## SCHEME OF B.A. (PASS COURSE) SEMESTER SYSTEM (PSYCHOLOGY) 2011-14

| Class | Nomenclature of paper | Internal Assess. | Theory | Time |
| :---: | :---: | :---: | :---: | :---: |
| B.A.(Sem.-I) | Introduction to Psychology | 20 | 50 | 3 Hours |
| -do- | Practical |  | 30 | 3 Hours |
| B.A.(Sem.-II) | Experimental Psychology | 20 | 50 | 3 Hours |
| - do- | Practical |  | 30 | 3 Hours |
| B.A.(Sem.-III) | Social Psychology | 20 | 50 | 3 Hours |
| -do- | Practical |  | 30 | 3 Hours |
| B.A. (Sem.-IV) | Developmental Psychology | 20 | 50 | 3 Hours |
| -do- | Practical |  | 30 | 3 Hours |
| B.A.(Sem.-V) | Psychopathology | 20 | 50 | 3 Hours |
| -do- | Practical |  | 30 | 3 Hours |
| B.A. (Sem.-VI) | Applied Psychology | 20 | 50 | 3 Hours |
| -do- | Practical |  | 30 | 3 Hours |

## B.A. (PASS COURSE) PSYCHOLOGY SYLLABUS (2011-14)

## B.A. (Semester-I)

INTRODUCTION TO PSYCHOLOGY
Theory: 50
Internal Assessment: 20
Time: 3 hours
Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory.
(ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Psychology: History, Emergence as Science, Subject matter.
Methods of Psychology: Experimental, Observation, Survey.

## UNIT-II

Sensory Proccesses: Visual, Auditory - Structure and Functions of Eye and Ear.
Perception: Nature, Perception of form - Figure and ground, Perceptual Organization, Depth Perception-cues.

## UNIT-III

Emotion: Nature, Bodily changes. Theories of Emotion: James-Lange, Cannon-Bard and Schachter-Singer.

Motivation: Nature, Biological and Psychological Motives.

## UNIT-IV

Personality: Nature, Determinants of personality, Type and Trait approach.
Intelligence: Nature, Theories: Spearman, Thurstone, and Cattell.

## References:

Atkinson, R.L., Atkinson, R.L, et al. (1985) Introduction to Psychology. N. Y.: HBJ Publishers.
Singh, A.K. (2009) Uchattar Samanaya Manovigyan. Delhi: Moti Lal Banarsidas.
Singh, A. \& Singh, U. (1984). Prayogatamak Manovigyan. Bhiwani: Vedic Prakashan.
Singh, R. \& Shyam, R. (2008) Adhunik Sangyanatmak Manovigyan. Panchkula: Haryana Sahitya Akadami.

## B.A. (Semester-I) PRACTICAL

M.Marks : 30

Time : $\mathbf{3}$ hrs.

1. EPQ/EPI
2. Retinal color zones/Color Blindness
3. Sound Localization
4. Study of emotions.
5. Simple reaction time
6. Verbal Test of Intelligence.
7. Performance Test of Intelligence/RPM.
8. Observation (Speed \& accuracy)
9. Experiment on form perception/Depth Perception
10. Test of Motivation.

Note: Students are to conduct and report at least 6(six) practicals.
The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory. (ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Attention: Nature, Characteristics, and types.
Psychophysics: Problems of Psychophysics and Methods (Classical).

## UNIT-II

Learning: Definition, Factors affecting, Trial and error learning, Insight learning, Classical and Operant conditioning.

## UNIT-III

Memory: Definition, Stages, STM and LTM - Methods to Study Memory.
Forgetting: Factors leading to forgetting, Pneomonics.

## UNIT-IV

Problem solving: Stages of problem solving, Convergent and Divergent thinking.
Statistics: Frequency Distribution, Graphical presentation of data, Measures of central tendencies.

## References:

Atkinson, R.L., Atkinson, R.L, et al. (1985) Introduction to Psychology. N. Y.: HBJ Publishers.
D' Amato, M.R. (2001) Experimental Psychology: Methodology, Psychophysics and Learning. New Delhi: McGraw Hill.

Singh, A.K. (2009) Uchattar Samanaya Manovigyan. Delhi: Moti Lal Banarsidas.
Singh, A. \& Singh, U. (1984). Prayogatamak Manovigyan. Bhiwani: Vedic Prakashan.
Singh, R. \& Shyam, R. (2008) Adhunik Sangyanatmak Manovigyan. Panchkula: Haryana Sahitya Akadami.

## B.A. (Semester-II)

M.Marks : 30

Time : 3 hrs.

1. Serial Position Effect.
2. Experiment on STM
3. Experiment on LTM
4. Retroactive Inhibition
5. AL by method of contstant stimuli
6. DL by method of limits.
7. Muller-Lyre Illusion
8. Problem Solving
9. Bilateral Transfer of Training/ Maze Learning
10. Span of Attention.

Note: Students are to conduct and report at least 6 (six) practicals. The examiner will allot one practical at the time of examination.

Theory: 50
Internal Assessment: 20
Time: 3 hours

Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory.
(ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Introduction: Nature, subject matter, Sociometric method.
Socialization: Nature, Process and Agents of Socialization.

## UNIT-II

Group: Types and functions; Social Norms: Meaning, Characteristics and formation.
Leadership: Types, Function, Theories- Trait, Situational, and Interactional.
UNIT-III
Attitudes: Characteristics, Development and Attitude change.
Prejudice: Nature, Development and Stereotypes.

## UNIT-IV

Prosocial Behaviour: Nature, Determinants ,Cognitive Model.
Aggression: Nature, determinants and prevention.

## References:

Baron, R.A. and Byrne, D. (2008) Samajik Manovigyan (Hindi Sanskaran). Delhi: Pearson.
Chaube S.P. (1985) Social Psychology. Agra: Educational Publishers.
Perlman, D. and Cozbty, P.C. (1983). Social Psychology. New York: CBS College Publishing.
Rai, B.C. (1989) Social Psychology. Delhi: Sultan Pub.
Singh, A.K. (2009). Samaj Manovigyan ki Rooprekha . Delhi: Moti Lal Banarsidas.
M.Marks : 30

Time : $\mathbf{3}$ hrs.

1. Sociometry
2. Measurement of Attitude
3. Altruism Scale
4. Stereotypes
5. Anger Expression/Aggression Scale
6. Prejudice Scale
7. Leadership Styles
8. Social Facilitation
9. Rosenwig's P.F. Test/Norm formation
10. Social Conformity

Note: Students are to conduct and report at least 6(six) practicals.
The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory.
(ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Human Development; Concept and principles
Factors in human development; Biological, Social and Cultural

## UNIT-II

Prenatal development, determinants and stages.
Infancy: Characteristics, Hazards and adjustment.

## UNIT-III

Childhood: Characteristics, Perceptual, Motor, Emotional, Cognitive Development.
Adoloscents: Characteristics and problems of adoloscents and adjustment.

## UNIT-IV

Adulthood: Early adulthood, late adulthood and aging-Changing patterns and problems.
Measures of variability: Quartile deviation, Standard deviation.

## References:

Berk, L.E. (2004). Development Through the Life Span. Delhi: Pearson Education.
Hurlock, E.B. (2001) Developmental Psychology: A life-span approach. New Delhi: Tata McGraw Hill.

Lal, J.N., \& Srivasstava, A. (2001) Modern Developmental Psychology. Agra: Vinod Pustak Bhandar.

Sheffer, D.R. \& Katherine, K. (2007). Developmental Psychology: Childhood And Adolescence NewYork: Thomson Wadsworth.

Santrock, J.W. (1997). Life Span Development. Dubuque: Brown and Benchmark.
Singh, R. \& Shyam, R. (2008) Comprehensive Statistics for Behavioural Sciences (in Hindi). Sanjay Prakashan, Delhi.
M.Marks : 30

Time : $\mathbf{3}$ hrs.

1. Cognitive Development
2. Emotional Maturity Scale
3. Parent-Child Relationship
4. Self Concept
5. Youth Problem Inventory
6. Self Esteem Inventory
7. Study of values
8. Family Environment Inventory
9. Impulsiveness Scale
10. Case Study

Note: Students are to conduct and report at least 6(six) practicals.
The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory.
(ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Concept of normality and abnormality.
Models of Psychopathology: Biological, Psychodynamic, Behavioural, and Cognitive.

## UNIT-II

Classification of Psychopathology: Need for classification, DSM system.
Diagnostic Assessment: Case history, Interview, Projective techniques.

## UNIT-III

Anxiety Based Disorders: GAD, OCD, and Phobic disorders-Symptom and Causes.
Substance/drug abuse - Causes, Consequences and Rehabilitation.

## UNIT-IV

Mood disorders: Unipolar and bipolar-Symptoms and causes.
Schizophrenia: Nature, types, and causes.

## References:

Anand, V. and Srivastva, R. (2003). Manovikriti Vigyan, Delhi: Moti Lal Banarsi Das.
Carson, R.C.; Butcher, J.N., et al. (2007). Abnormal Psychology. (13 ${ }^{\text {th }}$ Ed.) New Delhi: Pearson Education.

Davison, G.C. \& Neale, J.M. (1998). Abnormal Psychology (7 ${ }^{\text {th }}$ Ed.) New York: Willy.
Sarason, I.G. and Sarason, B.R. (2005). Abnormal Psychology: The Problem of Maladaptive Behaviour ( $10^{\text {th }}$ Ed.) New Delhi: Pearson Education Inc.

Singh, A.K. (2006). Adhunik Asamanya Manovigyan, Delhi: Moti Lal Banarasi Das.
Srivastava, D.N. (1991) Adhunik Asamnya Manovigyan ( $6^{\text {th }}$ Ed.) Agra: Sahitya.
M.Marks : 30

Time : $\mathbf{3}$ hrs.

1. Clinical Interview
2. CAQ
3. TAT
4. WAT
5. Depression Inventory
6. Anxiety Scale
7. WAIS
8. Emotional Intelligence
9. PGI Memory Scale
10. DMI

Note: Students are to conduct and report at least 6 (six) practicals.
The examiner will allot one practical at the time of examination.

## B.A. (Semester-VI) <br> APPLIED PSYCHOLOGY

Theory: 50

Note: - (i) The question paper will comprise of nine questions. First question will be of short answer type not exceeding 30 words consisting of five parts ( 2 marks each) to be set from the whole syllabus. This question would be compulsory.
(ii) Remaining eight questions (essay type) would be set unit-wise, two questions from each unit. The candidate has to attempt four questions, selecting at least one from each unit.
(iii) Each question carries 10 marks.

## UNIT-I

Applied Psychology: Meaning, History, fields, and careers in psychology.
Organizational Psychology: Nature, Scope, objectives, and development.

## UNIT-II

Guidance: Objectives, Principles, types of guidance, Organization of guidance programme.
Counselling: Need, Principles, Special areas, and Types of Counselling.

## UNIT-III

Health Psychology: Meaning, Scope and Objectives; Concept of health and illness.
Psychological factors in physical illness, Life style and health, Stress and coping.

## UNIT-IV

Forensic psychology: Psychology and Law, Eyewitness Memory; Accuracy and improvement.
Statistics: Correlation- Meaning, Rank difference, and Product moment method.

## References: -

Annastasi, A (1979) Fields of Applied Psychology (2 $2^{\text {nd }}$ ed.) U.S.A.: McGraw. Hill.
Garrett, H.E. (2005) Statistics in Psychology and Education. Delhi: Paragon Ind. Pub.
Goldstem, A.P.; Krasner, L. (1989) Modern Applied Psychology. New York: Pergamon Press.
Rao, S.N. (2004). Guidance and Counselling. New Delhi: Discovery Publishing House.
Taylor, S.E. (2006) Health Psychology ( $6^{\text {th }}$ ed.) Delhi: Tata McGraw Hill.
Verma, R.S., Singh, S., \& Sharma, D. (1982). Vayavaharik Manovigyan. Agra: Vinod Pustak Mandir.
M.Marks: 30

Time: $\mathbf{3}$ hrs.

1. Stress Scale
2. Coping Styles/Wellbeing Scale
3. General Health Questionnaire
4. Life Style Schedule
5. Aptitude Scale
6. Interest Inventory
7. Job Satisfaction
8. Counselling Need Inventory
9. Job Stress Scale
10. Healthiness Scale/Adjustment Inventory

Note: Students are to conduct and report at least 6(six) practicals. The examiner will allot one practical at the time of examination.

| Class | SCHEME OF B.A. Part-I (PASS COURSE) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | IN POLITICAL SCIENCE |  |  |  |  |
|  | SEMESTER SYSTEM 2012-2013 |  |  |  |  |
|  | Nomenclature of Paper | Internal |  | y Total | Time |
|  |  | Assess. |  | Marks |  |
| B.A. (Sem. I) | Option (i) Indian Constitution | 20 | 80 | 100 | 3 Hrs. |
| -do- | Option (ii) International Relations-I | 20 | 80 | 100 | 3 Hrs. |
| B.A. (Sem.II) | Option (i) Indian Politics | 20 | 80 | 100 | 3 Hrs. |
| -do- | Option (ii) International Relations-II | 20 | 80 | 100 | 3 Hrs . |
| B.A. Part - II |  |  |  |  |  |
| B.A. (Sem. III) | Option (i) Principles of Political Sciences-I | 20 | 80 | 100 | 3 Hrs. |
| -do- | Option (ii) Indian Political Thinker-I | 20 | 80 | 100 | 3 Hrs . |
| B.A. (Sem.IV) | Option (i) Principles of Political Sciences-II |  | 80 | 100 | 3 Hrs. |
| -do- | Option (ii) Indian Political Thinkers-II | 20 | 80 | 100 | 3 Hrs . |
| B.A. Part -III |  |  |  |  |  |
| B.A. (Sem. V) | Option (i) Comparative Politics | 10 | 90 | 100 | 3 Hrs. |
| -do- | Option (ii) International Organization-I | 10 | 90 | 100 | 3 Hrs . |
| B.A. (Sem.VI) | Option (i) Comparative Constitutions of UK \& USA | 10 | 90 | 100 | 3 Hrs . |
| -do- | Option (ii) International Organization-II | 10 | 90 | 100 | 3 Hrs . |

NOTE :- The students are required to opt only one out of two Optional papers in each Semester.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-I 

Syllabi and Courses of Reading w.e.f. 2012-2013
NOTE: There will be two Optional papers. The students will have to opt only one paper out of the two papers. The maximum marks are 100. (Theory 80, Internal Assessment 20).

## Option (i) : Indian Constitution

M. Marks: 80

Internal Assessment: 20
Time: 3 Hours
Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

UNIT-I
Indian Constitution - Sources and Features, Preamble, Fundamental Rights, Fundamental Duties and Directive Principles of State Policy.

UNIT-II
Union and State Executive - President, Prime Minister, Council of Ministers; State Executive - Governor, Chief Minister and Council of Ministers.

UNIT-III
Union and State Legislature - Parliament-Composition and Functions; Speaker of Lok Sabha Amendment Process; State Legislature-Vidhan Sabha; Panchayati Raj

UNIT-IV
Judiciary - Supreme Court, High Courts, Judicial Review.

## Reading:

1. G. Austin, The Indian Constitution: Corner Stone of a Nation, Oxford, Oxford University Press, 1966.
2. D.D. Basu, An Introduction to the Constitution of India, New Delhi, Prentice Hall, 1994.
3. D.D. Basu and B. Parekh (ed.), Crisis and Change in Contemporary India, New Delhi,

Sage, 1994.
4. C.P. Bhambhri, The Indian State: Fifty Years, New Delhi, Shipra, 1997.
5. P. Brass, Politics of India Since Independence, Hyderabad, Orient Longman, 1990.
6. R. Kothari, Politics in India, New Delhi, Orient Longman, 1970.
7. W.H. Morris Jones, Government and Politics in India, Delhi, BL Publications, 1974.
8. J.R. Siwach, Dynamics of Indian Government \& Politics, New Delhi, Sterling Publishers, 1985.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-I

Syllabi and Courses of Reading w.e.f. 2012-2013
Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii): International Relations-I

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each. Unit-I
Definition, Nature, Scope and Development of International Relations, Autonomy Debate
regarding International Relations.

## Unit-II

Approaches and Theories:-
a) Idealist Approach
b) Realist Approach
c) Systems Approach
d) Marxian Approach

## Unit-III

National Power : Definition, Elements and Assessment, Limitations on National Power:
International Law, International Morality and World Public Opinion

Unit-IV
Balance of Power, Collective, Security.

## Readings

1. John, Baylis and Steve Smith, Globalization of World Politics, Oxford, London, 1997.
2. P.Allan and K. Goldman (eds.), The End of the Cold War, Dordrecht, Martinus Nijhoff, 1992.
3. S. Burchill et. al., Theories of International Relations, Hamsphire, Macmillan, 2001.
4. S.H. Hoffman, Essays in Theory and Politics of International Relations, Boulder Colorado, Westview Press, 1989.
5. M.P. Sullivan, Theories of International Politics: Enduring Paradigm in a Changing

World, Hamsphire, Macmillan, 2001.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-II <br> Syllabi and Courses of Reading w.e.f. 2012-2013 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Indian Politics

M. Marks : 80

Internal Assessment : 20
Time : 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

UNIT-I
Federalism and its Working with reference to Centre-State Relations, Demand for State
Autonomy; Emerging Trends in Indian Federalism.

## UNIT-II

Election Commission, Electoral Process and its Defects and Voting Behaviour, Electoral
Reforms, Problem of Defection.
UNIT-III
Party System in India: National and Regional Political Parties.
UNIT-IV
Role of Caste, Religion, Language, Regionalism in India, Politics of Reservation.

## Reading:

1. D.D. Basu and B. Parekh (ed.), Crisis and Change in Contemporary India, New Delhi, Sage, 1994.
2. P. Brass, Politics of India Since Independence, Hyderabad, Orient Longman, 1990.
3. S. Kaushik (ed.), Indian Government and Politics, Delhi University, Directorate of Hindi Implementation racy and Discontent: India's Growing Crisis of Governability, Cambridge, Cambridge University Press, 1991.
4. R. Kothari, Politics in India, New Delhi, Orient Longman, 1970.
5. R. Kothari, Party System and Election Studies, Bombay, Asia Publishing House, 1967.
6. J.R. Siwach, Dynamics of Indian Government \& Politics, New Delhi, Sterling Publishers, 1985.
7. R. Thakur, The Government \& Politics of India, London, Macmillan, 1995.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-I, Political Science (Pass Course) <br> Semester-II 

Syllabi and Courses of Reading w.e.f. 2012-2013
Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.
M. Marks: 80

Internal Assessment: 20
Time: 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Option (ii): International Relations-II

Unit-I<br>Ideology in International Relations, National Interest, Foreign Policy, Diplomacy<br>Unit-II<br>Cold War, Non-Alignment, End of Cold War.

## Unit-III

Meaning of Disarmament and Arms-control: Types of Disarmament; History of Disarmament: NPT, CTBT.

## Unit-IV

New International Economic Order, North-South Dialogue, Globalization.

## Readings

1. John, Baylis and Steve Smith, Globalization of World Politics, Oxford, London, 1997.
2. P.Allan and K. Goldman (eds.), The End of the Cold War, Dordrecht, Martinus Nijhoff, 1992.
3. S. Burchill et. al., Theories of International Relations, Hamsphire, Macmillan, 2001.
4. K.W. Deutsch, The Analysis of International Relations, New Delhi, Prentice Hall, 1989.
asingstoke, Macmillan, 1999.
5. F. Halliday, Rethinking International Relations, Basingstoke, Macmillan, 1994.
6. M.S. Rajan, Non-Alignment and the Non-Alignment Movement in the Present

World
Order, Delhi, Konark, 1994.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-III <br> Syllabi and Courses of Reading w.e.f. 2012-2013 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Principles of Political Science-I

Max. Marks : 80
Internal Assessment : 20
Time: 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each. Unit-I
Political Science: Definition, Meaning, Nature and Scope. Relations of Political Science with other Social Sciences.

Unit-II
State: Definition, Elements, Relations with the other organizations. Theories of the Origin of the State.

## Unit-III

Nature of State: Liberal, Marxian.
Functions of State: Liberal and Socialist Views. Welfare State: Concept and Functions. Unit-IV
Sovereignty: Definition, Attributes and Types.
Theories of Sovereignty: Monistic and Pluralistic.

## Readings

1 The Dynamics of Diplomacy, Jean Robert Leguey- Feilleux, Published by (VIVA)
Vinod Vasishtha for viva Books Private Ldt., 4732/23 Ansari Road, New Delhi-110002, Printed by Anand Sons, Delhi-100092, First Edition-2010.
2 The game of Diplomacy- Richard Sharp, Published in Great Britain by Arthur Barker Ltd. London, 1928
3 Diplomacy for the $21^{\text {st }}$ Century, Naunihal Singh, Naurang Rai Mittal Publications (New Delhi) First Edition- 2002.
4 Conduct of the New Diplomacy: Jamesh Cany, Marper \& Row, New York, Evanstom and London, Copy right-1964.
5 Modern Diplomacy: Pialecties and Pinensions, GVG Krishnanmurty, Marinder Sagar, Sagar Publications, New Delhi-110001, 1980.
6 Theory and Practice of Diplomacy: Dr. Harish Chander Sharma, College Book Depot, Jaipur, New Delhi.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-III <br> Syllabi and Courses of Reading w.e.f. 2012-2013

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

# (Option-ii) Indian Political Thinkers-I 

Max. Marks : 80
Internal Assessment :

Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Raja Ram Mohan Ray and Swami Dayanand,
Unit-II
Dada Bhai Narojee and Gopal Krishan Gokhle
Unit-III
Swami Vivekanand and Aurbind Ghosh
Unit-IV
Lala Lajpat Rai and Bal Gangadhar Tilak

## Readings

1. A.S. Altekar, State and Government in Ancient India, Delhi, Motilal Banarsidass, 1966.
2. A.Appadorai, Documents on Political Thought in Modern India, 2 Vols. Bombay Oxford University Pres, 1970.
3. S. Ghose, Modern Indian Political Thought, Delhi, Allied, 1984.
4. V.R. Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992. 5. T. Pantham, and K. Deustch (eds), Political Thought in Modern India, New Delhi, Sage, 1986.
5. B. Parekh and T. Pantham (eds), Political Discourse: Exploration in Indian and Western Political Thought, New Delhi, Sage, 1987.
6. V.R. Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-IV <br> Syllabi and Courses of Reading w.e.f. 2012-2013

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Principles of Political Science-II

M. Marks : 80

Internal Assessment : 20
Time: 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Concepts and Theories of Rights. Relationships between Rights and duties. Universal Declaration of Human Rights.

## Unit-II

Concept and Theories of Liberty and Equality. Relationship between Liberty and Equality.

Unit-III
Concepts of Social Change
Concept and Theories and Development.
Unit-IV
RTI and Consumer Protection and Welfare.

## Readings

1 The Dynamics of Diplomacy, Jean Robert Leguey- Feilleux, Published by (VIVA) Vinod Vasishtha for viva Books Private Ldt., 4732/23 Ansari Road, New Delhi-110002, Printed by Anand Sons, Delhi-100092, First Edition-2010.
2 The game of Diplomacy- Richard Sharp, Published in Great Britain by Arthur Barker Ltd. London, 1928
3 Diplomacy for the $\mathbf{2 1}^{\text {st }}$ Century, Naunihal Singh, Naurang Rai Mittal Publications (New Delhi) First Edition- 2002.
4 Conduct of the New Diplomacy: Jamesh Cany, Marper \& Row, New York, Evanstom and London, Copy right-1964.
5 Modern Diplomacy: Pialecties and Pinensions, GVG Krishnanmurty, Marinder Sagar, Sagar Publications, New Delhi-110001, 1980.
6 Theory and Practice of Diplomacy: Dr. Harish Chander Sharma, College Book Depot, Jaipur, New Delhi.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-IV <br> Syllabi and Courses of Reading w.e.f. 2012-2013

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

# Option (ii) : Indian Political Thinkers 

$$
\text { Marks : } 80
$$

Internal Assessment : 20
Max.

Time: 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Mahatma Gandhi and M.N, Roy
Unit-II
Jawaharlal Nehru and B.R. Ambedkar
Unit-III
Subhash Chander Bose and Bhagat Singh
Unit-IV
J.P. Narayan and Ram Manohar Lohia

## Readings

1. A.Appadorai, Indian Political Thinking Through the Ages, Delhi Khanna

Publishers,

## 1992.

2. K.P. Karunakaran, Indian Politics from Dababhai Naoroji to Gandhi : A Study of Political Ideas of Modern India, New Delhi, Gitanjali, 1975.
3. V.R.Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992. 4. V.P. Verma, Modern Indian Political Thought, Agra, Lakshmi Narain Aggarwal, 1974

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-III, Political Science (Pass Course) Semester-V <br> Syllabi and Courses of Reading w.e.f. 2012-2013 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i): Comparative Politics

M. Marks: 90

Internal Assessment: 10
Time: 3 Hours
NOTE : Total 10 questions will be set: four each from Part A and Part B and the two from Part C. Candidates will have to attempt five questions in all selecting at least one question from each part. There will be one compulsory multiple choice objective type question.

UNIT-I
Comparative Politics-Definition, Scope; Traditional \& Modern Concerns; Comparative Methods.

## UNIT-II

Approaches to the Study of Comparative Politics: Input-Out (David Easton), Structural-Function (G. Almond), Political Development, Political Culture (G. Almond).

UNIT-III
Constitutionalism: History, Nature, Type and Problem in Modern Times.
UNIT-IV
Constitutional Structure: (a) Formal-Executive, Legislation and Judiciary, (b) Informal Structures- Political Parties and Pressure Groups.

## Readings

1. G.A. Almond and J.S. Coleman, The Politics of the Developing Areas, Princeton NJ, Princeton University Press, 1960.
2. G.A. Almond, and S. Verba, The Civic Culture : Political Attitudes and Democracy in Five Nations, Princeton NJ, Princeton University Press, 1963.
3. L.J.Cantori and A.H. Zeigler (ed.), Comparative Politics in the PostBehaviouralist Era, London, Lynne Reinner Publisher, 1988.
4. O. Dunleavy and B.O' Leary, Theories of Liberal Democratic State, London, Macmillan, 1987.
5. R. Hauge and M. Harrop, Comparative Government and Politics. An Introduction, 5th edn., New York, Palgrave, 1001.
6. H. Finer, Theory and Practice of Modern Government, London, Methuen, 1969.
7. J.C. Johari, Comparative Political Theory: New Dimensions, Basic Concepts and Major Trends, New Delhi, Sterling, 1987.
8. K. Kumar, Revolution : The Theory and Practice of a European Idea, London, Weidenfeld and Nicolson, 1971.
9. R.C. Macridis, The Study of Comparative Government, New York, Doubleday, 1955.
10. R.C. Macridis and R.E. Ward, Modern Political Systems : Europe, and Asia, 2nd edn. Englewood Cliffs NJ, Prentice Hall, 1968.
11. J. Manor (ed.), Rethinking Third World Politics, London, Longman, 1991.
12. R.C. Macridis, Modern European Governments : Cases in Comparative Policy - Making, Englewood Cliffs NJ, Prentice Hall, 1968.
13. L.W. Pey (ed.), Communication and Political Development, Princeton NJ, Princeton University Press, 1963.
14. R.I. Rotberg (ed.), Politics and Political Change : A Journal of InterDisciplinary History Reader, Massachusetts, MIT Press, 1001.
15. H.J. Wiarda (ed.), New Developments in Comparative Politics, Boulder Colorado, Westview Press, 1986.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-III, Political Science (Pass Course) Semester-V <br> Syllabi and Courses of Reading w.e.f. 2012-2013

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

# Option (ii) : International Organization-I 

Max. Marks: 90
Internal Assessment: 10
Time: 3 Hrs.
Note: Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of nine short answer questions of 2 marks each. Unit-I
International Organization: Meaning, Nature and Scope.
Evolution and growth of International Organization.

## Unit-II

League of Nations, Structure, Objectives, Functions and Causes of Failure.

## Unit-III

U.N.O.: Origins, Objectives and Principles, Membership, Structure and Functions. Organs of United Nations: General Assembly, Security Councils, Economic and Social Council,
U.N. Secretariat, International Court of Justice

Unit: IV
Specialized Agencies of the United Nations: UNESCO, IMF, ILO, UNICEF, WHO.

## Readings:

1. E. Laurd, A History of the United Nations, London, Macmillan, 1989.
2. W.H. Lewis (ed.), The Security Role of the United Nations, New York, Praegar, 1991.
3. P. Baehr and L. Gordenker, The United Nations in the 1990s, London, Oxford University Press, 1992.
4. K. P. Saxena, Reforming the United Nations : The Challenge and Relevance, New Delhi, Sage, 1993.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-III, Political Science (Pass Course) Semester-VI <br> Syllabi and Courses of Reading w.e.f. 2012-2013 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Comparative Constitutions of UK \& USA

M. Marks : 90

Internal Assessment : 10
Time : 3 Hours


#### Abstract

NOTE : Total 10 questions will be set: four each from Part A and Part B and the two from Part C. Candidates will have to attempt five questions in all selecting at least one question from each part. There will be one compulsory multiple choice objective type question.


UNIT-I
Evolution, Conventions, Legacies and Basic features of Constitutions of UK \& USA; Socio-Economic basis of Constitutions of UK \& USA.

UNIT-II
Comparative Study of Executive, Legislature
UNIT-III
Comparative study of Judiciary of U.K. \& U.S.A.
Comparative studies of Structures, Functions and roles of political parties and pressure groups of UK \& USA.

UNIT-IV
Electoral Processes, Voting Behaviour, Bureaucracy of UK \& USA.

## Readings

1. G. Almond et al., Comparative Politics Today : A World View, 7th edn., New York, London, Harper/Collins, 1000.
2. W. Bagehot, The English Constitution, London, Fontana, 1963.
3. J. Blondel, An Introduction to Comparative Government, London, Weidenfeld and Nicolson, 1969.
4. E.S. Griffith, The American System of Government, 6th edn., London, ethuen, 1983.
5. A.Lijphart,(ed.), Parliamentary versus Presidential Government, Oxford and New York, Oxford University Press, 1992.
6. M. Rhodes, P. Heywood and V. Wright, Developments in West European Politics, Basingstoke, Macmillan, 1997.
7. J. Wilson, American Government, 4th edn., Boston Massachusetts, Houghton Miffin, 1997.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-III, Political Science (Pass Course) Semester-VI <br> Syllabi and Courses of Reading w.e.f. 2012-2013

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii) : International Organization-II

$$
\text { Max. Marks : } 90
$$

Internal Assessment : 10
Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of nine short answer questions of 2 marks each.

Unit-I
Regional Organizations, European Community, SAARC, ASEAN

## Unit-II

UN and Social Justice: Human Rights, Decolonization.

## Unit-III

Working of the U.N. towards Peace : Peace Making, Peace, Enforcement, Peace building and Peace Keeping, An Assessment of U.N.

## Unit: IV

UN and the Third World; Reforms and Democratization of U.N. System, India's claim for Permanent Membership of the Security Council.

## Readings

1. Richard K. Ashley, "The Eye of Power : The Politics of World Modelling," International Organization, Vol. 37, No. 3, 1983.
2. E. Laurd, A History of the United Nations, London, Macmillan, 1989.
3. W.H. Lewis (ed.), The Security Role of the United Nations, New York, Praegar, 1991.
4. P. Baehr and L. Gordenker, The United Nations in the 1990s, London, Oxford University Press, 1992.
5. Rikhey, Strengthening UN Peace keeping, London, Hurst and Co., 1993.
6. K. P. Saxena, Reforming the United Nations : The Challenge and Relevance, New Delhi, Sage, 1993.

# Department of Geography <br> M D University, Rohtak <br> Scheme of Examination <br> w. e. f. Session 2011-12 

## B.A. Geography (Pass Course)

| Paper | No. Title | Internal Assessment | External Assessment | Maximum Marks | Time |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Semester-I |  |  |  |  |  |
| 101 | Geography of India | 20 | 50 | 70 | 3 Hours |
| 102 | Maps and scales (Practical) |  |  | 30 | 3 Hours |
| Semester-II |  |  |  |  |  |
| 103 | Physical Geography I | 20 | 50 | 70 | 3 Hours |
| 104 | Representation of Physical Features (Practical) |  |  | 30 | 3 Hours |
| Semester-III |  |  |  |  |  |
| 201 | Physical Geography II | 20 | 50 | 70 | 3 Hours |
| 202 | Representation of Climate Data (Practical) |  |  | 30 | 3 Hours |
| Semester - IV |  |  |  |  |  |
| 203 | Human Geography | 20 | 50 | 70 | 3 Hours |
| 204 | Maps projections (Practical) |  |  | 30 | 3 Hours |
| Semester - V |  |  |  |  |  |
| 301 | Economic Geography | 20 | 50 | 70 | 3 Hours |
| 302 | Distribution Maps and Diagrams (Practical) |  |  | 30 | 3 Hours |
| Semester- VI |  |  |  |  |  |
| 303 | Introduction to Remote Sensing, GIS and Quantitative Methods | 20 | 50 | 70 | 3 Hours |
| 304 | Introduction to Remote Sensing and Field Survey Report (Practic |  |  | 30 | 3 Hours |

## Paper 101 Geography of India

# Internal Assessment Marks: 20 <br> External Assessment Marks: 50 <br> Maximum Marks : 70 <br> Time : 3 Hours 

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks.

## SECTION- A

1. India: Location, relief structure and drainage systems.
2. Climate, soils, natural vegetation, and natural disasters in India.

## SECTION - B

3. Population: distribution, density, growth and composition.
4. Migration, human settlement types and levels of urbanization.

## SECTION-C

5. Land resources, irrigation, regional variations in cropping pattern, Green revolution and problems of Indian agriculture.
6. Energy and mineral resources: coal, petroleum, hydroelectricity and nuclear energy, iron ore, manganese and mica.

## SECTION-D

7. Industries- iron and steel, cotton textile, sugar and petrochemical industries; and industrial regions of India.
8. Modes of transport and communication, international trade changing pattern of export and import.

Suggested Readings

1. Deshpande, C D: India - A Regional Interpretation, Northern Book Depot, New Delhi, 1992.
2. Singh, Gopal : Geography of India, Atma Ram and Sons, 2006.
3. Shafi, M : Geography of South Asia, McMillan and Company, Calcutta, 2000.
4. Singh, R L (ed) : India : A Regional Geography, National Geographical Society, India, Varanasi, 1971.
5. Spate, D H K and ATA Learmonth : Indian and Pakistan - Land, People and Economy, Methnen and Company, London, 1967.

## Paper 102 Maps and Scales (Practical)

## Maximum Marks: 30 <br> Time : 3 Hours

## Distribution of Marks <br> Exercises = 18 <br> Record File = 6 <br> Viva-voce $=6$

Note: There will be four questions in all and candidate has to attempt three exercises.

1. Introduction to Cartography.
2. Maps and their types.
3. Map Scales. Exercises
(i) Methods of Expressing a scale 2
(ii) Conversion of Statement of Scale into R.F. and vice-versa.
(iii) Plain Scale (Km and mile)
(iv) Comparative Scale 1
(v) Diagonal Scale

1
4 Measurement of Distances and Areas on Maps
5 Enlargement and Reduction of Maps

## Suggested Readings:

1. F.J. Monkhouse and H.R. Wilkinson (1972) Maps and Diagrams, Mothuen and Co. Ltd., London
2. L.R. Singh and Raghuvander Singh (1973), Map Work and Practical Geography, Central Book Depot, Allahabad.
3. R.I. Singh and P.K. Dutt (1968), Elements of Practical Geography, Students Friends, Allahabad.
4. Singh Gopal (2004) $4^{\text {th }}$ edition, Map Work and Practical Geography, Viksa Publication House.

## Paper 103 Physical Geography - I

Internal Assessment Marks: 20<br>External Assessment Marks: 50<br>Maximum Marks : 70<br>Time : 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks.

## SECTION- A

1. Definition, Nature, scope and fields of Physical Geography.
2. Interior of the earth, Geological time scale and rocks.

## SECTION- B

3. Earth movements; organic, eperogenic, earth quakes and volcanoes.
4. Theory of Isostasy; Wegner's theory of continental drift and Plate tectonic theory.

## SECTION- C

5. Weathering; causes and its types.
6. Mass-movements; causes, its types and impacts.

## SECTION- D

7. Concept of cycle of erosion; cycle of erosion by W.M.Davis and
8. Process of Wind, River, Underground water, Glaciers and Sea waves.

## References

1. Sharma H.S. Perspective in Geomorphology, Concept, New Delhi 1980.
2. Singh Savinder, Geomorphology, Prayag Publication, Allahabad 1998.
3. Singh Savinder, Physical Geography Prayag Publication, Allahabad, 1998.
4. Sparks B.W. Geomorphology, Jojngman, London, 1960.
5. Thornbury W.D. 1969 Principles of Geomorphology, New York, John Wiley \& Sons.

## Paper 104 Representation of Physical Features (Practical)

Maximum Marks: 30<br>Time : 3 Hours

## Distribution of Marks <br> Exercises = 18 <br> Record File = 6 <br> Viva-voce $=6$

Note: There will be four questions in all and candidate has to attempt three exercises.

1. Introduction to Topographical Sheets

Exercises
India and adjacent countries
Degree Sheet

- Half Degree Sheet
- Quarter Degree Sheet
- Conventional Signs

2. Methods of representing relief 1
3. Representation of Topographical features by contours. 4 Slopes (Concave, convex, undulating and terraced)
Valleys (V Shaped, U shaped, Gorge, Re-entrant)
Ridges (Conical hill, Volcanic hill, Plateau, Escarpment)
Complex features (waterfall, sea cliff, overhanging cliff, Fiord coast)
4. Drawing of Profiles
(a) Cross Profiles: Serial, superimposed, projected and composite profiles.
(b) Longitudinal profiles

Suggested Readings:

1. F.J. Monkhouse and H.R. Wilkinson (1972) Maps and Diagrams, Mothuen and Co. Ltd., London.
2. L.R. Singh and Raghuvander Singh (1973), Map Work and Practical Geography, Central Book Depot, Allahabad.
3. R.I. Singh and P.K. Dutt (1968), Elements of Practical Geography, Students Friends, Allahabad
4. Singh Gopal (2004) $4^{\text {th }}$ edition, Map Work and Practical Geography, Vikas Publication House, New Delhi.

## Paper 201 Physical Geography-II

## Internal Assessment Marks: 20 <br> External Assessment Marks: 50 <br> Maximum Marks : 70 <br> Time : 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks.

## SECTION-A

1. Weather and Climate; Origin, composition and structure of atmosphere.
2. Insolation, Global heat budget, Horizontal and vertical distribution of temperature, inversion of temperature.

## SECTION-B

3. Atmospheric pressure- measurement and distribution, pressure belts, planetary winds, Monsoon, Jet Streams EL NINO- La Nina Phenomenon and Local winds.
4. Humidity- measurement and variables, evaporation, condensation, precipitation forms and types and distribution, hydrological cycle.

## SECTION-C

5. Air masses- concept and classification; Fronts- type and characteristics, Weather disturbances- tropical and extra-tropical cyclones.
6. Climate classification by Koppen; climatic change and global warming.

## SECTION-D

7. Configuration of oceanic floors and surface relief of Pacific, Atlantic and Indian Oceans; temperature and salinity of oceans.
8. Tides, waves and oceanic currents; circulation in Pacific, Atlantic and Indian Oceans; Oceanic resources.

Suggested Readings:

1. Barry, RG and Chorley R.J., Atmosphere, Weather and Climate, Routledge, 1998.
2. Critchfield, H., General Climatology, Prentice-Hall of India, 2002.
3. King, C. Oceanography for Geographers, Edward Arnold, London, 1975.
4. Trewartha, GT: An Introduction to Climate, Mc-Graw Hill, New York, 1981.
5. Trewartha, G.T., The Earth's Problems Climates, University of Wisconsin Press, USA.

# Paper - 202 Representation of Climatic Data (Practical) 

Maximum Marks: 30
Time : 3 Hours

## Distribution of Marks

Exercises = 18
Record File $=6$
Viva-voce $=6$
Note: There will be four questions in all and candidate has to attempt three exercises.

1. Measurement of temperature, rainfall, pressure and humidity.
2. Representation of temperature and rainfall.
(i) Line and Bar Graph - 1 Exercise.
(ii) Distribution of temperature ( 180 therms) - 1 Exercise.
(iii) Distribution of rainfall (180 hytes) - 1 Exercise.
(iv) Hythergraph - 1 Exercise.
(v) Rainfall deviation diagram-1 Exercise.
3. Climograph (wet and dry places) - 2 Exercise.
4. Distribution of pressure (180 bars) - 2 Exercise.
5. Weather map Interpretation (January \& July) - 2 Exercise.
6. Change and tape survey - 2 Exercise.

Suggested Readings:

1. Mishra R.P. and Ramesh A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi.
2. Monkhouse, FJ, and Wilkinson H.R., 1972. Maps and Diagrams, Methuen Press, London
3. Robinson, A.H. et.al. Elements of Cartography, John Wiley \& Sons, 1995.
4. Singh, R.L., 1979. Elements of Practical Geography, Kalyani Publisher, New Delhi.

## Paper 203 Human Geography

## Internal Assessment Marks: 20 <br> External Assessment Marks: 50 <br> Maximum Marks : 70 <br> Time : 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks. Section -I

1. Nature and scope of Human Geography, Branches of Human Geography, Approaches to the study of Human Geography.
2. Division of Mankind: Spatial distribution of race and tribes of India; concept of menenvironment relation : A historical approach.

## Section - II

3. Human adaptation to the environment (i) Cold region - Eskimo (ii) Hot regionBushman (iii) Plateau - Gonds (iv) Mountains - Gujjars
4. Meaning, nature and components of resources; Classification of resources - renewal and non- renewable ; biotic and aboitic, recyclable and non recyclable.
Distribution, utilization and conservation of biotic (flora and fauna) and aboitic (water, minerals and energy) resources.

## Section - III

5. Distribution and density of world population, population growth, fertility and mortality patterns.
6. Concept of over, under and optimum population; Population theories: Malthus, Ricardo and Marx.

## Section-IV

7. Rural settlements: Meaning, classification and types. Urban settlements: Origin, classification and functions of towns.
8. Population pressure, resource use and environment degradation; sustainable development, concept of deforestation, soil erosion, air and water pollution.

## Suggested Readings:-

1. Agarwal, A etal : The Citizen's Fifth Citizen's Report, Centre for Science \& Environment, New Delhi, 1999.
2. Alexander, John. W. : Economic Geography, Prentice Hall of India Ltd., New Delhi, 1988.
3. Bergwan, Edward E: Human Geography: Culture Connections and Landscape, PrenticeHall, New Jersey, 1985.
4. Carr, M. Patterns: Process and Change in Human Geography, McMillan Education, London, 1987.
5. Chandna, R.C. : A Geography of Population : Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi, 1986.
6. DeBlij, H. J. : Human Geography, Culture, Society and Space, John Wiley, New York, 1996.
7. Fellman, J.L. : Human Geography-Landscapes of Human Activities, Brown and Benchman Pub., USA, 1997.
8. Global Environment Outlook: Earthscan, London, 2000.
9. McBride, P.J. Human Geography; Systems Patterns and Change, Nelson, UK and Canada, 1996.
10. Michael, Can: New Patterns : Process and Change in Human Geography, Nelson, 1996.

## Paper 204 Maps Projections (Practical)

# Maximum Marks: 30 <br> Time : 3 Hours 

## Distribution of Marks

Exercises = 18
Record File $=6$
Viva-voce $=6$
Note: There will be four questions in all and candidate has to attempt three exercises.

## Total Exercises $=15$

1. Introduction to Map Projection: Meaning, Classification and importance; Characteristics of latitudes and longitudes lines.
2. Cylindrical projections: Characteristics, applications and drawing;
(i) Simple cylindrical projection
(ii) Cylindrical equal area projection.
(iii) True shape or orthomorphic or Mercator's Projection.
3. Conical Projections: Characteristics, applications and drawing.
(i) Simple conical projections with one standard parallel
(ii) Simple conical projection with two standard parallel
(iii) Bonne's Projection
(iv) Polyconic projection.
(v) International Map Projection.
4. Zenithal Projections: Characteristics, applications and drawing.
(i) Polar Zenithal Equidistant Projection.
(ii) Polar Zenithal Equal Area Projection
(iii) Polar Zenithal Gnomonic Projection
(iv) Polar Zenithal Stereographic Projection.
(v) Polar Zenithal Orthographic Projection
5. Characteristics, applications and drawings of (i) Sinosoidal and
(ii) Mollweide Projections.
6. Plane Table Survey.

## Suggested Readings:-

1. Goyal K.K.1981.. Practical Geography, Manthan Publication, Rohtak.
2. Gregory S. 1963. Statistical Methods and the Geography, Longman, London.
3. Khan, A.A. 1996. Text Book of Practical Geography, Concept, New Delhi,.
4. Lawarence, GRP1968. Cartographic Methods, Methuen, London,.
5. Monkhouse, F.J. and Wilkinson, H.R1994. Maps and Diagrams, Methuen, London,
6. Pal. S.K. 1998: Statistics for Geoscientist- Techniques and Applications, Concept Publication, New Delhi,.
7. Sarkar, A.K 1997: Practical Geography-A Systematic Approach, Orient Longman, Calcutta,
8. Singh, R.L. 1972. Elements of Practical Geography, Kalyani Pub., New Delhi
9. Steers, J.B. Map Projections; University of London Press, London.

# Paper 301 Economic Geography 

Internal Assessment Marks: 20<br>External Assessment Marks: 50<br>Maximum Marks : 70<br>Time : 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks.

## Section A

1. Nature, scope and relationship of economic geography with economics and other branches of social sciences.
2. Classification of economic activities and their impact on environment.

## Section B

3. World natural resources: Types, bases and classification.
4. Conservation and utilization of natural resources.

## Section C

5. Spatial distribution of food (rice and wheat), commercial (cotton and sugarcane) and plantation crops (tea, rubber and coffee).
6. Classification of mineral resources (ferrous and non-ferrous), distribution and production of coal, iron ore, petroleum and natural gas.

## Section D

7. Classification of industries, world distribution and production of iron and steel and textile industry, major industrial complexes of the world.
8. Transport, communication and trade: geographical factors in their development, major modes of water, land and air transport, recent trends in international trade

## Suggested Readings:

1. Hartshorne TN and Alexander JW. 1988. Economic Geography, Prentice Hall, New Delhi.
2. Jones CF and Darkenwald GG. 1975. Economic Geography. McMillan Company, New York
3. Thomas, RS. 1962. The Geography of Economic Activities. McGraw Hill, New York.
4. Wheeler J et al. 1995. Economic Geography. John Wiley, New York.

## Paper 302 Distribution Maps and Diagrams (Practical)

Maximum Marks: 30
Time : 3 Hours

## Distribution of Marks

Exercises = 18
Record File $=6$
Viva-voce $=6$
Note: There will be four questions in all and candidate has to attempt three exercises.

1. Principal of map design and layout
2. Symbolization: point, line and area symbol
3. Lettering and toponomy
4. Mechanics of map construction
5. Distribution maps
(i) Qualitative distribution maps

- Choroschematic maps- 1 Exercise
- Chorochromatic maps- 2 Exercise
(ii) Quantitative distribution Maps
- Isopleth maps-3 Exercises
- Choropleth maps-3 Exercises
- Dot maps-3 Exercises
- Diagrammatic maps- 3 Exercises.

6. Prismatic Compass Survey - 2 Exercises.

## Suggested readings:

1. Mishra RP and Ramesh A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi.
2. Monkhouse FJ and Wilkinson HR. 1972. Maps and Diagrams, Methuen Press, London
3. Singh Gopal. 2004. Map Work and Practical Geography, Vikas Publication House, New Delhi.
4. Singh RL. 1979. Elements of Practical Geography, Kalyani Publishers, New Delhi

## Paper-303-Introduction to Remote Sensing, GIS \& Quantitative Methods

Internal Assessment Marks: 20<br>External Assessment Marks: 50<br>Maximum Marks : 70<br>Time : 3 Hours

Note: There shall be nine questions in all. The candidates have to attempt five question including Question 1 which is compulsory comprising six short questions to be answered in 15-20 words each. In addition the candidates have to attempt four more questions selecting at least one from each section. All questions carry equal marks.

## Section-A

1. Introduction to Aerial Photographs: their advantages and types.
2. Elements of aerial Photo interpretation.

## Section-B

3. Introduction to Remote Sensing; Electromagnetic spectrum, stages in remote sensing, type of satellites.
4. Types of Imageries and their application in various fields such as agriculture, environment and resource mapping.

## Section-C

5. Introduction to Geographical Information System: Definition, purpose, advantages and software and hardware requirements.
6. Application of GIS in various fields of geography.

## Section-D

7. Measure of Central Tendency: Mean, Median and Mode.
8. Measure of Dispersion: Range, Quartile deviation and Mean deviation, Standard deviation, Coefficient of variation.

## Suggested Readings:

1. Aslam Mahmood 1993. Statistical Methods in Geographical Studies, Rajesh Publications, New Delhi,.
2. John R. Jensen 2009. Remote Sensing of the Environment;, An Earth Resource Perspective, Pearson Education, ( India Edition) New Delhi,
3. Kumar Meenakshi 2001. Remote Sensing, NCERT, New Delhi,
4. Lillesand and R.W.Kiefer,2005. Remote Sensing and Image Interpretation, John Wiley and Sons.
5. Pritvish Nag, and M.Kudrat 1998. Digital Remote Sensing, Concept Publishing Company, New Delhi,

# Paper 304 - Introduction to Remote Sensing and Field Survey Report (Practical) 

Maximum Marks: 30
Time: 3 Hours

## I - Remote Sensing Practical - 15 Marks

Marks Breakup
Exercise = 9
Record book $=3$
Viva-voce $=3$

Note: There will be four questions in all and candidate has to attempt three exercises.

1. Demarcation of Principal Point, Conjugate Principal point and Flight line on Aerial Photographs - 1 Exercise
2. Determination of Scale of Aerial Photographs - 1 Exercise.
3. Interpretation of Single Vertical Photographs - 1 Exercise.
4. Use of Stereoscope and Identification of Features - 1 Exercise.
5. Identification of Features on IRSID, LISS III imagery (Mark copy of FCC) -1 Exercise.

II Socio-economic Survey and Report Writing $\mathbf{- 1 5}$ marks.

Marks Breakup<br>Field Survey Report = 10 marks<br>Viva-voce = 5 marks

## Suggested Readings:-

1. John R. Jensen, Remote Sensing of the Environment; An Earth Resource Perspective, Pearson Education, (India Edition) New Delhi, 2009.
2. Lillesand and R.W.Kiefer, Remote Sensing and Image Interpretation, John Wiley and Sons, 1994.

Scheme of Examination of B.A. Hindi (Compulsory)
W.e.f. July 2012-13

| Course | Nomenclature | Total <br> Marks | Theory | Internal <br> Assessment | Time |
| :--- | :--- | :---: | :---: | :---: | :--- |
| Sem.-I | Hindi <br> (Compulsory) | 100 | 80 | 20 | 3 Hrs. |
| Sem.-II | Hindi <br> (Compulsory) | 100 | 80 | 20 | 3 Hrs. |
| Sem.-III | Hindi <br> (Compulsory) | 100 | 80 | 20 | 3 Hrs. |
| Sem.-IV | Hindi <br> (Compulsory) | 100 | 80 | 20 | 3 Hrs. |
| Sem.-V | Hindi <br> (Compulsory) | 100 | 90 | 10 | 3 Hrs. |
| Sem.-VI | Hindi <br> (Compulsory) | 100 | 90 | 10 | 3 Hrs. |

म० द० विश्वविद्यालय के लिए
सामूहिक पाठ्यक्रम (महर्षि दयानन्द विश्वविद्यालय और कुरूक्षेत्र विश्वविद्यालय के लिए) जुलाई २०१२
बी०ए० : प्रथम सेमेस्टर
हिन्दी (अनिवार्य)

समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा: | 〒० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम एवं अंक विभाजन

- वस्तुनिष्ठ प्रश्न
- निर्धारित पाठ्यपुस्तक-मध्यकालीन काव्य-कुंज : सं० डॉ० रामसजन पाण्डेय प्रकाशक : खाटू श्याम प्रकाशन, १२७६/५, पीर जी मोहल्ला, प्रताप टाकीज़, रोहतक।
- हिंदी साहित्य का आदिकाल
- काव्यशास्त्र

खण्ड--क : वस्तुनिष्ठ प्रश्न
खण्ड--ख : मध्यकालीन काव्य-कुंज

- पाठ्यक्रम में निर्धारित कवि

कबीर, सूरदास, तुलसीदास, मीराँबाई, बिहारी, घनानंद, रसखान

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों पर उनके साहित्यिक परिचय, अनुभूतिगत वैशिष्ट्य तथा अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जायेंगे । कवियों की विशिष्ट रचनात्मक प्रवृत्ति पर प्रश्न नहीं पूछे जायेंगे ।

खण्ड-ग : हिन्दी साहित्य का आदिकाल

## पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न

9 हिन्दी साहित्येतिहास लेखन की परम्परा
2 आदिकाल का नामकरण
३ आदिकाल की परिस्थितियॉ
8 आदिकालीन साहित्य की सामान्य प्रवृत्तियाँ
ч रासोकाव्य परम्परा : संक्षिप्त परिचय

खण्ड--घ : काव्यशास्त्र पर आधारित विषय
9 काव्य के तत्व

२ रस : स्वरूप और अंग
३ रस के भेद
$४$ अलंकार—अनुप्रास, श्लेष, यमक, उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, मानवीकरण, अन्योक्ति, समासोक्ति छंद—दोहा, चौपाई, सोरठा, बरवै, कुण्डलियाँ, छप्पय, कवित्त, घनाक्षरी शब्दशक्तियाँ : अभिधा, लक्षणा, व्यंजना काव्य-गुण : प्रसाद, माधुर्य और ओज

## निर्देश-

9 खण्ड (क) में पूरे पाठ्यक्रम में से द वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक पश्न 9 अंक का तथा पूरा प्रश्न $\sim$ अंक का होगा ।

2 खण्ड (ख) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।
$३$
खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न ₹ अंक का होगा ।

8 खण्ड (ख) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा। प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

4 खण्ड (ग) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछ जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न 乞-ఒ अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

६ खण्ड (ग) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५ू० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।
$\vartheta$
खण्ड (घ) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न $\mathcal{y}$ अंक का तथा पूरा प्रश्न १० अंक का होगा ।

सामूहिक पाठ्यक्रम (महर्षि दयानन्द विश्वविद्यालय और कुरूक्षेत्र विश्वविद्यालय के लिए)

> जनवरी २०१२ से प्रभावी
> बी०ए० : द्वितीय सेमेस्टर
> हिन्दी (अनिवार्य)

समय : ३ घण्टे

कुल अंक : १००
लिखित परीक्षा : ऽ० अंक
आंतरिक मूल्यांकन : २० अंक

## निर्धारित पाठ्यक्रम एवं अंक विभाजन

- वस्तुनिष्ठ प्रश्न
- ध्रुवस्वामिनी (नाटक) : जयशंकर प्रसाद
- हिन्दी साहित्य का भक्तिकाल
- व्यावहारिक हिन्दी

खण्ड--क : वस्तुनिष्ठ प्रश्न
खण्ड--ख : ध्रुवस्वामिनी
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 'ध्रुवस्वामिनी' नाटक का प्रतिपाद्य
2 'ध्रुवस्वामिनी' नाटक की पात्र-योजना
३ 'ध्रुवस्वामिनी' नाटक की अभिनेयता
8 प्रसाद की नाट्यकला
खण्ड-ग : हिन्दी साहित्य का भक्तिकाल
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 भक्तिकाल की परिस्थितियाँ
2 संत काव्य की प्रवृत्तियाँ
३ सूफी काव्य की प्रवृत्तियाँ
४ राम काव्य की प्रवृत्तियाँ
4 कृष्ण काव्य की प्रवृत्तियाँ
६ भक्तिकाल : स्वर्णयुग

खण्ड--घ : व्यावहारिक हिंदी
पाठ्यक्रम में निर्धारित विषय
9 भाषा की परिभाषा
२ भाषा के विविध रूप : बोली, मानक भाषा, राजभाषा, राष्ट्रभाषा, माध्यमभाषा, मातृभाषा
३ मानक-भाषा की प्रमुख प्रवृत्तियाँ
8 हिन्दी वर्णमाला : स्वर एवं व्यंजन
4 हिन्दी वर्तनी : समस्या और समाधान
६ मुहावरे एवं लोकोक्तियाँ

## निर्देश-

9 खण्ड (क) में पूरे पाठ्यक्रम में से $\varsigma$ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न $\curvearrowleft$ अंक का होगा ।

२ खण्ड (ख) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।

खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\varsigma$ अंक का होगा ।

खण्ड (ख) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक पश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा। प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

4 खण्ड (ग) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न $\tau-\varsigma$ अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

६ खण्ड (ग) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।

खण्ड (घ) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न $\mathcal{L}$ अंक का तथा पूरा प्रश्न 90 अंक का होगा ।

# महर्षि दयानन्द विश्वविद्यालय, रोहतक <br> बी०ए० : तृतीय सेमेस्टर <br> सत्र २०१२-१३ <br> हिन्दी (अनिवार्य) 

समय : ३ घण्टे

$$
\begin{array}{ll}
\text { कुल अंक : } & \text { १०० } \\
\text { लिखित परीक्षा : } & \text { ६० अंक } \\
\text { आंतरिक मूल्यांकन : २० अंक }
\end{array}
$$

## निर्धारित पाठ्यक्रम

- आधुनिक हिंदी कविता : प्रधान संपा० डॉ० सरिता वशिष्ठ, कुरूक्षेत्र विश्वविद्यालय, कुरूक्षेत्र
- हिंदी साहित्य का रीतिकाल
- प्रयोजनमूलक हिंदी : हिंदी कंप्यूटिंग और अनुवाद
- खण्ड--क : प्रस्तावित निर्धारित पाठ्यपुस्तक : आधुनिक हिंदी कविता : प्रधान संपा० डॉ० सरिता वशिष्ठ, कुरूक्षेत्र विश्वविद्यालय, कुरूक्षेत्र

नोट: गत वर्ष सत्र २०११-१२ में पढ़ाई जाने वाली पाठ्यपुस्तक 'अभिनव काव्य कौमुदी' (संपा० डॉ० संजीव कुमार) के स्थान पर कुरूक्षेत्र विश्वविद्यालय द्वारा तैयार पुस्तक 'आधुनिक हिंदी कविता' वर्तमान सत्र २०१२-१३ से पाठ्यक्रम में निर्धारित की गई है। यह निर्णय संयुक्त पाठ्यक्रम समिति में पारित प्रस्ताव की अनुपालना में दोनों विश्वविद्यालयों में समान रूप से लागू होगा । उक्त पुस्तक कुरूक्षेत्र विश्वविद्यालय द्वारा उपलब्ध कराई जाएगी ।

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों पर उनके साहित्यिक परिचय, अनुभूतिगत वैशिष्ट्य तथा अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जाएंगे । कवियों की विशिष्ट रचनात्मक प्रवृत्ति पर प्रश्न नहीं पूछे जाएंगे ।

## खण्ड--ख : हिंदी साहित्य का रीतिकाल

पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 रीतिकालीन हिंदी कविता की पृष्ठभूमि
$२$ रीतिकाल का नामकरण
३ रीतिबद्ध काव्य की विशेषताएँ
४ रीतिमुक्त काव्य की विशेषताएँ
y रीतिकालीन काव्य की उपलब्धियाँ

## खण्ड--ग : प्रयोजनमूलक हिंदी : हिंदी कंप्यूटिंग और अनुवाद

पाठ्यक्रम में निर्धारित विषय
9 कंप्यूटर : स्वरूप और महत्व
२ ई-मेल : प्रेषण-ग्रहण

३ इंटरनेट : स्वरूप और उपयोगिता
8 मशीनी अनुवाद
4 अनुवाद : परिभाषा और स्वरूप

## निर्देश-

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या $\varphi$ अंक की होगी ।पूरा प्रश्न १० अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से कोई दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\approx$ अंक का होगा ।

खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५ू० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक पश्न 乞-乞 अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

4 खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थी को लगभग १५०० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निधारित हैं। पूरा प्रश्न दस अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न $\mathcal{y}$ अंक का तथा पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से १० वस्तुनिप्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न 9 अंक का तथा पूरा प्रश्न दस अंक का होगा ।

# महर्षि दयानन्द विश्वविद्यालय, रोहतक <br> बी०ए० : चतुर्थ सेमेस्टर <br> सत्र २०१२-१३ <br> हिन्दी (अनिवार्य) 

समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा : | ఒ० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

निर्धारित पाठ्यक्रम एवं अंक विभाजन

- कथाक्रम : संपा० डॉ० रोहिणी अग्रवाल
- हिंदी साहित्य का आधुनिक काल : गद्य
- पारिभाषिक शब्दावली
- वस्तुनिष्ठ प्रश्न


## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कहानीकारों के साहित्यिक परिचय, निर्धारित कहानियों के वस्तु पक्ष तथा कला पक्ष पर ही प्रश्न पूछे जाएंगे ।

खण्ड--ख : हिंदी साहित्य का आधुनिक काल : गद्य
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 आधुनिक काल की परिस्थितियाँ
$२$ हिंदी उपन्यास : उद्भव और विकास
३ हिंदी कहानी : उद्भव और विकास
४ हिंदी नाटक : उद्भव और विकास
ч हिंदी निबन्ध : उद्भव और विकास

## खण्ड-गग : पारिभाषिक शब्दावली

## निर्धारित विषय

9 पारिभाषिक शब्दावली : स्वरूप और महत्व
२ पारिभाषिक शब्दावली के गुण
3 पारिभाषिक शब्दावली के निर्माण में सक्रिय विविध सम्प्रदाय : राष्ट्रीयतावादी, अन्तरराष्ट्रीयतावादी, समन्वयवादी ।

खण्ड-- घ : वस्तुनिष्ठ प्रश्न

## निर्देश-

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी। प्रत्येक व्याख्या $\varphi$ अंक की होगी ।पूरा प्रश्न १० अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से कोई दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $ఒ$ अंक का होगा ।

३
खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न 乞-乞 अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

4 खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थी को लगभग १५ू० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं। पूरा प्रश्न दस अंक का होगा ।

६ खण्ड (ग) म निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न $y$ अंक का तथा पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से १० वस्तुनिप्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न दस अंक का होगा

# केवल महर्षि दयानन्द विश्वविद्यालय, रोहतक के लिए बी०ए० : पाँचवाँ सेमेस्टर <br> जुलाई २०१२ से शुरू होने वाले सेमेस्टर के लिए <br> हिन्दी (अनिवार्य) 

समय : ३ घण्टे


## निर्धारित पाठ्यक्रम एवं अंक विभाजन

- समकालीन हिंदी कविता संपा० डॉ० रामरती
- हिंदी साहित्य का आधुनिक काल : कविता
- प्रयोजनमूलक हिंदी : पत्र लेखन, संक्षेपण तथा पल्लवन
- वस्तुनिष्ठ प्रश्न

खण्ड--क : प्रस्तावित निर्धारित पाठ्यपुस्तक

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों पर उनके साहित्सिक परिचय, अनुभूतिगत वैशिष्ट्य तथा अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जायेंगे । कवियों की विशिष्ट रचनात्मक प्रवृत्ति पर प्रश्न नहीं पूछे जायेंगे ।

खण्ड--ख : हिंदी साहित्य का आधुनिक काल : कविता
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न

9 भारतेन्दुयुगीन हिंदी कविता की प्रवृत्तियाँ
2 द्विवेदीयुगीन हिंदी कविता की प्रवृत्तियाँ
३ छायावाद
$४$ प्रगतिवाद
५ प्रयोगवाद
६ नयी कविता
$\vartheta$ समकालीन कविता

खण्ड--ग : प्रयोजनमूलक हिंदी : पत्रलेखन, संक्षेपण तथा पल्लवन
9 पत्रलेखन : स्वरूप और उसके विविध भेद
२ संक्षेपण
३ पल्लवन

खण्ड--घ : वस्तुनिष्ठ प्रश्न

## निर्देश

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ७ अंक की होगी । पूरा प्रश्न १४ अंक का होगा ।

२ खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न १० अंक का होगा ।

3 खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न १०.१० अंक का होगा । इस प्रकार यह प्रश्न २० अंक का होगा ।

ч खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\varphi$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।
$७$ खण्ड (घ) में पूरे पाठ्यक्रम में से १० वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न १० अंक का होगा।

# केवल महर्षि दयानन्द विश्वविद्यालय, रोहतक के लिए बी०ए० षष्ठ सेमेस्टर <br> जनवरी २०१३ से शुरू होने वाले सेमेस्टर के लिए हिन्दी (अनिवार्य) 

समय : ३ घण्टे

$$
\begin{array}{ll}
\text { कुल अंक : } & \text { १०० } \\
\text { लिखित परीक्षा : } & \text { ६० अंक } \\
\text { आंतरिक मूल्यांकन : १० अंक }
\end{array}
$$

## निर्धारित पाठ्यक्रम एवं अंक विभाजन

- नव्यतर विधाओं पर आधारित पाठ्यपुस्तक ४० अंक
- हरियाणवी लोक साहित्य का इतिहास
३० अंक
- हिंदी पत्रकारिता १० अंक
- वस्तुनिष्ठ प्रश्न

१० अंक

## खण्ड क : प्रस्तावित निर्धारित पाठ्यपुस्तक

पंचम सेमेस्टर हिंदी (अनिवार्य) की नव्यतर गद्य विधाओं पर आधारित पाठ्यपुस्तक (जिसका नामकरण पुस्तक-निर्माण के साथ किया जाएगा) म० द० विश्वविद्यालय का हिंदी-विभाग तैयार करेगा। म० द० विश्वविद्यालय के हिंदी-विभाग का दायित्व होगा कि पाठ्यक्रम प्रभावी होने से पहले वह पाठ्यपुस्तक विद्यार्थियों को उपलब्ध कराए ।

प्रस्तुत प्रस्तावित पाठ्य पुस्तक में निम्नलिखित लेखकों की रचनाओं को शामिल किया जाएगा9 (निबन्ध) : बालमुकन्द गुप्त
२ (निबन्ध) : आचार्य रामचन्द्र शुक्ल
$३$ (संस्मरण) : महादेवी वर्मा
$४$ (ललित निबन्ध) : आचार्य हजारीप्रसाद द्विवेदी
ч (ललित निबन्ध) : विद्यानिवास मिश्र
६ (व्यंग्य) : हरिशंकर परसाई
$७$ (यात्रावृत्तान्त) : राहुल सांकृत्यायन

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित लेखकों के साहित्यिक परिचय, निबन्धों के वस्तु पक्ष तथा कला पक्ष पर ही प्रश्न पूछे जाएंगे ।

## खण्ड--ख : हरियाणवी भाषा और साहित्य का इतिहास

पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 हरियाणवी भाषा का उद्भव और विकास
२ हरियाणवी भाषा की प्रमुख बोलियाँ
$४$ हरियाणवी भाषा का आधुनिक साहित्य
(क) हरियाणवी कविता : परिचय और प्रवृत्तियाँ
(ख) हरियाणवी का गद्य साहित्य
$१$ उपन्यास साहित्य
2 कहानी साहित्य
३ नाट्य साहित्य
खण्ड--ग : प्रयोजनमूलक हिंदी : पत्रकारिता
१ पत्रकारिता : स्वरूप एवं प्रकार
2 शीर्षक की संरचना
३ सम्पादक के गुण और दायित्व
8 फीचर लेखन
ч स्वतंत्र प्रेस की अवधारणा

## खण्ड-घ वस्तुनिष्ठ प्रश्न

## निर्देश

$१$ खण्ड (क) मे निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या $\vartheta$ अंक की होगी । पूरा प्रश्न १४ अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न १० अंक का होगा ।
$३$ खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छः लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न १०-१० अंक का होगा । इस प्रकार यह प्रश्न २० अंक का होगा ।

ч खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न 90 अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघुत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\varphi$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से १० वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न १० अंक का होगा।

# BA (Economics) Pass Course <br> 2013-14 <br> Semester $V$ <br> Development Economics 

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hrs.
Unit -I
Features of U.D.C's, Economic Growth and Development; Determinants, Measurement and obstacles of Economic Development, Vicious Circle of Poverty.

## Unit-II

Balanced and Unbalanced Growth Theories, Lewis' Model and Leibenstein's Critical minimum effort thesis.

## Unit III

Environment, Meaning, features and components of Environment.Scope of Environmental Economics; Environment as a necessity and luxury.Population-Environment linkage.Features of Environment as a public good.

## Unit IV

Natural Resources; Environmental pollution, types, causes and effects. Control policies; Environmental legislations in India. Sustainable Development: meaning; indicators, measurement and importance of Sustainable Development.

## Note:-

The question paper will consist of 9 questions. The candidate will be asked to attempt 5 questions in all, selecting one question from each unit. Question 9 shall be compulsory consisting of short answer type nine questions of two marks each and spread over the entire syllabus. All questions will carry equal marks.

## Book recommended:

1. G. Meir and James E. Rauch (2000), "Leading Issues in Economic Development," Oxford University Press, New York.
2. Goodstein, E.S. (2002), "Economics and the Environment, $3^{\text {rd }}$ edition, Prentice Hall.
3. Sinha
4. S.K. Mishra and V.K. Puri ,"Indian Economy", Himalaya Publishing House, New Delhi.
5. Ray, Debraj (2004), "Development Economics," Oxford University Press, New Delhi.
6. Ghatak, Subrata (2003), Introduction to Development Economics, Routledge, London, New York.
7. Thirwall, A. P. (2003), "Growth and Development," $7^{\text {th }}$ ed. Palgrave Macmillan, New York.

# BA (Economics) Pass Course <br> 2013-14 <br> Semester VI <br> International Economics 

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hrs.

## Unit-I

Inter-regional and International Trade; Comparative Cost Theory; Hecksher-Ohlin Theory; Rate of Exchange Determination; Mint Par Theory and Purchasing Power Parity Theory

## Unit-II

Fixed and Flexible Exchange Rate; Exchange Rate Policy in India.Free Trade Vs Protection; Terms of Trade, Exchange Control.

## Unit-III

Change in Value, Volume, Composition and direction of Foreign Trade in India since 1991; Balance of Trade and Balance of Payments Structure, causes of adverse Balance of Payment in India and measure to correct it. Foreign Trade Multiplier.

## Unit-IV

Objectives, Functions and advantages for India of International Monetary Fund; World Bank; World Trade Organisation andSouth Asian Association for Regional Cooperation PreferentialTrading Arrangement (SAPTA).

Note:-
The question paper will consist of 9 questions. The candidate will be asked to attempt 5 questions in all selecting one question from each unit. Question 9 shall be compulsory consisting of short answer type nine questions of two marks each and spread over the entire syllabus. All questions will carry equal marks.

## Book recommended:

1. Bo-Soderston,"International Economics", Macmillan Press, London.
2. AlokGhosh, "Indian Economy", World Press, Calcutta.
3. A.N. Aggarwal,"Indian Economy", Vikas Publication, New Delhi.
4. RuddraDutta and KPM Sundram, "Indian Economy", S.Chand Publication, New Delhi.
5. S.K. Misra and V.K.Puri, "Indian Economy", Himalaya Publishing House, New Delhi.

# Maharshi Dayanand University Rohtak UNDER GRADUATE SYLLABUS OF SOCIOLOGY 

Scheme of Examination

Maximum Marks
Theory
Internal Assessment

- 100 Marks
- $\quad 90$ Marks
- 10 Marks


## Important Note:-

The Paper setter shall set 8 questions from all the four units with internal choice. However, one compulsory question of short answer type (to be answered in $20-30$ words) and it will cover all the units. It will consist of nine sub-questions of two marks each. The students will be required to attempt five questions in all. All questions will consist of 18 marks each.

## Papers and their nomenclature for Six Semesters degree course

B.A. $1^{\text {st }}$ Semester Basic Concepts in Sociology
B.A. $2^{\text {nd }}$ Semester Society, Culture and Social Change
B.A. $3^{\text {rd }}$ Semester

Methods in Social Research
B.A. $4^{\text {th }}$ Semester

Optional Papers *
i) Indian Society
ii) Social Problems in India
iii) Social Change and Development

* The candidate will have to opt for only one optional paper amongst the three papers listed above.
B.A. $5^{\text {th }}$ Semester Foundations of Social Thought
B.A. $6^{\text {th }}$ Semester

Optional Papers *
i) Population Studies
ii) Society and Environment
iii) Rural Society : Structure and Change

* The candidate will have to opt for only one optional paper amongst the three papers listed above.


# B.A. - 5th Semester Foundations of Social Thought 

> Maximum Marks - 100
> Theory - 90

Internal Assessment - 10
Time - 3 hours
Note: - The Paper setter shall set 8 questions from all the four units with internal choice. However, one compulsory question of short answer type (to be answered in $20-30$ words) and it will cover all the units. It will consist of nine sub-questions of two marks each. The students will be required to attempt five questions in all. All questions will consist of 18 marks each.

UNIT - I
Positivism: Comte's Law of three stages, Social Static \& Dynamics; Evolutionism: Spencer's Evolutionary Approach

UNIT - II
Functionalism: Durkheims' Concept of Social Fact, Rules and the procedures for the study of Social Phenomena; Radcliffe Brown’s Structural-Functional Approach

UNIT - III
Conflict: Marx's concept of Dialectical Historical Materialism, Class \& Class Conflict; Coser's Approach of Social Conflict

UNIT - IV
Interactionalism: Weber's Interpretative Sociology, Ideal Types and Types of Social Action; G.H.Mead's Concept of Mind, Self \& Society

## Readings :

Atal, Yogesh (2003): Sociology: From where to where, Jaipur: Rawat Publication.
Barnes, H.E. (1959): Introduction to the history of Sociology, Chicago Uni. Press.
Bose, N.K.: Structure of Hindu Society, New Delhi.
Coser, Lewis, A. (1979): Master of Sociological Thought, Harcourt Brake, Jovanovich.
Dube, S.C.(1990): Society in India, New Delhi: National Book Trust.
Dumont, Luis (1970): Homohierarchichus: The caste System and its Implications, New Delhi: Vikas Publication.
Fletcher, Ronald (1994): The Making of Sociology (Two Volumes), Jaipur: Rawat Publication

Ghurye, G.S.(1969): Caste and Races in India, Bombay: Popular Prakashan.
Johnson, H.M.( 1995) : Sociology: A Systematic Introduction, New Delhi: Allied Publishers.
Prabhu, P.H. ( 1963): Hindu Social Organistion, Bombay: Popular Parkashan. Singh, Yogendra (1986): Indian Sociology: Social conditioning and emerging trends, New Delhi: Vistaar Publication.

# B.A. $6^{\text {th }}$ Semester Population Studies <br> (Optional-I) 

Maximum Marks - 100
Theory - 90
Internal Assessment - 10
Time - 3 hours
Note: - The Paper setter shall set 8 questions from all the four units with internal choice. However, one compulsory question of short answer type (to be answered in $20-30$ words) and it will cover all the units. It will consist of nine sub-questions of two marks each. The students will be required to attempt five questions in all. All questions will consist of 18 marks each.
Population $\quad$ Studies: $\begin{gathered}\text { UNIT - I } \\ \text { Meaning, }\end{gathered}$ Scope and Significance;
Demographic Processes: Fertility, Mortality and Migration
UNIT - II
Population Theories: Malthusian, Demographic Transition and Optimum Population Theory

UNIT - III
Population Composition in India: Age and Sex Structure, Sex-Ratio, Rural-Urban Composition, Literacy in India

UNIT - IV
Population Planning and Control: Needs and Objectives; Population Policy of India, National Rural Health Mission

## Readings:

Agarwal, S.N. (1989): Population Studies with Special Reference to India, New Delhi: Lok Surjeet Publication.
Bose, Ashish (1991): Demographic Diversity in India, Delhi: B.R.Publishing Corporation.
Banarjee, D. (1985): Health and Family Planning Services in India, New Delhi: Lok Parkshan.
Chandrasekhar, S. (ed.) (1974): Infant Mortality, Population Growth and Family Planning in India, London: George Alen and Unwin Ltd.

Dubey, Surendra Nath (2001): Population of India, Delhi: Authors Press.
Kohli, S. (1977): Family Planning in India, New Delhi.
Malthus, T.R. (1986): An Essay on the Principle of Population, London: William Pickering.
Premi, M.K. (2004): Social Demography, Delhi: Jawahar Publishers and Distributors.
Sharma, Rajendra (1997): Demography and Population Problems, New Delhi: Atlantic Publishers.
Srivastava, O.S. (1998): Demography and Population Studies, New Delhi: Vikas Publishing House.
National Rural Health Mission (2006), Govt. of India, New Delhi.

# B.A. - 6th Semester Society and Environment (Optional-II) 

Maximum Marks - 100
Theory - 90
Internal Assessment - 10
Time - 3 hours
Note: - The Paper setter shall set 8 questions from all the four units with internal choice. However, one compulsory question of short answer type (to be answered in $20-30$ words) and it will cover all the units. It will consist of nine sub-questions of two marks each. The students will be required to attempt five questions in all. All questions will consist of 18 marks each.

UNIT - I
Environment and its Concepts: Eco-system, Ecology, Environment and Society their inter-relations

UNIT - II
Environmental Issues: Sustainable Development, Industrialization and Development, Urbanization and Development, Environmental Pollution

UNIT - III
Environment and Development: Global Efforts for Resource Conservation, Environmental Consciousness and Movements: Chipko, Sardar Sarovar and Tehri Dam

UNIT - IV
Contemporary Environmental Problems: Water, Forest, Urban Wastes, Slums, Industrial Pollution, Global-Warming

## Readings :

Baviskar. Amita (1995), In the Valley of the River: Tribal Conflict over Development in the Narmada Valley, Delhi: OUP.

Desh Bandhu and Garg, R.K. (eds) (1986), Social Forestry and Tribal Development, Dehradun: Natraj Publishers.

Dubey, S.M and Murdia, Ratno (ed) (1980), Land Alienation and Restoration in Tribal Communities in India, Bombay: Himalaya Publishing House.

Gadgil, Madhav \& Ram Chandra. Guha (1996), Ecology and Equity: The use and Abuse of Nature in contemporary India:: New Delhi: OUP.

Ghai, Dharam (ed) (1994), Development and Environment: Sustaining People and Nature. UNRISD: Blackwell Publication.

Giddens, Anthony (1996), Global Problems and Ecological Crisis", $2^{\text {nd }}$ edition New York:W.W. Norton and Co.

Guha, Ramechandra (1995), The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya. OUP: Delhi.

Kanwar, J.S (ed) (1988) Water Management: The key to Developing Agriculture, New Delhi.Agricole.

Katyal, Jimmy and M.Satake(1989), Environmental Pollution, New Delhi: Anmol Publications.

Krishna, Sumi (1996), Environmental Politics: People's lives and Development Choices, New Delhi:Sage Publications.

Mehta S.R. (ed)(1997), Poverty, Population and Sustainable Development, New Delhi: Rawat Publications.

Schnaiberg, Allan (1980), The Environment, New York: OUP.
Shiva, Vandana (1988), Staying Alive: Women, Ecology and the Environment, London Zed Books.

Shiva. Vandana (1991) Ecology and the Politics of Survival: Conflicts over Natural Resources in India. New Delhi: Sage Publications.

Singh, Gian (1991), Environmental Deterioration in India: Causes and Control, New Delhi: Agricole.
UNDP, (1987), Sustainable Development : World commission On Environment and Development, Our Common Future Brutland Report, OUP: New Delhi.

# B.A. - 6th Semester <br> Rural Society : Structure and Change (Optional-III) 

Maximum Marks - 100
Theory - 90
Internal Assessment - 10
Time - 3 hours
Note: - The Paper setter shall set 8 questions from all the four units with internal choice. However, one compulsory question of short answer type (to be answered in $20-30$ words) and it will cover all the units. It will consist of nine sub-questions of two marks each. The students will be required to attempt five questions in all. All questions will consist of 18 marks each.

UNIT - I
Introduction to Rural Sociology: Origin of Rural Sociology, Nature, Subject Matter and Importance of the Study of Rural Sociology

## UNIT - II

Rural Social Structure: Caste and Class in Rural Set Up, Inter Caste Relations and Jajmani System, Rural Family and Changing pattern

UNIT - III
Rural Economy: Land Tenure, Land Reforms, Green Revolution and Its Impact, Bonded and Migrant Labourers, Trends of Change in Rural Society

UNIT - IV
Rural Political Structure: Traditional Caste Panchayats, Panchayat before and after $73^{\text {rd }}$ Amendment, New Panchayati Raj and Empowerment of Women

## Readings :

Beteille, A. (1974), Studies in Agrarian Social Structure, Delhi: Oxford University Press.

Desai, A.R. (1969), Rural Sociology in India, Bombay : Popular Prakashan.
Dube, S.C.(1955), Indian Village, London : Routledge and Kegan Paul.
Doshi, S.L. and P.C.Jain (1999), Rural Sociology, Jaipur : Rawat Publication.
Jodhka, S.S. (1995), Debt, Dependence and Agrarian Change, Jaipur : Rawat Publication.

Sharma, K.L. (1997), Rural Society in India, Jaipur : Rawat Publication.

# Maharshi Dayanand University Rohtak UNDER GRADUATE SYLLABUS OF SOCIOLOGY 

Scheme of Examination

| Maximum Marks | - | 100 Marks |
| :--- | :--- | :---: |
| Theory | - | 80 Marks |
| Internal Assessment | - | 20 Marks |
| Time | - | 3 Hrs. |

Note for paper setter :
The question paper will consist of four sections containing eight questions with internal choice from each unit i.e. two questions from each unit. The candidate will be required to answer five questions in all. Four questions will have to be attempted from four units and the fifth question which is compulsory shall be in the short answer type question covering the entire syllabus. All the questions shall carry equal marks i.e. 16 each from the units and $5^{\text {th }}$ compulsory question shall be divided in to eight short answer question of 2 marks each i.e. $8 \times 2=16$ thus making it the total weightage to 80 marks.

Papers and their nomenclature for Six Semesters degree course
B.A. 1 ${ }^{\text {st }}$ Semester Basic Concepts in Sociology
B.A. $2^{\text {nd }}$ Semester

Society, Culture and Social Change
B.A. $3^{\text {rd }}$ Semester

Methods in Social Research
B.A. $4^{\text {th }}$ Semester

Optional Papers *
i) Indian Society
ii) Social Problems in India
iii) Social Change and Development

* The candidate will have to opt for only one optional paper amongst the three papers listed above.
B.A. $5^{\text {th }}$ Semester Foundations of Social Thought
B.A. $6^{\text {th }}$ Semester

Optional Papers *
i) Population Studies
ii) Society and Environment
iii) Rural Society : Structure and Change

* The candidate will have to opt for only one optional paper amongst the three papers listed above.


# B.A. - 3rd Semester Methods in Social Research 

$$
\begin{array}{r}
\text { Maximum Marks - } 100 \\
\text { Theory - } 80 \\
\text { Internal Assessment - } 20
\end{array}
$$

Time - 3 hours

## Note for paper setter :

The question paper will consist of four sections containing eight questions with internal choice from each unit i.e. two questions from each unit. The candidate will be required to answer five questions in all. Four questions will have to be attempted from four units and the fifth question which is compulsory shall be in the short answer type question covering the entire syllabus. All the questions shall carry equal marks i.e. 16 each from the units and $5^{\text {th }}$ compulsory question shall be divided in to eight short answer question of 2 marks each i.e. $8 \times 2=16$ thus making it the total weightage to 80 marks.

## UNIT - I

Concepts of Social Research: Nature, Definition and Steps of Social Research; Objectivity and Subjectivity in Social Research

UNIT - II
Qualitative Methods: Nature \& Characteristics of observation, Interview, Case Study, Content Analysis and Social Survey - Their Importance in Social Research

UNIT - III
Quantitative Methods: Nature \& Characteristics; Research Design, Sampling and Hypothesis: Their Nature, Types and Importance of Social Research

UNIT - IV
Use of Statistics \& Computer in Social Research: Classification and Tabulation of Data; Measures of Central Tendency, Mean, Mode \& Median; Use of Computer in Data Analysis

## Readings :

Ahuja, Ram (2001): Research Methods, New Delhi: Rawat Publication.
Goode, W.J. and P.K.Hatt (1952): Methods in Social Research, New York: McGraw International.
Seltiz, Claise et al; (1959): Research Methods in Social Relation, New York: Henry Holt and Co.
Srivastava, Prakash G.N.(1994): Advances Research Methodology, Delhi: Radha Publication.

Thakur, Devender(2003): Research Methodology in Social Science, Delhi: Deep and Deep Publication.

Young, P.V.(1988): Scientific Social Survey and Research, New Delhi Prentice Hall.

# B.A. $4^{\text {th }}$ Semester <br> Indian Society <br> (Optional-I) 

Maximum Marks - 100
Theory - 80
Internal Assessment - 20
Time - 3 hours

## Note for paper setter :

The question paper will consist of four sections containing eight questions with internal choice from each unit i.e. two questions from each unit. The candidate will be required to answer five questions in all. Four questions will have to be attempted from four units and the fifth question which is compulsory shall be in the short answer type question covering the entire syllabus. All the questions shall carry equal marks i.e. 16 each from the units and $5^{\text {th }}$ compulsory question shall be divided in to eight short answer question of 2 marks each i.e. $8 \times 2=16$ thus making it the total weightage to 80 marks.

## UNIT - I

Evolution of Indian Society: Traditional view of Indian Society; Factors Promoting Unity and Diversity in India; India as Pluralistic Society, Multi-Ethnic; Multi-Religious; Cultural and Lingual

UNIT - II
Indian Social Institutions: Kinship, Family, Marriage; Caste and its Changing Dimensions.

UNIT - III
Processes of Social Change in India: Sanskritization, Westernization, Parochialization and Universalization

UNIT - IV
Social Issues and Problems: Gender Discrimination, Secularism and Religious Minorities, Problems of Dalits, Women and OBC and Affirmative Actions

## Readings:

Ahuja, Ram (1997): Society in India: Concept, Theories and Recent Trends, Jaipur: Rawat Publication.

Beteille, Andre (1992): Backward Classes in Contemporary India, New Delhi: OUP.
Dube, S.C.(1991): Indian Society, New Delhi : National Book Trust.
Ghurye, G.S. (1968): Social Tension, Bombay: Popular Prakashan.
Karve, Iravati (1961): Hindu Society: An Interpretation, Pune: Daccan College.
Mandelbaum, D.G. (1970): Society in India, Bombay: Popular Prakashan.
Sharma K.L.(ed.) (1994): Caste and Class, Jaipur, Rawat Publication.
Srinivas, M.N.(1980): India's : Social Structure, New Delhi : Hindustan Publication.
Srinivas, M.N.(1985): Social Change in Modern India, New Delhi : Orient Longman.
India: 2010 Govt. of India, New Delhi, Govt. of India publication division.

# B.A. $-4^{\text {th }}$ Semester <br> Social Problems in India <br> (Optional-II) 

Maximum Marks - 100
Theory - 80
Internal Assessment - 20
Time - 3 hours

## Note for paper setter :

The question paper will consist of four sections containing eight questions with internal choice from each unit i.e. two questions from each unit. The candidate will be required to answer five questions in all. Four questions will have to be attempted from four units and the fifth question which is compulsory shall be in the short answer type question covering the entire syllabus. All the questions shall carry equal marks i.e. 16 each from the units and $5^{\text {th }}$ compulsory question shall be divided in to eight short answer question of 2 marks each i.e. $8 \times 2=16$ thus making it the total weightage to 80 marks.

UNIT - I
Social Problem: Concepts, Meaning and Importance, Deviance and Social Disorganization

UNIT - II
Structural Issues: Inequality of Caste, Class and Gender; Problems of Minorities.
UNIT - III
Problem and Issues: Female Foeticide, Dowry, Domestic Violence, Problems of Aged and Divorce

UNIT - IV
Social Disorganization: Crime and Juvenile Delinquency, Corruption, Drug Addiction, Suicide, Prostitution and AIDS

## Readings:

Ahuja, Ram (2000): Social Problems in India, New Delhi: Rawat Publications.
Beteille, Andre (1992): Backward Classes in Contemporary India, New Delhi: OUP
Beteille, Andre (1974): Social Inequality, New Delhi: OUP
Bereman, G.D. (1979): Caste and Other Inequalities: Essay in Inequality, Meerut: Folklore Institute.

Dube, Leela (1997): Women and Kinship, Comparative Perspectives on Gender in South and Southeast Asia, New Delhi: Sage Publication.
Desai, Neera \& Usha Thakkar (2007): Women in Indian Society, National Book Trust, India.
Gadgil, Madhav and Ramchandra Guha (1996): Ecology and Equality: The use and Abuse of Nature in Contemporary India, New Delhi: OUP.

Gill, S.S. (1998): The Pathology of Corruption, New Delhi: Harper Collin Publishers.
Satya Murty, T.V. (1996): Region, Religion, Caste, Gender and Culture in Contemporary India, New Delhi: OUP.

# B.A. $-4^{\text {th }}$ Semester <br> Social Change and Development <br> (Optional-III) 

$$
\begin{array}{r}
\text { Maximum Marks }-100 \\
\text { Theory }-80 \\
\text { Internal Assessment }-20 \\
\text { Time }-3 \text { hours }
\end{array}
$$

## Note for paper setter :

The question paper will consist of four sections containing eight questions with internal choice from each unit i.e. two questions from each unit. The candidate will be required to answer five questions in all. Four questions will have to be attempted from four units and the fifth question which is compulsory shall be in the short answer type question covering the entire syllabus. All the questions shall carry equal marks i.e. 16 each from the units and $5^{\text {th }}$ compulsory question shall be divided in to eight short answer question of 2 marks each i.e. $8 \times 2=16$ thus making it the total weightage to 80 marks.

$$
\text { Unit - } 1
$$

Social Change: Concept, Forms and Factors. Unit - II
Theories of Social Change: Linear; Cyclical; Fluctuation; Conflict Theories (Marx) Unit - III
Social Change in Contemporary India: Trends and Processes of Change - Sanskritisation, Westernisation, Modernisation and Secularisation
Unit - IV

State and Development in India: Strategies of Government's Development Schemes - Impact of Five Year Plan, Community Development Programme and Panchayati Raj Institutions, Impact of Panchayati Raj on Women Empowerment

## Readings:

Appadurai, Arjun.(1997), Modernity At Large: Cultural Dimensions of Globalization. New Delhi: OUP
Bernd, Hamns \& Pandurang K. Mutagi (1998), Sustainable Development and Future of Cities, Intermediate Technology Publication, UNSECO

Dreze, Jean and Amartya Sen.(1996), India: Economic Development and Social Opportunity. New Delhi: OUP.

Desai, A.R. (1985), India's Path of Development: A Marxist Approach. Bombay: Popular Parkashan.(Chapter 2).

Dube, S.C. (1988), Modernization and Development: The Search for Alternative Paradigm, Vistaar Publication, New Delhi.

Dube, S.C. (2000), Vikas Ka Samajshastra, Vani Parkashan, New Delhi.
Giddens, Anthony.(1990), The Consequences of Modernity. Cambridge: Polity Press.
Magdoff, Harry (2002), Imperialism and Globalisation, Cornerstone Publications, Kharagpur.
Myrdal, G. (1966), in Shanin, Theodor (Ed.), Peasant and Peasant Societies, Penguin.
Moor, Wilbert and Robert Cook. (1967), Social Change. New Delhi: Prentice-Hall (India)
N.Long (1977), An Introduction to the Sociology of Rural Development, Tavistock

Publications;London
Sharma, SL(1986), Development: Socio-Cultural Dimensions. Jaipur: Rawat.(Chapter1).
Srinivas, M.N. (1966), Social Change in Modern India. Berkley: University of Berkley.
S.C. Dube(1998): Modernization and Development, New Delhi: VistaarPublishers.

## NEW SCHEME

## Scheme of Examination of B.A. $1^{\text {st }}$ Semester Mathematics (w.e.f. 2012-2013)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 111 | Algebra | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 112 | Calculus | 6 periods/ <br> 4 hours per <br> week | 27 | 7 |  |
| 12BAM 113 | Solid <br> Geometry | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Algebra

## Paper: 12BAM 111

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Rank of a matrices. Inverse of a matrix. Linear dependence and independence of rows and columns of matrices. Row rank and column rank of a matrix. Eigenvalues, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix.

## Section - II

Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices, Bilinear and Quadratic forms.

## Section - III

Relations between the roots and coefficients of general polynomial equation in one variable. Solutions of polynomial equations having conditions on roots. Common roots and multiple roots. Transformation of equations.

## Section-IV :

Nature of the roots of an equation Descarte's rule of signs. Solutions of cubic equations (Cardon's method). Biquadratic equations and their solutions.

## Books Recommended :

1. H.S. Hall and S.R. Knight : Higher Algebra, H.M. Publications 1994.
2. Shanti Narayan : A Text Books of Matrices.
3. Chandrika Prasad : Text Book on Algebra and Theory of Equations.

Pothishala Private Ltd., Allahabad.

## Calculus

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Definition of the limit of a function. Basic properties of limits, Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibnitz theorem. Maclaurin and Taylor series expansions.
Section - II

Asymptotes in Cartesian coordinates, intersection of curve and its asymptotes, asymptotes in polar coordinates. Curvature, radius of curvature for Cartesian curves, parametric curves, polar curves. Newton's method. Radius of curvature for pedal curves. Tangential polar equations. Centre of curvature. Circle of curvature. Chord of curvature, evolutes. Tests for concavity and convexity. Points of inflexion. Multiple points. Cusps, nodes \& conjugate points. Type of cusps.
Section - III :

Tracing of curves in Cartesian, parametric and polar co-ordinates. Reduction formulae. Rectification, intrinsic equations of curve.
Section - IV :

Quardrature (area)Sectorial area. Area bounded by closed curves. Volumes and surfaces of solids of revolution. Theorems of Pappu's and Guilden.

## Books Recommended :

1. Differential and Integral Calculus : Shanti Narayan.
2. Murray R. Spiegel : Theory and Problems of Advanced Calculus. Schaun's Outline series. Schaum Publishing Co., New York.
3. N. Piskunov : Differential and integral Calculus. Peace Publishers, Moscow.
4. Gorakh Prasad : Differential Calculus. Pothishasla Pvt. Ltd., Allahabad.
5. Gorakh Prasad : Integral Calculus. Pothishala Pvt. Ltd., Allahabad.

# Solid Geometry 

## Paper: 12BAM 113

Max. Marks:
$5 \times 4=20$
$1 \times 6=6$
Total $=26$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

General equation of second degree. Tracing of conics. Tangent at any point to the conic, chord of contact, pole of line to the conic, director circle of conic. System of conics. Confocal conics. Polar equation of a conic, tangent and normal to the conic.

## Section-II :

Sphere: Plane section of a sphere. Sphere through a given circle. Intersection of two spheres, radical plane of two spheres. Co-oxal system of spheres Cones. Right circular cone, enveloping cone and reciprocal cone. Cylinder: Right circular cylinder and enveloping cylinder.

Section-III :
Central Conicoids: Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a coincoid. Enveloping cylinder of a coincoid.

## Section-IV :

Paraboloids: Circular section, Plane sections of conicoids.
Generating lines. Confocal conicoid. Reduction of second degree equations.

## Books Recommended

1. R.J.T. Bill, Elementary Treatise on Coordinary Geometry of Three Dimensions, MacMillan India Ltd. 1994.
2. P.K. Jain and Khalil Ahmad : A Textbook of Analytical Geometry of Three Dimensions, Wiley Eastern Ltd. 1999.

## NEW SCHEME

Scheme of Examination of B.A. $2^{\text {nd }}$ Semester Mathematics
(w.e.f. 2012-2013)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Theory | linternal <br> Assessment | Total |  |
| 12BAM 121 | Number <br> Theory and <br> Trigonometry | 6 periodss <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 122 | Ordinary <br> Differential <br> Equations | 6 periods/ <br> 4 hours per <br> week | 27 | 700 |  |
| 12BAM 123 | Vector <br> Calculus | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Number Theory and Trigonometry 

## Paper: 12BAM 121

Max. Marks:

$4.5 \times 4=18$ $1.5 \times 6=9$ Total $=27$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

Divisibility, G.C.D.(greatest common divisors), L.C.M.(least common multiple)
Primes, Fundamental Theorem of Arithemetic. Linear Congruences, Fermat's theorem. Wilson's theorem and its converse. Linear Diophanatine equations in two variables

> Section - II :

Complete residue system and reduced residue system modulo m. Euler's $\varnothing$ function Euler's generalization of Fermat's theorem. Chinese Remainder Theorem. Quadratic residues. Legendre symbols. Lemma of Gauss; Gauss reciprocity law. Greatest integer function [x]. The number of divisors and the sum of divisors of a natural number $n$ (The functions $d(n)$ and $\sigma(n)$ ). Moebius function and Moebius inversion formula.

> Section -III :

De Moivre's Theorem and its Applications. Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties.

Section-IV:
Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity. Gregory's series. Summation of Trigonometry series.

## Books Recommended :

1. S.L. Loney : Plane Trigonometry Part - II, Macmillan and Company, London.
2. R.S. Verma and K.S. Sukla : Text Book on Trigonometry, Pothishala Pvt. Ltd. Allahabad.
3. Ivan Ninen and H.S. Zuckerman. An Introduction to the Theory of Numbers.

## Ordinary Differential Equations

Paper: 12BAM 122

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

Geometrical meaning of a differential equation. Exact differential equations, integrating factors. First order higher degree equations solvable for $\mathrm{x}, \mathrm{y}, \mathrm{p}$ Lagrange's equations, Clairaut's equations. Equation reducible to Clairaut's form. Singular solutions.

## Section-II :

Orthogonal trajectories: in Cartesian coordinates and polar coordinates. Self orthogonal family of curves.. Linear differential equations with constant coefficients. Homogeneous linear ordinary differential equations. Equations reducible to homogeneous linear ordinary differential equations.

## Section-III :

Linear differential equations of second order: Reduction to normal form. Transformation of the equation by changing the dependent variable/ the independent variable. Solution by operators of non-homogeneous linear differential equations. Reduction of order of a differential equation. Method of variations of parameters. Method of undetermined coefficients.
Section - IV :

Ordinary simultaneous differential equations. Solution of simultaneous differential equations involving operators $x(d / d x)$ or $t(d / d t)$ etc. Simultaneous equation of the form $d x / P=d y / Q=$ $\mathrm{dz} / \mathrm{R}$. Total differential equations. Condition for $\mathrm{Pdx}+\mathrm{Qdy}+\mathrm{Rdz}=0$ to be exact. General method of solving Pdx $+\mathrm{Qdy}+\mathrm{Rdz}=0$ by taking one variable constant. Method of auxiliary equations.

## Books Recommended :

1. D.A. Murray : Introductory Course in Differential Equations. Orient Longaman (India). 1967
2. A.R.Forsyth : A Treatise on Differential Equations, Machmillan and Co. Ltd. London
3. E.A. Codington : Introduction to Differential Equations.
4. S.L.Ross: Differential Equations, John Wiley \& Sons
5. B.Rai \& D.P. Chaudhary : Ordinary Differential Equations; Narosa, Publishing House Pvt. Ltd.

## Vector Calculus

## Paper: 12BAM 123

Max. Marks:

$5 \times 4=20$
$1 \times 6=6$
Total $=26$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives
Section - II

Gradient of a scalar point function, geometrical interpretation of grad $\Phi$, character of gradient as a point function. Divergence and curl of vector point function, characters of Div $\vec{f}$ and Curl $\vec{f}$ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.

## Section - III

Orthogonal curvilinear coordinates Conditions for orthogonality fundamental triad of mutually orthogonal unit vectors. Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal curvilinear coordinates, Cylindrical co-ordinates and Spherical co-ordinates.
Section - IV

Vector integration; Line integral, Surface integral, Volume integral.
Theorems of Gauss, Green \& Stokes and problems based on these theorms.

## Books Recommended:

1. Murrary R. Spiegal : Theory and Problems of Advanced Calculus, Schaum Publishing Company, New York.
2. Murrary R. Spiegal : Vector Analysis, Schaum Publisghing Company, New York.
3. N. Saran and S.N. NIgam. Introduction to Vector Analysis, Pothishala Pvt. Ltd., Allahabad.
4. Shanti Narayna : A Text Book of Vector Calculus. S. Chand \& Co., New Delhi.

## NEW SCHEME

## Scheme of Examination of B.A. $3^{\text {rd }}$ Semester Mathematics <br> (w.e.f. 2013-2014)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 231 | Advanced <br> Calculus | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 232 | Partial <br> Differential | 6 periods/ <br> 4 hours per <br> week | 27 | 7 |  |
|  | Equations |  |  |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Advanced Calculus

## Paper: 12BAM 231

Max. Marks:<br>$4.5 \times 4=18$<br>$1.5 \times 6=9$<br>Total $=27$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.

## Section - II

Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions \& implicit functions. Change of variables. Homogenous functions \& Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.

## Section - III

Differentiability of real valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.

## Section - IV

Curves: Tangents, Principal normals, Binormals, Serret-Frenet formulae. Locus of the centre of curvature, Spherical curvature, Locus of centre of Spherical curvature, Involutes, evolutes, Bertrand Curves. Surfaces: Tangent planes, one parameter family of surfaces, Envelopes.

## Books Recommended:

1. C.E. Weatherburn : Differential Geometry of three dimensions, Radhe Publishing House, Calcutta
2. Gabriel Klaumber : Mathematical analysis, Mrcel Dekkar, Inc., New York, 1975
3. R.R. Goldberg : Real Analysis, Oxford \& I.B.H. Publishing Co., New Delhi, 1970
4. Gorakh Prasad : Differential Calculus, Pothishala Pvt. Ltd., Allahabad
5. S.C. Malik : Mathematical Analysis, Wiley Eastern Ltd., Allahabad.
6. Shanti Narayan : A Course in Mathemtical Analysis, S.Chand and company, New Delhi
7. Murray, R. Spiegel : Theory and Problems of Advanced Calculus, Schaum Publishing co., New York

# Partial Differential Equations 

Paper: 12BAM 232

Max. Marks:
$4.5 \times 4=18$
$1.5 \times 6=9$
Total $=27$
Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Partial differential equations: Formation, order and degree, Linear and Non-Linear Partial differential equations of the first order: Complete solution, singular solution, General solution, Solution of Lagrange's linear equations, Charpit's general method of solution. Compatible systems of first order equations, Jacobi's method.

## Section - II

Linear partial differential equations of second and higher orders, Linear and non-linear homogenious and non-homogenious equations with constant co-efficients, Partial differential eqution with variable co-efficients reducible to equations with constant coefficients, their complimentary functions and particular Integrals, Equations reducible to linear equations with constant co-efficients.

## Section - III

Classification of linear partial differential equations of second order, Hyperbolic, parabolic and elliptic types, Reduction of second order linear partial differential equations to Canonical (Normal) forms and their solutions, Solution of linear hyperbolic equations, Monge's method for partial differential equations of second order.

Section - IV
Cauchy's problem for second order partial differential equations, Characteristic equations and characteristic curves of second order partial differential equation, Method of separation of variables: Solution of Laplace's equation, Wave equation (one and two dimensions), Diffusion (Heat) equation (one and two dimension) in Cartesian Co-ordinate system.

## Books Recommended:

1. D.A.Murray: Introductory Course on Differential Equations, Orient Longman, (India), 1967
2. Erwin Kreyszing : Advanced Engineering Mathematics, John Wiley \& Sons, Inc., New York, 1999
3. A.R. Forsyth : A Treatise on Differential Equations, Macmillan and Co. Ltd.
4. Ian N.Sneddon : Elements of Partial Differential Equations, McGraw Hill Book Company, 1988
5. Frank Ayres : Theory and Problems of Differential Equations, McGraw Hill Book Company, 1972
6. J.N. Sharma \& Kehar Singh : Partial Differential Equations

## Statics

## Paper: 12BAM 233

Max. Marks:

| $5 \times 4=20$ |
| :--- |
| $1 \times 6=6$ |
| Total $=26$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Composition and resolution of forces. Parallel forces. Moments and Couples.

> Section - II

Analytical conditions of equilibrium of coplanar forces. Friction. Centre of Gravity.

> Section - III

Virtual work. Forces in three dimensions. Poinsots central axis.
Section-IV
Wrenches. Null lines and planes. Stable and unstable equilibrium.

## Books Recommended:

1. S.L. Loney : Statics, Macmillan Company, London
2. R.S. Verma : A Text Book on Statics, Pothishala Pvt. Ltd., Allahabad

## NEW SCHEME

## Scheme of Examination of B.A. $4^{\text {th }}$ Semester Mathematics

(w.e.f. 2013-2014)

| Paper Code | Title of the Paper | Allocation of Periods | Maximum Marks |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Theory | Intternal Assessment | Practical | Total |
| 12BAM 241 | Sequences and Series | $\begin{aligned} & \hline 6 \text { periods/ } \\ & 4 \text { hours per } \\ & \text { week } \\ & \hline \end{aligned}$ | 27 | 6 | -- | 100 |
| 12BAM 242 | Special Functions and Integral transforms | $\begin{aligned} & 6 \text { periods/ } \\ & 4 \text { hours per } \\ & \text { week } \end{aligned}$ | 27 | 7 | -- |  |
| 12BAM 243 | Programming in C and Numerical Methods | 6 periods/ 4 hours per week | 20 | -- | 13 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Sequences and Series 

## Paper: 12BAM 241

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Boundedness of the set of real numbers; least upper bound, greatest lower bound of a set, neighborhoods, interior points, isolated points, limit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties. Bolzano-Weiestrass theorem, Open covers, Compact sets and Heine-Borel Theorem.

## Section - II

Sequence: Real Sequences and their convergence, Theorem on limits of sequence, Bounded and monotonic sequences, Cauchy's sequence, Cauchy general principle of convergence, Subsequences, Subsequential limits.
Infinite series: Convergence and divergence of Infinite Series, Comparison Tests of positive terms Infinite series, Cauchy's general principle of Convergence of series, Convergence and divergence of geometric series, Hyper Harmonic series or p-series.

## Section - III

Infinite series: D-Alembert's ratio test, Raabe's test, Logarithmic test, de Morgan and Bertrand's test, Cauchy's Nth root test, Gauss Test, Cauchy's integral test, Cauchy's condensation test.

## Section - IV

Alternating series, Leibnitz's test, absolute and conditional convergence, Arbitrary series: abel's lemma, Abel's test, Dirichlet's test, Insertion and removal of parenthesis, re-arrangement of terms in a series, Dirichlet's theorem, Riemann's Re-arrangement theorem, Pringsheim's theorem (statement only), Multiplication of series, Cauchy product of series, (definitions and examples only) Convergence and absolute convergence of infinite products.

## Books Recommended:

1. R.R. Goldberg : Real Analysis, Oxford \& I.B.H. Publishing Co., New Delhi, 1970
2. S.C. Malik : Mathematical Analysis, Wiley Eastern Ltd., Allahabad.
3. Shanti Narayan : A Course in Mathematical Analysis, S.Chand and company, New Delhi
4. Murray, R. Spiegel : Theory and Problems of Advanced Calculus, Schaum Publishing co., New York
5. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
6. Earl D. Rainville, Infinite Series, The Macmillan Co., New York

## Special Functions and Integral Transforms

Paper: 12BAM 242

## Max. Marks: <br> $4.5 \times 4=18$ <br> $1.5 \times 6=9$ <br> Total $=27$

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Series solution of differential equations - Power series method, Definitions of Beta and Gamma functions. Bessel equation and its solution: Bessel functions and their properties-Convergence, recurrence, Relations and generating functions, Orthogonality of Bessel functions.

## Section - II

Legendre and Hermite differentials equations and their solutions: Legendre and Hermite functions and their properties-Recurrence Relations and generating functions. Orhogonality of Legendre and Hermite polynomials. Rodrigues’ Formula for Legendre \& Hermite Polynomials, Laplace Integral Representation of Legendre polynomial.

## Section - III

Laplace Transforms - Existence theorem for Laplace transforms, Linearity of the Laplace transforms, Shifting theorems, Laplace transforms of derivatives and integrals, Differentiation and integration of Laplace transforms, Convolution theorem, Inverse Laplace transforms, convolution theorem, Inverse Laplace transforms of derivatives and integrals, solution of ordinary differential equations using Laplace transform.

> Section - IV

Fourier transforms: Linearity property, Shifting, Modulation, Convolution Theorem, Fourier Transform of Derivatives, Relations between Fourier transform and Laplace transform, Parseval's identity for Fourier transforms, solution of differential Equations using Fourier Transforms.

## Books Recommended:

1. Erwin Kreyszing : Advanced Engineering Mathematics, John Wiley \& Sons, Inc., New York, 1999
2. A.R. Forsyth : A Treatise on Differential Equations, Macmillan and Co. Ltd.
3. I.N. Sneddon : Special Functions on mathematics, Physics \& Chemistry.
4. W.W. Bell : Special Functions for Scientists \& Engineers.
5. I.N. Sneddon: the use of integral transform, McGraw Hill, 1972
6. Murray R. Spiegel: Laplace transform, Schaum's Series.

## Programming in C and Numerical Methods

Part-A (Theory)
Paper: 12BAM 243

> | Max. Marks: |
| :--- |
| $3.5 \times 4=14$ <br> $1 \times 6=6$ <br> Total $=20$ <br> Time: 3 Hours |

Note:- The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 3.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions ( each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Programmer's model of a computer, Algorithms, Flow charts, Data types, Operators and expressions, Input / outputs functions.

## Section - II

Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops, Switch Statement \& Case control structures. Functions, Preprocessors and Arrays.

## Section - III

Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters. Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers: Pointers Data type, Pointers and Arrays, Pointers and Functions.
Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method. Newton's iterative method for finding pth root of a number, Order of convergence of above methods.

Section - IV
Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, Triangularization method (LU decomposition method). Crout's method, Cholesky Decomposition method. Iterative method, Jacobi's method, Gauss-Seidal's method, Relaxation method.

## Books Recommended:

1. B.W. Kernighan and D.M. Ritchie : The C Programming Language, $2^{\text {nd }}$ Edition
2. V. Rajaraman : Programming in C, Prentice Hall of India, 1994
3. Byron S. Gottfried : Theory and Problems of Programming with C, Tata McGraw-Hill Publishing Co. Ltd., 1998
4. M.K. Jain, S.R.K.Lyengar, R.K. Jain : Numerical Method, Problems and Solutions, New Age International (P) Ltd., 1996
5. M.K. Jain, S.R.K. Lyengar, R.K. Jain : Numerical Method for Scientific and Engineering Computation, New Age International (P) Ltd., 1999
6. Computer Oriented Numerical Methods, Prentice Hall of India Pvt. Ltd.
7. Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill Publishing Co. Ltd.
8. Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill Publishing Co. Ltd.
9. Babu Ram: Numerical Methods, Pearson Publication.
10. R.S. Gupta, Elements of Numerical Analysis, Macmillan's India 2010.

## Part-B (Practical)

Max. Marks: 13
Time: 3 Hours
There will be a separate practical paper which will consist simple programs in C and the implementation of Numerical Methods, studied in the paper 12BAM 243 (Part-A).

## NEW SCHEME

## Scheme of Examination of B.A. $5^{\text {th }}$ Semester Mathematics

(w.e.f. 2014-2015)

| Paper Code | Title of the <br> Paper | Allocation <br> of <br> Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 351 | Real Analysis | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 352 | Groups and <br> Rings | beriods/ <br> 4 hours per <br> week | 27 | 7 |  |
| 12BAM 353 | Dynamics | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |
|  |  |  |  |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Real Analysis

## Paper: 12BAM 351

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Riemann integral, Integrabililty of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.

## Section - II

Improper integrals and their convergence, Comparison tests, Abel's and Dirichlet's tests, Frullani's integral, Integral as a function of a parameter. Continuity, Differentiability and integrability of an integral of a function of a parameter.

## Section - III

Definition and examples of metric spaces, neighborhoods, limit points, interior points, open and closed sets, closure and interior, boundary points, subspace of a metric space, equivalent metrics, Cauchy sequences, completeness, Cantor's intersection theorem, Baire's category theorem, contraction Principle

## Section - IV

Continuous functions, uniform continuity, compactness for metric spaces, sequential compactness, Bolzano-Weierstrass property, total boundedness, finite intersection property, continuity in relation with compactness, connectedness , components, continuity in relation with connectedness.

## Book s Recommended:

1. P.K. Jain and Khalil Ahmad: Metric Spaces, $2^{\text {nd }}$ Ed., Narosa, 2004
2. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
3. R.R. Goldberg : Real analysis, Oxford \& IBH publishing Co., New Delhi, 1970
4. D. Somasundaram and B. Choudhary : A First Course in Mathematical Analysis, Narosa Publishing House, New Delhi, 1997
5. Shanti Narayan : A Course of Mathematical Analysis, S. Chand \& Co., New Delhi
6. E.T. Copson, Metric Spaces, Cambridge University Press, 1968.
7. G.F. Simmons : Introduction to Topology and Modern Analysis, McGraw Hill, 1963.

## Groups and Rings

## Paper: 12BAM 352

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Largrage's theorem and its consequences, Normal subgroups, Quotient groups,

## Section - II

Homoomorphisms, isomophisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.

## Section - III

Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.

Section - IV
Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is $\mathrm{R}[\mathrm{X} 1, \mathrm{X} 2 \ldots . . \mathrm{Xn}]$

## Books Recommended:

1. I.N. Herstein : Topics in Algebra, Wiley Eastern Ltd., New Delhi, 1975
2. P.B. Bhattacharya, S.K. Jain and S.R. Nagpal : Basic Abstract Algebra (2 ${ }^{\text {nd }}$ edition).
3. Vivek Sahai and Vikas Bist : Algebra, NKarosa Publishing House.
4. I.S. Luther and I.B.S. Passi : Algebra, Vol.-II, Norsa Publishing House.
5. J.B. Gallian: Abstract Algebra, Narosa Publishing House.

## Dynamics

Paper: 12BAM 353

> | Max. Marks: |
| :--- |
| $5 \times 4=20$ |
| $1 \times 6=6$ |
| Total $=26$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Velocity and acceleration along radial, transverse, tangential and normal directions. Relative velocity and acceleration. Simple harmonic motion. Elastic strings.

## Section - II

Mass, Momentum and Force. Newton's laws of motion. Work, Power and Energy. Definitions of Conservative forces and Impulsive forces.

## Section - III

Motion on smooth and rough plane curves. Projectile motion of a particle in a plane. Vector angular velocity.

## Section - IV

General motion of a rigid body. Central Orbits, Kepler laws of motion. Motion of a particle in three dimensions. Acceleration in terms of different co-ordinate systems.

## Books Recommended:

1. S.L.Loney : An Elementary Treatise on the Dynamics of a Particle and a Rigid Bodies, Cambridge University Press, 1956
2. F. Chorlton : Dynamics, CBS Publishers, New Delhi
3. A.S. Ramsey: Dynamics Part-1\&2, CBS Publisher \& Distributors.

## NEW SCHEME

## Scheme of Examination of B.A. $6^{\text {th }}$ Semester Mathematics (w.e.f. 2014-2015)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Practical | Total |
| 12BAM 361 | Real <br> Complex <br> Analysis | 6 periods/ <br> 4 hours per <br> week | 27 | 6 | ---- |  |
| 12BAM 362 | Linear <br> Algebra | 6 periods/ <br> 4 hours per <br> week | 27 | 7 | 100 |  |
| 12BAM 363 | Numerical <br> Analysis | 6 periods/ <br> 4 hours per <br> week | 20 | --- |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Real and Complex Analysis 

Paper: 12BAM 361
Max. Marks:
$4.5 \times 4=18$
$1.5 \times 6=9$
Total $=27$
Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Jacobians, Beta and Gama functions, Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals.

## Section - II

Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Coefficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier series for even and odd functions, Half range series, Change of Intervals.

Section - III
Extended Complex Plane, Stereographic projection of complex numbers, continuity and differentiability of complex functions, Analytic functions, Cauchy-Riemann equations. Harmonic functions.

## Section-IV

Mappings by elementary functions: Translation, rotation, Magnification and Inversion. Conformal Mappings, Mobius transformations. Fixed pints, Cross ratio, Inverse Points and critical mappings.

## Books Recommended:

1. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
2. R.R. Goldberg : Real analysis, Oxford \& IBH publishing Co., New Delhi, 1970
3. D. Somasundaram and B. Choudhary : A First Course in Mathematical, Analysis, Narosa Publishing House, New Delhi, 1997
4. Shanti Narayan : A Course of Mathematical Analysis, S. Chand \& Co., New Delhi
5. R.V. Churchill \& J.W. Brown: Complex Variables and Applications, $5^{\text {th }}$ Edition, McGraw-Hill, New York, 1990
6. Shanti Narayan : Theory of Functions of a Complex Variable, S. Chand \& Co., New Delhi.

## Linear Algebra

## Paper: 12BAM 362

Max. Marks:<br>$4.5 \times 4=18$<br>$1.5 \times 6=9$<br>Total $=27$

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I

Vector spaces, subspaces, Sum and Direct sum of subspaces, Linear span, Linearly Independent and dependent subsets of a vector space. Finitely generated vector space, Existence theorem for basis of a finitely generated vactor space, Finite dimensional vector spaces, Invariance of the number of elements of bases sets, Dimensions, Quotient space and its dimension.

## Section - II

Homomorphism and isomorphism of vector spaces, Linear transformations and linear forms on vactor spaces, Vactor space of all the linear transformations Dual Spaces, Bidual spaces, annihilator of subspaces of finite dimentional vactor spaces, Null Space, Range space of a linear transformation, Rank and Nullity Theorem,

Section - III
Algebra of Liner Transformation, Minimal Polynomial of a linear transformation, Singular and non-singular linear transformations, Matrix of a linear Transformation, Change of basis, Eigen values and Eigen vectors of linear transformations.

## Section-IV

Inner product spaces, Cauchy-Schwarz inequality, Orthogonal vectors, Orthogonal complements, Orthogonal sets and Basis, Bessel's inequality for finite dimensional vector spaces, GramSchmidt, Orthogonalization process, Adjoint of a linear transformation and its properties, Unitary linear transformations.

## Books Recommended:

1. I.N. Herstein : Topics in Algebra, Wiley Eastern Ltd., New Delhi, 1975
2. P.B. Bhattacharya, S.K. Jain and S.R. Nagpal : Basic Abstract Algebra (2 ${ }^{\text {nd }}$ edition).
3. Vivek Sahai and Vikas Bist : Algebra, Narosa Publishing House.
4. I.S. Luther and I.B.S. Passi : Algebra, Vol.-II, Narosa Publishing House.

## Numerical Analysis

## Part-A (Theory)

Paper: 12BAM 363

Max. Marks:

| $3.5 \times 4=14$ |
| :---: |
| $1 \times 6=6$ |
| Total $=20$ |
| Time: 3 Hours |

Time: 3 Hours

Note:- The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 3.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Finite Differences operators and their relations. Finding the missing terms and effect of error in a difference tabular values, Interpolation with equal intervals: Newton's forward and Newton's backward interpolation formulae. Interpolation with unequal intervals: Newton's divided difference, Lagrange's Interpolation formulae, Hermite Formula.

## Section - II

Central Differences: Gauss forward and Gauss's backward interpolation formulae, Sterling, Bessel Formula.
Probability distribution of random variables, Binomial distribution, Poisson's distribution, Normal distribution: Mean, Variance and Fitting.

## Section - III

Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections -I \& II.
Eigen Value Problems: Power method, Jacobi's method, Given's method, House-Holder's method, QR method, Lanczos method.
Section - IV

Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's onethird and three-eighth rule, Chebychev formula, Gauss Quadrature formula.
Numerical solution of ordinary differential equations: Single step methods-Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods. Multiple step methods; Predictor-corrector method, Modified Euler's method, Milne-Simpson's method.

## Books Recommended:

1. Babu Ram: Numerical Methods, Pearson Publication.
2. R.S. Gupta, Elements of Numerical Analysis, Macmillan's India 2010.
3. M.K. Jain, S.R.K.Iyengar, R.K. Jain : Numerical Method, Problems and Solutions, New Age International (P) Ltd., 1996
4. M.K. Jain, S.R.K. Iyengar, R.K. Jain : Numerical Method for Scientific and Engineering Computation, New Age International (P) Ltd., 1999
5. C.E. Froberg : Introduction to Numerical Analysis (2 ${ }^{\text {nd }}$ Edition).
6. Melvin J. Maaron : Numerical Analysis-A Practical Approach, Macmillan Publishing Co., Inc., New York
7. R.Y. Rubnistein : Simulation and the Monte Carlo Methods, John Wiley, 1981
8. Radhey S. Gupta: Elements of Numerical Analysis, Macmillan Publishing Co.

## Part-B (Practical)

Max. Marks: 13
Time: 3 Hours
There will be a separate practical paper which will consist simple programs in C and the implementation of Numerical Methods, studied in the paper 12BAM 363 (Part-A).

# B. A. Part I <br> English (Compulsory) <br> Semester I <br> Literature and Language I 

## Scheme of Examination

| Total Marks: | 100 |
| :--- | ---: |
| Theory: | 80 |
| Int. Assessment: $\mathbf{2 0}$ |  |
| Time: | $\mathbf{3}$ hrs |

## Prescribed Text :

Mohan, Loveleen, Randeep Rana and Jaibir Singh Hooda eds. Literature and Language I, Delhi: Orient Blackswan, 2015 (Revised Edition).

Workload: $\mathbf{8}$ periods of 45 minutes per week for Text: $\mathbf{2}$ periods of 45 minutes per week for composition for a group of 20 students.

## Instructions to the Paper-setter and Students:

Note: All questions are compulsory.

Q 1 will be based on phonetic transcription given in the chapters in the text book. The students shall transcribe eight words out of the given twelve.

Q 2 will comprise very short answer type questions (using a word, a phrase or one or two sentences each) based on the chapters in the text book. The students shall answer any eight out of the given twelve items.

Q 3 will comprise inference based questions to elicit the understanding of the text by the students. The students shall answer any five out of the given eight questions based on the chapters (in about 75-100 words each).

Q 4 will be based on a comprehension passage from the text followed by four questions.

Q 5 will be based on vocabulary given in the exercises. The students shall attempt questions on vocabulary as directed. (e.g. framing sentences of their own or giving various forms of the given wordssynonyms, antonyms, one word substitutes). The students shall answer any eight out of the given twelve words

Q 6 will be based on grammar topics discussed in the text book. It will have two parts - (a) and (b). Part (a) will be based on the use of tenses and Part (b) on parts of speech. Both the parts will carry 12 marks each. There will be 50\% internal choice in both the parts.

Note: Questions will be based on the exercises but not necessarily from the exercises as such.

In Q 7, students will be required to write a Paragraph in about 150 words on any one out of the given three topics. The topics will be similar to the topics given in the exercises in the text book.

# B. A. Part I <br> English (Compulsory) <br> Semester II <br> Literature and Language II 

## Scheme of Examination

|  | Total Marks: 100 |
| :--- | :--- | :--- |
| Theory: | 80 |
|  | Int. Assessment: 20 |
|  | Time: $\quad 3$ hrs |

## Prescribed Text :

Literature and Language I / eds. Jaibir S. Hooda, Randeep Rana and Loveleen Mohan.
Workload: $\mathbf{8}$ periods of 45 minutes duration per week for Text. 2 periods of 45 minutes duration per week for Grammar and Composition for a group of 20 students.

## Instructions to the Paper-setter and Students:

Note: All questions are compulsory.
Q.No. 1 (a)Transcription of one/two syllabic words only from the words given in the exercises given at the end of the chapters. Students will be required to transcribe any four out of the given eight words.

4 Marks
(b)Antonyms and synonyms from the exercises given at the end of the chapters. Students will be required to give four antonyms and four synonyms out of the given eight each. 4 Marks
Q.No. 2 (a) Very short answer type questions. Students will be required to answer any four out of given eight questions in a word/phrase/sentence. The questions may not necessarily be the same as given in the exercises.

4 Marks
(b) Students will be required to attempt any six out of the given nine questions in $2-5$ sentences/50 words each. Short answer type questions also may not be the same as given in the exercises.

12 Marks
Q.No. 3 Long answer type questions. Students will be required to attempt in about $150-200$ words each any three out of the given six questions. 21 Marks
Q.No. 4 (a) Grammar: This question will be based on the grammar exercises given in the text. The sentences will not necessarily be the same as given in exercises. There will be $50 \%$ internal choice.

20 Marks
(b) One question based on Grammar topics covered in Semester I (with 50\% internal choice)

7 Marks
Q.No. 5 Composition: Students will be required to write an essay in about 200 words on one of the two given topics with hints for composition.

8 Marks

## B.A. Part II <br> English (Compulsory) <br> Semester III

Scheme of Examination

| Total Marks: | 100 |
| :--- | :---: |
| Theory: | 80 |
| Int. Assessment:20 |  |
| Time: | 3 hrs |

Prescribed Text:
Fragrances: edited by Dinesh Kumar, Sunita Siroha and S.S. Rehal, and published by Orient Blackswan, New Delhi.

Workload: 8 periods of 45 minutes duration per week for Text. 2 periods of 45 minutes duration per week for Grammar and Composition for a group of 20 students.

Instructions to the Paper-setter and Students:
Note: All questions are compulsory.
Q.No.1. Students will be required to explain any two stanzas out of the given three with reference to the context.
(8 Marks)
Q.No.2. It will comprise very short answer type questions based on the poems in the text book. The students shall answer any six out of the given eight questions (in about 20 to 30 words each).
(6 Marks)
Q.No.3. It will comprise inference based questions to elicit the understanding of the text by the students. The students shall answer any two out of the given three questions based on the poems (in about 150 to 200 words each).
(12 Marks)
Q.No.4. It will be based on a comprehension passage from the text followed by four questions.
(4 Marks)
Q.No.5. (a) This question will be based on the grammar topics discussed in the text book. The sentences will not necessarily be the same as given in the exercises. Students will be required to attempt any sixteen out of the given twenty four.
(16 Marks)
(b) In this question the students will be required to attempt four out of the given six questions (two each based on poetic forms and devices). The candidates may be asked to identify devices and forms on the basis of extracts from the prescribed poems.
(12 Marks)
(c) Transcription of any six words out of the given nine from the text (not more than trisyllabic words). (6 Marks)
(For visually challenged students only)
Students will be required to write a paragraph in about 100 words on any one out of the given three paragraphs of general nature.
(d) Vocabulary exercise. The student will attempt any eight out of the given twelve vocabulary based items (not necessarily the same as given in the exercises).
(8 Marks)
Q.No. 6 Composition: Students will be required to write an essay in about 200 words on any one of the four given topics of general nature.
(8 Marks)

## B.A.II ENGLISH (COMPULSORY)

## Semester IV

Scheme of Examination:

| Max.Marks | 100 |
| :--- | :---: |
| Theory | 80 |
| Internal Assessment: | 20 |
| Time: | 3 Hours |

1. Snapshots: An Anthology of One-Act Play. Ed. S.K.Sharma (OUP)
2. The Mahabharta chapters 25 to 49 i.e. ÊDraupadiÍs GriefËto ÊArjunaÍs Charioteer.Ë
3. Precis, Translation, Comprehension,

From A Text book of Grammar by Inderjit Kumar and Sanjay Kumar (Kurukshetra: K U Press).
4. email and Resume writing

## Instructions to the Paper-Setter and Students:

Q. 1 Explanation with reference to the context: Candidates will be required to attempt two passages (with internal choice) from Snapshots. $2 \times 4=8$ marks
Q. 2 Short answer type questions will be set on Snapshots. $4 \times 4=16$ marks
Q. 3 Short answer type questions will be set on The Mahabharata. Students will be required to attempt any four out of the given six questions. $4 \times 2=8$ marks
Q. 4 Two essay type questions (a) and (b) (both with internal choice) will be set on Snapshots and The Mahabharta respectively.
$2 \times 6=12$ marks
Q. 5 The break up of Question No. 5 is as under:-
a) Précis: (A passage of about 350 words will be given) 7 marks
b) Translation: Translation from English to Hindi of a passage consisting of 9 to 10 sentences on a general topic.
(In lieu of translation, foreign students will be required to write a paragraph of about 150 words on any one of the three given topics)

6 marks
c) Comprehension: Comprehension passage of about 300 words followed by six questions.

9 marks
d) Drafting email: expressing views about any current topic (in about 150 words) 7 marks
e) Resume writing: The examiner will give specific details to the students about the purpose and the kind of the resume.

7 marks

## Suggested Reading:

Communication Skills in English by S.D. Sharma
Essentials of Communication by D.G.Saxena, Kuntal Tamang

# BA-III <br> Semester-V <br> English (Compulsory) 

Scheme of Examination:

Prescribed Books:

| Max. Marks | $: 100$ |
| :--- | :--- |
| Theory | $: 80$ |
| Internal Assessment | $: 20$ |
| Time | $: 3$ hours |

1. The Eternal Muse edited by Brajesh Sawhney
2. The Spectrum of Life : A Selection of Modern Essays edited by M.K.Bhatnagar
3. A Text Book of English Grammar and Composition edited by S.C. Sharma, Shiv Narain, Gulab Singh and Pankaj Sharma
Instructions to the Paper-Setter and Students:
Q. 1: This question will have one stanza (with internal choice) for explanation with reference to the context from The Eternal Muse.

8 Marks
Q.2: There will be six short answer type questions based on both the text books. Students will be required to attempt four questions (in about 100 words each) choosing two from each text. $3 \times 3=09$ Marks
Q.3: There will be one essay type question (with internal choice) from The Eternal Muse requiring first hand understanding of the poems.

12 Marks
Q.4: There will be one essay type question (with internal choice) from The Spectrum of Life: A

Selection of Modern Essays, requiring first hand understanding of the essays. 12 Marks
Q.5: Precis of an unseen passage of about 300 words. 12 Marks
Q.6: This question will consist of one application/letter ÇPersonal and Business letters. Students will be required to attempt either of the given two. 8 Marks
Q. 7 (a) Common errors: ( 10 sentences to be corrected out of the given 15 sentences). 10 Marks
(b) Clauses: (students will be required to attempt six out of the given nine items). 9 Marks

## BA-III <br> Semester-VI <br> English (Compulsory)

Scheme of Examination:

| Max. Marks | $: 100$ |
| :--- | :--- |
| Theory | $: 80$ |
| Internal Assessment | $: 20$ |
| Time | $: 3$ hours |

Prescribed Books:

1. Macbeth by William Shakespeare
2. A Text Book of English Grammar and Composition edited by S.C. Sharma, Shiv Narain, Gulab Singh and Pankaj Sharma

## Instructions to the Paper-Setter and Students:

Q.1: This question will have one extract (with internal choice) for explanation with reference to the context from Macbeth. 8 Marks
Q.2: Six short answer type questions will be set on Macheth Students will be required to attempt any four (in about 150 words each) out of the given six questions. $4 \times 6=24$ Marks
Q. 3: One essay type question (with internal choice) on Macbeth requiring first hand understanding of the text -i.e. theme, character and plot etc.

12 Marks
Q.4: Students will be required to write an essay on one (in about 400 words) out of the given four topics. The topics may be of descriptive, reflective or of general nature. 12 Marks
Q.5: Translation from Hindi to English of a passage consisting of 12 to 15 sentences on a general topic (In lieu of translation, foreign students will be required to write a paragraph of about 250 words on any one of the three given topics).

8 Marks
Q.6: (a) One word substitution: students will be required to attempt any six out of the given eight. 6 Marks
(b) English in Situations: Students will be required to develop one dialogue-based paragraph (with internal choice) on the situations given below:
i) Facing an interview for a job
ii) Making enquiries
iii) At a railway platform
iv) Helping the victims of road accident
v) Greetings
vi) At a wedding party
vii) Opening a bank account
viii) Inside the examination hall
ix) Calling the fire brigades
x) Trying to save a drowning child
xi) At the time of admission
xii) Consulting a doctor
xiii) Dealing with a broker
xiv) Escorting the chief guest
xv) At the police station

10 Marks
Suggested Reading:

1. English in Situations by R.O. Neill (O.U.P.)
2. Success with English: The Penguin Course Book I by Geoffry Bronghton (Penguin Books).
3. What To Say When Ed. Viola Huggins (BBC London) Fifty Ways to Improve your Presentation Skills in English by English by Bob Dignen (Orient Black Swan)

## M.D. University, Rohtak

## B.A. I \& II Semesters (Home Science)

(w.e.f. 2012-2013)
(Passed in BOS meeting held on 05/9/2012)
B.A.(Semester- I)

| Paper Code | Nomenclature <br> Of the Paper | Max <br> Marks | Internal <br> Ass. | Total | Duration <br> of Exam | No of Periods <br> per week |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HS101 | Home Management <br> (Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| HS102 | Practical <br> (Based on HS 101) | $\underline{25}$ | - | 25 | 3 Hrs. | 06 |
|  |  | Grand Total | $\mathbf{1 0 0}$ |  |  |  |

practical is to be examined after each semester

|  | B.A .(Semester- II) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Paper Code | Nomenclature <br> Of the Paper | Max Internal <br> Marks Ass. | Total | Duration <br> of Exam | No of Periods <br> per week |  |
| HS201 | Hygiene and Applied | 60 | 15 | 75 | 3 Hrs. | 08 |
| HS202 | Science (Theory) <br> Practical <br> (Based on HS 201) | 25 | - | 25 | 3 Hrs. | 06 |

Grand Total
100

## B.A. Ist Semester (Home Science) w.e.f. 2012-2013 Home Management (Theory)

Time : 3 Hrs.
Periods: 8 /week

Max Marks : 60
Int. Assess: 15

Note: 1. Examiner will set nine questions in all, selecting two question from each unit. Q. No. 1 is of objective type having eight sub- parts and covering all units.
2. Candidate will attempt five questions in all selecting one question from each unit \& question No. 1 is compulsory.

## Unit-I

1. Concept of Home Science, definition, meaning and scope of Home Science.
2. Housing-functions of Home, selection of site for an ideal house-soil, locality and orientation.
3. Kitchen garden-meaning and utility of kitchen garden, planning \& raising of kitchen garden, types of manure.

## Unit-II

1. Elements of art-line, texture, form, texture size, shape \& colour. Characteristics of colour and colour schemes.
2. Principles of art-harmony, balance, proportion, rhythm, emphasis, in relation to interior decoration and flower arrangement.

## Unit-III

1. Consumer protection-buying problems of consumer, consumer protection act-rights and duties of consumer.
2. Meaning of Home Management, process of Home Management-planning, controlling and evaluation.
3. Classification of human and material resources, similarities of different resources.

## Unit-IV

1. Management of family resources-money management, meaning, types of income, process of money management, budgeting, keeping of records, evaluation.
2. Time management, process of time management, time plans, peak loads, rest periods.
3. Energy management, process of energy management, fatigues and its types, work simplification-Meaning and Methods.

## References:

1. Ritu Kapur: A Text of Home Science; Vijay, Ludhiana.
2. Saweera Ralhen: Home Management \& Hygience, S. Dinesh, New Delhi
3. H. Kaur: Theory and practice of Home Management, Surjeet, New Delhi
4. P. Nickell: Management in Family Living, Wiley Eastern, New Delhi.
5. B.K. Bakshi: Home Management \& Decoration, Sahitay Prakashan, Agra

## Practical- I (Home Science)

Max Marks : 25

## Time : 3 Hrs.

## Periods: 6 /week

1. Cleaning \& Polishing of Household metals :-Brass, Copper, Silver \& Aluminum
2. Floor Decoration :- Rangoli, Alpana
3. Table Setting \& Table Manners.
4. Preparation of Monthly Budget for various income groups.
5. Care and Cleaning of Household Equipments-Mixer and Grinder, Microwave Oven, Washing Machine and Refrigerator.

> B.A. -- IInd Semester (Home Science)
> Hygiene and Applied Science (Theory)
> (w.e.f. 2012-2013)

Time 3 Hrs.
Max Marks : 60
Periods: 8 / Week
Int. Assess: 15
Note: 1. Examiner will set nine questions in all, selecting two question from each unit. Q. No. 1. is of objective type having eight sub - parts and covering all units.
2. Candidate will attempt five questions in all, selecting one question from each unit \& question No. 1 is compulsory.

## Unit-I

1. Meaning and Objective of Health Education, Health Hazards of Modern Age-Air, Water, Soil, Noise Pollution.
2. Definition of health and hygiene, factors relating to health -- food habits, exercise, rest and sleep and cleanliness of body.
3. Water-importance of water, impurities of water, types of water, sources of contamination and purification of water (natural and domestic methods.).

## Unit-II

1. Definition of infection, infective agents, infectious diseases, communicable diseases, incubation period, modes and channels of transmission of infection, isolation.
2. Disinfectants-Definition, types and methods of disinfection.
3. Immunity -Definition and types of immunity, immunization schedule.

## Unit-III

1. Diseases spread by insects : Malaria.
2. Disease spread by ingestion : Enteric Fever, Dysentery, Cholera.
3. Diseases spread by droplet infections; Measles, Mumps, Diptheria, Tuberculosis.
4. Diseases spread by contact : Leprosy, Tetanus.

## Unit-IV

1. Transmission of heat-Elementary ideas about transmission of heat \& their application in daily life, clothes, utensils, fire place, thermos flasks.
2. Thermometers and J scales of measurement, simple conversions- centigrade to fahrenheit.
3. Evaporation-factors affecting evaporation, refrigeration.

## References :

1. Ritu Kapur : A Text of Home Sciences Vijay, Ludhiana.
2. Saweera Ralhen: Home Management \& Hygience, S. Dinesh, New Delhi
3. Santosh Sharma Tikoo: Resources Management -- Interior decoration \& hygiene.
4. P. Nickell: Management in Family living, Wiley Eastern, New Delhi.
5. B.K. Bakshi: Home Management \& Decoration, Sahitay Prakashan, Agra.
6. Yash Pal Bedi; Social and Preventive medicine, Atma Ram \& Sons, Delhi.

## PRACTICAL- II (Home Science)

Max Marks : 25
Time : 3 Hrs.

## Periods : 6 /week

1. Pottery, painting \& decoration ( At least one pot each)
2. Repair of fuse \& plug.
3. Flower aqrangement-Fresh / Dry
4. Preparation of any two charts in relation to personal hygiene.
5. Preparation of any one article for interior decoration: Soft Toys, Paper Machine, Glass Painting, Fabric Painting, Tie and Dye, etc.

## M.D. University, Rohtak

## B.A. IIIrd \& IVth Semesters (Home Science)

 (w.e.f. 2012-2013)Passed in BOS meeting held on 01/12/2011

| B.A. (Semester- III) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nomenclature | Max | Internal | Total | Duration | No of Periods |
| Of the Paper | Marks | Assessment |  | of Exam | per week |
| Clothing \& Textile (Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| Practical-III(Home Sci.) |  | - | 25 | 3 Hrs. | 06 |
|  | Grand Total |  | 100 |  |  |
| B.A. (Semester-IV) |  |  |  |  |  |
| Human Physiology(Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| Practical-IV (Home Sci.) |  | - | 25 | 3 Hrs. | 06 |
|  | Grand | Total | 100 |  |  |

## M.D. UNIVERSITY, ROHTAK <br> Scheme of Examination of B.A.-- IIIrd Semester (Home Science) <br> w.e.f. Session 2012-2013

| Nomenclature of paper | Max Marks | Internal <br> Assessment | Total | Exam Duration |
| :--- | :---: | :---: | :---: | :---: |
| Clothing and Textiles (Theory) | 60 | 15 | 75 | 3 Hrs |
| Practical-III (Home Science) | 25 |  | - | 25 |

CLOTHING AND TEXTILES (Theory)
Max Marks : 60
Periods: 8/ week
Time: 3 Hours
Note:1.The examiner will set nine questions in all selecting two questions from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
Note2.Candidate shall attempt five questions in all selecting one question from each unit. Q.No. 1 will be compulsory.

## Unit-I

Definition and classification of Fibers.
Properties and uses of Different Fibers: Cotton, Silk, Wool and Nylon

## Unit-II

Brief introduction of weaving, basic weaves - plain, twit and satin.
Finishing processes in fabrics
(a) Meaning and Objective of finishes
(b) Different types of Finishes: Calendaring, Sizing, Mercerizing, Crease Resistant.
(c) Dyeing-simple dyeing and resist dyeing, dyeing at various stages.
(d) Types of printing

## Unit-III

Selection of fabrics according to age, season, budget, occupation, figure, fashion and occasion.
Traditional embroideries of India (Phulkari, Kantha, Kashida and Chikankari) Traditional textiles of India : ---
(a) Traditional sarees of India (i, Baluchari, Banarsi, Chanderi, Patola and Bandhani)
(b) Other textiles- (Dhaka, Mulmul, Brocade.)

## Unit-IV

Supplies necessary for Laundry: --
(a) Soaps and Detergents-composition and manufacturing, difference between soaps and detergent
(b) Types and uses of Starches, blues and bleaches.
(c) Different methods of Laundry
(d) Reagents used in Laundry: Acids, Alkalis, Solvents and Absorbents.
(e) Stain removal-classification of stains, methods of removing different types of stains.

## References:

1. Saweera Ralhen, A book of Clothing Textiles and Physiology
2. S. Dinesh, New Delhi.

## PRACTICAL- III (Home Science)

Max Marks: 25
Time :
3 Hrs.
Periods
: 6/
week

1. Preparation of samples: ---
(a) Basic stitches-tacking, running stitch, back stitch, hemming, button hole stitch
(b) Seams-Plain seam, French seam, counter seam, lapped seam
(c) Processes-Gathers into a band --- Pleats (Knife and Box), Darts (Simple and Fish
Dart), Placket Opening (Continuous and Two pieces), Tucks (Pin and Cross)
2. Embroidery-one article of fancy embroidery using at least four stitches.

OR
Six fancy embroidered handkerchiefs with different stitches
3. Knitting: ---(a) Following of knitting instructions
(b) Preparation of two samples of different designs (Minimum size 4" 4 ")
4. Tie and dye
5. Block Printing.

## M.D. UNIVERSITY, ROHTAK <br> Scheme of Examination of B.A. -IVth Semester (Home Science) <br> (w.e.f. Session 2012-2013)

| Nomenclature of paper | Max Marks | Internal <br> Assessment | Total | Exam Duration |
| :---: | :---: | :---: | :---: | :---: |
| Human Physiology (Theory) | 60 | 15 | 75 | 3 Hrs. |
| Practical-IV (Home Science) | 25 | - | 25 | 3 Hrs. |

## HU̇MAN PHYSIOLOGY (Theory)

Max Marks : 60
Periods: 8/ week

## Time: 3 Hours

Note:1. The examiner will set nine questions in all selecting two questions from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
2. Candidate shall attempt five questions in all selecting one question from each unit. Q. No. 1 will be compulsory.

## Unit-I

Animal cell-structure and functions of cell organelles. Skeletal System: Functions, Types of bones, Names of bones and types of joints.

## Unit-II

Digestive System; Parts of Alimentary Canal-Mouth, Pharynx, Oesophagus, Stomach, Small Intestine, and Large Intestine. Digestion and Absorption of food Excretory System: Structure and functions of Kidney, Skin and Lungs

## Unit-III

Circulatory System : --
(a) Composition and Functions of Blood
(b) Heart: Structure and Working
(c) Coagulation of blood
(d) Blood Pressure
(e) Normal levels of hemoglobin, cholesterol, urea, uric acid and glucose in blood

## Unit-IV

Reproductive System: ---
(a) Female reproductive system
(b) Sex Glands (Male and Female)
(c) Menstruation
(d) Fertilization
(e) Pregnancy
(f) Lactation

Endocrine System: --- Functions of different glands-Pituitary, Thyroid, Parathyroid, Adrenal Gland, islets of Langerhans in Pancreas.

## References:--

Sweera Ralhan, A book of Clothing, Textiles and physiology, S. Dinesh, New Delhi PRACTICAL-IV (Home Science)

Max Marks : 25
Time : 3 Hrs.
Periods: 6 /week

1. Different parts of sewing machine, its care, defects and remedies
2. Taking body measurement
3. Drafting of the following:
(i) Child's bodice block and its adaptation to a gathered frock.
(ii) Adult's bodice block and its adaptation to their choice garment
4. Drafting and stitching of the following garments:
(i) Gathered frock (three to eight years old)
(ii) Petticoat
(iii) Salwar \& Kamiz Or Blouse.

## M.D. University, Rohtak

## B.A. ---- Vth \& VIth Semesters (Home Science)

( for the session 2013-2014 and onwards)
(Passed in BOS meeting held on 06/12/2013)

## B.A. (Semester-V)

| Nomenclature Of the Paper | Max <br> Mark | Internal Assessment | Total | Duration of Exam | No of Periods per week |
| :---: | :---: | :---: | :---: | :---: | :---: |
| nd Nutrition (Theory) | 60 | 15 | 75 | 3 Hrs . | 08 |
| - V( Home Sci.) | $\underline{25}$ | - | 25 | 3 Hrs . | 06 |
|  | Grand | Total | 100 |  |  |
| Semester-VI) |  |  |  |  |  |
| Psychology \& r craft (Theory) | 60 | 15 | 75 | 3 Hrs . | 08 |
| al-VI ( Home Sci.) | $\underline{25}$ | - | 25 | 3 Hrs . | 06 |
|  | Grand | Total | 100 |  |  |

## B.A. -- Vth Semester (Home Science) <br> ( for the session 2013-2014 and onwards) <br> Food \& Nutrition (Theory)

Time 3 Hrs.
Periods: 8 / Week

Max Marks : 60
Internal Ass: 15

Note:
3. The examiner will set nine questions in all selecting two question from each unit. Question No. 1 will be of objective type and having eight sub -parts covering all the four units.
4. Candidate shall attempt five question in all selecting one question from each unit. Question No. 1 will be compulsory.

## Unit-I

Food-classification \& functions of food
groups Essential food constituents: ---
Carbohydrates, Protein, Fats, Water, source: functions, recommended daily allowances, effect of deficiency and excess of these food constituents
Vitamins-A, D, C, B1, B2, Niacin

Minerals - Calcium, Phosphorus \& Iodine.
Food source, functions, recommended daily allowances, effects of deficiency \& excess of the above.

## Unit-II

Importance and methods of cooking. Effect of cooking on different nutrients. Methods of cooking, their advantages and disadvantages:
Moist heat-Boiling, Stewing, steaming. Dry heat-Roasting, grilling, baking. FryingShallow and deep
Microwave cooking in brief

## Unit-III

Methods of enhancing nutritive value of food stuffs: ---
4. Importance of enhancing nutritive value of food stuffs. Methods of enhancing nutritive value of food stuff, sprouting, fermentation, combination, and supplementation.
Food Preservation: ----
3. Importance of food preservation.
4. Causes of food spoilage in brief
5. Methods of food preservation with special emphasis on house hold methods.

## Unit-IV

Meal Planning: --
4. Concept of Balanced diet.
5. Principles of Meal Planning, factors affecting it.
6. Planning meals for : Children-school going child, Adolescents, Adults, Pregnant women and lactating mother.

PRACTICAL - V (Home Science)
(for the session 2013-2014 and onwards)
Time 3 Hrs.
Max Marks : 25
Periods: 6/ Week

1. Preparation of various dishes (at least 2 each) under following heads using different methods of cooking : ----
(a) Beverages,(b) Soups,(c) Desserts,(d) Snacks ,(e)Salads,(f) Breakfast dishes, (g) Main meal dishes

# B.A. --- VIth Semester (Home Science) <br> Child Psychology and Mother craft (Theory) <br> (for the session 2013-2014 and onwards) 

Time 3 Hrs.
Max Marks : 60
Periods : 8 / Week
Internal Ass: 15
Note:
6. The examiner will set nine questions in all selecting two question from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
7. Candidate shall attempt five questions in all selecting one question from each unit. Question No. 1 will be compulsory.

## Unit-I

6. Definition, aims, subjects, matter, objective of studying child psychology.

Learning: ---
4. What is learning, importance of learning.
5. Methods of learning.
6. Factors affecting learning.
7. Role of reward and punishment in learning.

## Unit-II

Personality development: -- Nature of personality, Definitions, Types of personality factors affecting the development of personality,

Play: -- Definition, features of play, Difference between work and play, Types of play, importance of play in childhood.
Stages of the development of the child, characteristics and problems of Adolescence, role of parents and teachers in solving their problems.

## Unit-III

The Expectant mother: --
4. Signs of pregnancy
5. Discomforts of pregnancy
6. Ill --effects of an early marriage

## Unit-IV

5. Breast feeding, (b) artificial feeding (c) Weaving Common aliments of childhood: ---
6. Cold, cough, fever.
7. Digestive disturbances-Diarrhoea, Constipation and Vomiting.
8. Skin infections.

# PRACTICAL-VI (Home Science) <br> (for the session 2013-2014 and onwards) 

Time 3 Hrs.
Max Marks : 25
Periods: 6 / Week
7. Planning and preparation of meals for: -- -
6. Pre-school going child and school going child.
7. Adolescents-Boys and Girls
8. Adult
9. Pregnant and lactating mother.
(e) Food Preservation-Pickle, Chutney, Jam, Squash, Morrabba (at least two each:)

B.A. Part II<br>English (Compulsory)<br>Semester III (Session 2015-16)

Scheme of Examination

Prescribed Text:

| Total Marks: | 100 |
| :--- | :---: |
| Theory: | 80 |
| Int. Assessment: 20 |  |
| Time: | 3 hrs |

Fragrances: edited by Dinesh Kumar, Sunita Siroha and S.S. Rehal, and published by Orient Blackswan, New Delhi.
Workload: 8 periods of 45 minutes duration per week for Text. 2 periods of 45 minutes duration per week for Grammar and Composition for a group of 20 students.

Instructions to the Paper-setter and Students:
Note: All questions are compulsory.
Q.No.1. Students will be required to explain any two stanzas out of the given three with reference to the context.
Q.No.2. It will comprise very short answer type questions based on the poems in the text book. The students shall answer any six out of the given eight questions (in about 20 to 30 words each). (6 Marks)
Q.No.3. It will comprise inference based questions to elicit the understanding of the text by the students. The students shall answer any two out of the given three questions based on the poems (in about 150 to 200 words each).
Q.No.4. It will be based on a comprehension passage from the text followed by four questions.
Q.No.5. (a) This question will be based on the grammar topics discussed in the text book. The sentences will not necessarily be the same as given in the exercises. Students will be required to attempt any sixteen out of the given twenty four.
(b) In this question the students will be required to attempt two out of the given three questions. The candidates may be asked to identify literary devices from the extracts from the prescribed poems.
(6 Marks)
(c) In this question the students will be required to write short note on two out of the given four poetic forms based on the prescribed poems and discussed in the text book.
(6 Marks)
(d) Transcription of any six words out of the given nine from the text (not more than trisyllabic words).
(6 Marks)
(For visually challenged students only)
Students will be required to write a paragraph in about 100 words on any one out of the given three paragraphs of general nature.
(e) Vocabulary exercise. The student will attempt any eight out of the given twelve vocabulary based items (not necessarily the same as given in the exercises).
(8 Marks)
Q.No. 6 Composition: Students will be required to write an essay in about 200 words on any one of the four given topics of general nature.

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(8 Marks)

B.A. Part II<br>English (Compulsory)<br>Semester IV (Session 2015-16)

Scheme of Examination

| Total Marks: | 100 |
| :--- | :---: |
| Theory: | 80 |
| Int. Assessment:20 |  |
| Time: | 3 hrs |

Prescribed Text:
Centre Stage edited by Sunita Siroha, S.S. Rehal and Dinesh Kumar and published by Orient Blackswan, New Delhi.

Workload: 8 periods of 45 minutes duration per week for Text. 2 periods of 45 minutes duration per week for Grammar and Composition for a group of 20 students.
Instructions to the Paper-setter and Students:
Note: All questions are compulsory.
Q.No.1. Explanation of one extract out of the given two with reference to the context.
(8 Marks)
Q.No.2.(a) Very short answer type text-based questions: Students will be required to answer any six out of the given eight questions in a word/phrase/sentence.
(6 Marks)
(b) Students will be required to attempt any two out of the given three questions based on the text in 100 words each. Short answer type questions also may not be the same as given in the exercises.
Q.No.3. Long answer type question based on the text, to be answered in about 300 words on any one of the given two questions. The questions will be designed to test the candidate's critical understanding of the text.
(12 Marks)
Q.No.4(a)Writing Skills: This question, with internal choice, will be based on the topics discussed in the textbook under the title "Extended Language Skills" except "Translation".
(15 Marks)
(b) Students will be required to transcribe and mark primary stress on any ten words out of the given fifteen words.
(10 Marks)
(For visually challenged candidates only) There will be a question based on vocabulary.
(c) Vocabulary exercise (any five out of the given eight).
(5 Marks)

## Q.No. 5 Translation:

(a) Students will be required to translate one short passage from Hindi into English.
(b) Students will be required to translate one short passage from English into Hindi.

Or (In lieu of translation for Foreign students only)
Make a précis of a prose passage (300 words).

## B. A. I Semester I (w. e. f. Session 2016-17) <br> Additional English

Workload: 6 periods (of 45 minutes duration) per Week

## Unit I

Poems:

1. William Shakespeare :"That time of year thou mayst in me behold"
2. John Milton : "On His Twenty-Third Birthday"
3. Alexander Pope :"Whate'er the passion ... and life's poor play is o'er." (From Essay on Man, Ep. II.)
4. William Wordsworth : "To the Cuckoo"
5. AlfedTennyson : "Crossing the Bar"
6. W. B. Yeats : "The Lake Isle of Innisfree"
7. Robert Frost :"The Road not Taken"
8. SarojiniNaidu :"Palanquin Bearers"
9. Rabindranath Tagore : "Where the mind is without fear"

Unit II
Literary Terms: alliteration; allusion; elegy; hyperbole; imagery; irony; lyric; metaphor; monologue; ode; paradox; personification; satire; simile; sonnet.

## Unit III

Grammar:

1. Use of Articles
2. Subject-Verb Agreement

Unit IV
Letter Writing: Informal Letters

Instructions to the Paper-Setter and the Students:
Question 1 (with internal choice) will be set from Unit I.Students will be required to explain the given passage with.referencetothecontext.

Question 2 (with internal choice) will be an essay type question based on Unit I.

Question 3(a) will be set from Unit I. Students will be required to answer two out of four shortanswer type questions in about 50 words each.

Question 3 (b) will be set from Unit II. Students will be required to answer two out of four literary terms in about 75 words each.

Question 4 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 5,students will be required to give answers appended to an unseen prose passage. 10
Question 6(with internal choice) will be based on Unit IV.



## B. A. I Semester II (w. e. f. Session 2016-17) Additional English

Workload: 6 periods (of 45 minutes duration) per Week
Total Marks 100
Theory 80
Internal Assessment 20
Time $\quad 3$ Hours

## Unit I

One Act Plays:

1. Anton Chekhov :The Boor
2. Dhan Gopal Mukerji : The Judgment of Indra [From Fifty Contemporary One-Act Plays Selected and Edited by Frank Shay and Pierre Loving (Project Gutenberg ebook)]
3. Alice Gerstenberg : Fourteen[From Fifty Contemporary One-Act Plays Selected and Edited by Frank Shay and Pierre Loving. (Project Gutenberg ebook)]
4. J. M. Synge : Riders to the Sea
5. August Strindberg : Facing Death [ONE-ACT PLAYS.com]

## Unit II

Literary Terms: plot; sub-plot; character; three unities; climax; setting; theme; soliloquy; protagonist; comedy; tragedy; tragicomedy; aside; theme; denouement.

## Unit III

Grammar:

1. Tenses
2. Voice

Unit IV
Letter Writing: Formal Letters
Instructions to the Paper-Setter and the Students:

Question 1 will be set from Unit I. Students will be required to answer four out of eight short-answer type questions in about 75 words each.

$$
4 \times 4=16
$$

Question 2 (with internal choice) will be an essay type question based on Unit I.
Question 3 will be set from Unit II. Students will be required to answer two out of four literary terms in about 75 words each.

Question 4 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 5, students will be required to give answers appended to an unseen prose passage. 10
Question 6 (with internal choice) will be based on Unit IV. 10


## B. A. II Semester III (w. e. f. Session 2016-17) <br> Additional English

Workload: 6 periods (of 45 minutes duration) per Week
Total Marks 100
Theory 80
Internal Assessment 20
Time
3 Hours
Unit I
Short Stories:

1. Rabindranath Tagore :"Cabuliwallah"
2. Munshi Premchand
:"Idgah" (http://www.arvindguptatoys.com/arvindgupta/idgah.pdf)
3. Stephen Leacock
: "The Errors of Santa Claus"
4. Edgar Ellen Poe
: "The Angel of the Odd"
5. Leo Tolstoy : "Three Questions"
6. Charles Dickens :"Prince Bull"
7. R. K. Narayan
: "An Astrologer's Day"
[https//archive.org/details/astrologersday03547]
8. Graham Greene
: "The Case for the Defence" [https://www.scribd.com/doc/24765936/Greene-Graham-21-Stories]
Unit II
Literary Terms: plot; character; characterisation; point of view; theme; setting; tone; style; symbol; narrator; protagonist; antagonist; motif.

Unit III
Grammar:
1 Narration
2 Modal Auxiliaries

Unit IV
Composition: Essay Writing

Instructions to the Paper-Setter and the Students:

Question 1 will be set from Unit I. Students will be required to answer four out of eight short-answer type questions in about 75 words each.
$4 \times 4=16$

Question 2 (with internal choice) will be an essay type question based on Unit I.
Question 3 will be set from Unit II. Students will be required to answer two out of four literary terms in about 75 words each.
$4 \times 2=8$

Question 4 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 5, students will be required to give answers appended to an unseen prose passage. 10

In Question 6, students will be required to write an essay in about 250 words on one out of given four topics of general nature.



# B. A. II Semester IV (w. e. f. Session 2016-17) <br> Additional English <br> Workload: 6 periods (of 45 minutes duration) per Week 

Total Marks 100
Theory 80
Internal Assessment 20
Time
3 Hours
Unit I
Essays:

1. Francis Bacon : "Of Friendship"
2. Daniel Defoe : "The Education of Women" [From English Essays: Sidney to Macaulay. Vol. XXVII. The Harvard Classics. New York: P.F. Collier \& Son, 1909-14; Bartleby.com, 2001. www.bartleby.com/27/.
3. Jonathan Swift ': "A Treatise on Good-Manners and Good-Breeding"
4. Joseph Addison : "Women and Liberty" [Essays of Joseph Addison. Internet Archive.org]
5. Samuel Johnson : "Monitions on the flight of time" [Number 43 Idler. Saturday, February 10, 1759]
6. Leigh Hunt : "Deaths of the Little Children" [From English Essays: Sidney to Macaulay. Vol. XXVII. The Harvard Classics. New York: P.F. Collier \& Son, 1909-14; Bartleby.com, 2001. www.bartleby.com/27/.
7. Bertrand Russel : "In Praise of Idleness"
8. R. L. Stevenson : "An Apology for Idlers"

Unit II
Grammar:
1 Prepositions
2 Commonly Used Phrasal Verbs

## Unit III

Composition: Dialogue Writing
Instructions to the Paper-Setter and the Students:

Question 1 will be set from Unit I. Students will be required to answer five out of eight short-answer type questions in about 75 words each.

Question 2 (with internal choice) will be an essay type question based on Unit I.

Question 3 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 4, students will be required to give answers appended to an unseen prose passage. 10
In Question 5, students will be required to convert a short narrative of about 150-200 words in dialogues.


## B. A. III Semester V (w. e. f. Session 2016-17) Additional English

 Workload: 6 periods (of 45 minutes duration) per WeekTotal Marks 100
Theory 80
Internal Assessment 20
Time
3 Hours
Unit I
Drama:
Vijay Tendulkar : Kanyadaan. New Delhi: Oxford University Press; 2009.
Unit II
Grammar:
1 Conditional Clauses
2 Infinitives, Gerunds and Participles
Unit III
1 Story Writing
2 Composing email - formal and informal
Instructions to the Paper-Setter and the Students:
Question 1 will be set from Unit I. Students will be required to answer four out of seven shortanswer type questions in about 75 words each.

Question 2 (with internal choice) will be an essay type question based on Unit I.
Question 3 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 4, students will be required to give answers appended to an unseen prose passage. 10
In Question 5 (a), students will be required to convert a dramatic passage of about 150-200 words into a short narrative.

In Question 5 (b), students will be required to attempt a short composition based on items in Unit III (2).

## B. A. III Semester VI (w. e. f. Session 2016-17) <br> Additional English

Workload: 6 periods (of 45 minutes duration) per Week
Total Marks 100
Theory 80
Internal Assessment 20
Time 3 Hours

## Unit I

Novel:
Hemingway (Ernest) :The Old Man and the Sea.

## Unit II

Grammar:
1 Conjunctions and connectors
2 Tag questions; appended questions; reported (indirect) questions
3 Concord of nouns, pronouns and possessive adjectives (third person)
4 Common errors

Unit III

Precis- Writing

## Instructions to the Paper-Setter and the Students:

Question 1 will be set from Unit I. Students will be required to answer five out of eight short-answer type questions in about 75 words each.
$4 \times 5=20$

Question 2 (with internal choice) will be an essay type question based on Unit I.
Question 3 will be a 'Do as Directed' question based on Unit III. There will be at least 50 percent choice.

In Question 4, students will be required to give answers appended to an unseen prose passage.
In Question 5, students will be required to write a precis of a passage of about 200-250 words.


## B. Sc. II Semester III

Additional English (w. e. f. Session 2016-17)

## Workload: 6 Periods of 45 Minutes Duration a Week

Total Marks: 100
Theory: 80
Internal assessment: 20
Time: 3 Hours
Unit I
Poems:

1. William Shakespeare
: "When to the sessions of sweet silent thought"
2. Philip Sidney . : "What words may say, or may words not say,"
3. Alexander Pope : "Go, wiser thou! . . . sins against th'Eternal cause."
[From An Essay on Man Epistle I]
4. William Wordsworth :"I Wandered as a Lonely Cloud"
5. P. B. Shelley : "The Solitary"
6. Robert Browning : "The Patriot"
7. W. B. Yeats : "The Second Coming"
8. Seamus Heaney : "Digging"

## Unit II

Grammar: 1 Articles
2 Tenses
3 Voice
4 Prepositions

Unit III
Composition

Instructions to the Paper-Setter and the student:
Question 1 will be based on Unit I. students will be required to explain the given passage with reference to the context. There will be internal choice.
In Question 2, students will be required to answer three out of six short answer-type questions (based on Unit I) in about 60-75 words each.
Question 3 will be an essay type question (with internal choice) based on Unit I
Question 4, based on unit II, will be a 'Do as directed' question. There will be at least fifty percent choice.
In Question 5, students will be required to answer the questions appended to an unseen prose passage.

In Question 6, students will be required to write an essay on one out of four topics of general nature. 12


B. Sc. II Semester IV<br>Additional English (w. e. f. Session 2016-17)

Workload: 6 Periods of 45 Minutes Duration a Week
Total Marks: 100
Theory: 80
Internal assessment: 20
Time: 3 Hours
Unit I
Essays:

1. Francis Bacon
2. Joseph Addison
3. Daniel Defoe
4. Richard Steele
5. Thomas De Quincy
: "Levana and Our Ladies of Sorrow" [From English Essays: Sidney to Macaulay. Vol. XXVII. The Harvard Classics. New York: P.F. Collier \& Son, 1909-14; Bartleby.com, 2001. www.bartleby.com/27/]
6. Bertrand Russell : "The Uses of Language" [From The Basic Writings of Bertrand Russell Edited by Robert E. Egner and Lester E. Denonn With an introduction By John G. Slater. Routledge. 2009. [emilkirkegaard.dk/en/wp.../The-Basic-Writings-of-Bertrand-Russell.pdf]

## Unit II

Grammar: 1 Narration
2 Conditional Clauses
3 Modals

## Unit III

Composition: Formal letters; Job Applications and C. V.

## Instructions to the Paper-Setter and the student:

Question 1 will be based on Unit I. students will be required to explain the given passage with reference to the context. There will be internal choice.
In Question 2, students will be required to answer three out of six short answer-type questions (based on Unit I) in about 60-75 words each.
$4 \times 3=12$
Question 3 will be an essay type question (with internal choice) based on Unit I 16
Question 4, based on unit II, will be a 'Do as directed' question. There will be at least fifty percent choice.
In Question 5, students will be required to answer the questions appended to an unseen prose passage.

In Question 6, students will be required to write a letter 9based on Unit III). There will be internal choice.



NOTE :- The students are required to opt only one out of two Optional papers in each Semester.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-I <br> Syllabi and Courses of Reading 

NOTE: There will be two Optional papers. The students will have to opt only one paper out of the two papers. The maximum marks are 100. (Theory 80, Internal Assessment 20).

Option (i) : Indian Constitution
M. Marks: 80

Internal Assessment: 20
Time: 3 Hours
Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

UNIT-I
Indian Constitution - Sources and Features, Preamble, Fundamental Rights, Fundamental Duties and Directive Principles of State Policy.

UNIT-II
Union and State Executive - President, Prime Minister, Council of Ministers; State Executive - Governor, Chief Minister and Council of Ministers.

## UNIT-III

Union and State Legislature - Parliament-Composition and Functions; Speaker of Lok Sabha Amendment Process; State Legislature-Vidhan Sabha; Panchayati Raj

## UNIT-IV

Judiciary - Supreme Court, High Courts, Judicial Review.

## Reading:

1. G. Austin, The Indian Constitution: Corner Stone of a Nation, Oxford, Oxford University Press, 1966.
2. D.D. Basu, An Introduction to the Constitution of India, New Delhi, Prentice Hall, 1994.
3. D.D. Basu and B. Parekh (ed.), Crisis and Change in Contemporary India, New Delhi, Sage, 1994.
4. C.P. Bhambhri, The Indian State: Fifty Years, New Delhi, Shipra,1997.
5. P. Brass, Politics of India Since Independence, Hyderabad, Orient Longman, 1990.
6. R. Kothari, Politics in India, New Delhi, Orient Longman, 1970.
7. W.H. Morris Jones, Government and Politics in India, Delhi, BL

Publications, 1974.
8. J.R. Siwach, Dynamics of Indian Government \& Politics, New Delhi, Sterling Publishers, 1985.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-I <br> Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii): International Relations-I

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Definition, Nature, Scope and Development of International Relations, Autonomy Debate regarding International Relations.

## Unit-II

Approaches and Theories:-
a) Idealist Approach
b) Realist Approach
c) Systems Approach
d) Marxian Approach

## Unit-III

National Power : Definition, Elements and Assessment, Limitations on National Power:
International Law, International Morality and World Public Opinion
Unit-IV
Balance of Power, Collective, Security.

## Readings

1. John, Baylis and Steve Smith, Globalization of World Politics, Oxford, London, 1997.
2. P.Allan and K. Goldman (eds.), The End of the Cold War, Dordrecht, Martinus Nijhoff,1992.
3. S. Burchill et. al., Theories of International Relations, Hamsphire, Macmillan, 2001.
4. S.H. Hoffman, Essays in Theory and Politics of International Relations, Boulder Colorado, Westview Press, 1989.
5. M.P. Sullivan, Theories of International Politics: Enduring Paradigm in a Changing

World, Hamsphire, Macmillan, 2001.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-I, Political Science (Pass Course) Semester-II <br> Syllabi and Courses of Reading 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Indian Politics

M. Marks : 80

Internal Assessment : 20
Time: 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

## UNIT-I

Federalism and its Working with reference to Centre-State Relations, Demand for State
Autonomy; Emerging Trends in Indian Federalism.

## UNIT-II

Election Commission, Electoral Process and its Defects and Voting Behaviour, Electoral
Reforms, Problem of Defection.
UNIT-III
Party System in India: National and Regional Political Parties.
UNIT-IV
Role of Caste, Religion, Language, Regionalism in India, Politics of Reservation.

## Reading:

1. D.D. Basu and B. Parekh (ed.), Crisis and Change in Contemporary India, New Delhi, Sage, 1994.
2. P. Brass, Politics of India Since Independence, Hyderabad, Orient Longman, 1990.
3. S. Kaushik (ed.), Indian Government and Politics, Delhi University, Directorate of Hindi Implementation racy and Discontent: India's Growing Crisis of Governability, Cambridge, Cambridge University Press, 1991.
4. R. Kothari, Politics in India, New Delhi, Orient Longman, 1970.
5. R. Kothari, Party System and Election Studies, Bombay, Asia Publishing House, 1967.
6. J.R. Siwach, Dynamics of Indian Government \& Politics, New Delhi, Sterling Publishers, 1985.
7. R. Thakur, The Government \& Politics of India, London, Macmillan, 1995.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-I, Political Science (Pass Course) <br> Semester-II <br> Syllabi and Courses of Reading 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.
M. Marks: 80

Internal Assessment: 20
Time: 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

## Option (ii): International Relations-II

Unit-I<br>Ideology in International Relations, National Interest, Foreign Policy, Diplomacy

Unit-II
Cold War, Non-Alignment, End of Cold War.

## Unit-III

Meaning of Disarmament and Arms-control: Types of Disarmament; History of Disarmament: NPT, CTBT.

Unit-IV
New International Economic Order, North-South Dialogue, Globalization.

## Readings

1. John, Baylis and Steve Smith, Globalization of World Politics, Oxford, London, 1997.
2. P.Allan and K. Goldman (eds.), The End of the Cold War, Dordrecht, Martinus Nijhoff, 1992.
3. S. Burchill et. al., Theories of International Relations, Hamsphire, Macmillan, 2001.
4. K.W. Deutsch, The Analysis of International Relations, New Delhi, Prentice Hall, 1989.
asingstoke, Macmillan, 1999.
5. F. Halliday, Rethinking International Relations, Basingstoke, Macmillan, 1994.
6. M.S. Rajan, Non-Alignment and the Non-Alignment Movement in the

Present World
Order, Delhi, Konark, 1994.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-III 

## Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i): Principles of Political Science-I

Max. Marks : 80
Internal Assessment : 20
Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

## Unit-I

Political Science: Definition, Meaning, Nature and Scope. Relations of Political Science with other Social Sciences.

## Unit-II

State: Definition, Elements, Relations with the other organizations. Theories of the Origin of the State.

## Unit-III

Nature of State: Liberal, Marxian.
Functions of State: Liberal and Socialist Views. Welfare State: Concept and Functions.

## Unit-IV

Sovereignty: Definition, Attributes and Types. Theories of Sovereignty: Monistic and Pluralistic.

## Readings

1 The Dynamics of Diplomacy, Jean Robert Leguey- Feilleux, Published by (VIVA) Vinod Vasishtha for viva Books Private Ldt., 4732/23 Ansari Road, New Delhi110002, Printed by Anand Sons, Delhi-100092, First Edition-2010.
2 The game of Diplomacy- Richard Sharp, Published in Great Britain by Arthur Barker Ltd. London, 1928
3 Diplomacy for the $21{ }^{\text {st }}$ Century, Naunihal Singh, Naurang Rai Mittal Publications (New Delhi) First Edition- 2002.
4 Conduct of the New Diplomacy: Jamesh Cany, Marper \& Row, New York, Evanstom and London, Copy right-1964.
5 Modern Diplomacy: Pialecties and Pinensions, GVG Krishnanmurty, Marinder Sagar, Sagar Publications, New Delhi-110001, 1980.
6 Theory and Practice of Diplomacy: Dr. Harish Chander Sharma, College Book Depot, Jaipur, New Delhi.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-III Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.
(Option-ii) Indian Political Thinkers-I
Max. Marks : 80
Internal Assessment :
Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Raja Ram Mohan Ray and Swami Dayanand,
Unit-II
Dada Bhai Narojee and Gopal Krishan Gokhle
Unit-III
Swami Vivekanand and Aurbind Ghosh
Unit-IV
Lala Lajpat Rai and Bal Gangadhar Tilak

## Readings

1. A.S. Altekar, State and Government in Ancient India, Delhi, Motilal Banarsidass, 1966.
2. A.Appadorai, Documents on Political Thought in Modern India, 2 Vols. Bombay Oxford University Pres, 1970.
3. S. Ghose, Modern Indian Political Thought, Delhi, Allied, 1984.
4. V.R. Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992.
5. T. Pantham, and K. Deustch (eds), Political Thought in Modern India, New Delhi, Sage, 1986.
6. B. Parekh and T. Pantham (eds), Political Discourse: Exploration in Indian and Western Political Thought, New Delhi, Sage, 1987.
7. V.R. Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-IV <br> Syllabi and Courses of Reading 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Principles of Political Science-II

M. Marks : 80

Internal Assessment : 20
Time: 3 Hours
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

## Unit-I

Concepts and Theories of Rights. Relationships between Rights and duties. Universal Declaration of Human Rights.

## Unit-II

Concept and Theories of Liberty and Equality. Relationship between Liberty and Equality.

Unit-III
Concepts of Social Change
Concept and Theories and Development.
Unit-IV
RTI and Consumer Protection and Welfare.

## Readings

1 The Dynamics of Diplomacy, Jean Robert Leguey- Feilleux, Published by (VIVA) Vinod Vasishtha for viva Books Private Ldt., 4732/23 Ansari Road, New Delhi110002, Printed by Anand Sons, Delhi-100092, First Edition-2010.
2 The game of Diplomacy- Richard Sharp, Published in Great Britain by Arthur Barker Ltd. London, 1928
3 Diplomacy for the 21 ${ }^{\text {st }}$ Century, Naunihal Singh, Naurang Rai Mittal Publications (New Delhi) First Edition- 2002.
4 Conduct of the New Diplomacy: Jamesh Cany, Marper \& Row, New York, Evanstom and London, Copy right-1964.
5 Modern Diplomacy: Pialecties and Pinensions, GVG Krishnanmurty, Marinder Sagar, Sagar Publications, New Delhi-110001, 1980.
6 Theory and Practice of Diplomacy: Dr. Harish Chander Sharma, College Book Depot, Jaipur, New Delhi.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-II, Political Science (Pass Course) Semester-IV Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii) : Indian Political Thinkers

Max. Marks : 80
Internal Assessment : 20
Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of eight short answer questions of 2 marks each.

Unit-I
Mahatma Gandhi and M.N, Roy
Unit-II
Jawaharlal Nehru and B.R. Ambedkar

## Unit-III

Subhash Chander Bose and Bhagat Singh
Unit-IV
J.P. Narayan and Ram Manohar Lohia

## Readings

1. A.Appadorai, Indian Political Thinking Through the Ages, Delhi

Khanna Publishers,
1992.
2. K.P. Karunakaran, Indian Politics from Dababhai Naoroji to Gandhi : A Study of Political Ideas of Modern India, New Delhi, Gitanjali, 1975.
3. V.R.Mehta, Foundations of Indian Political Thought, New Delhi, Manohar, 1992.
4. V.P. Verma, Modern Indian Political Thought, Agra, Lakshmi Narain

Aggarwal, 1974

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-III, Political Science (Pass Course) Semester-V Syllabi and Courses of Reading 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i): Comparative Politics

M. Marks: 80

Internal Assessment: 20
Time: 3 Hours
NOTE : Total 10 questions will be set: four each from Part A and Part B and the two from Part C. Candidates will have to attempt five questions in all selecting at least one question from each part. There will be one compulsory multiple choice objective type question.

UNIT-I
Comparative Politics-Definition, Scope; Traditional \& Modern Concerns; Comparative Methods.

## UNIT-II

Approaches to the Study of Comparative Politics: Input-Out (David Easton), Structural-Function (G. Almond), Political Development, Political Culture (G. Almond).

UNIT-III
Constitutionalism: History, Nature, Type and Problem in Modern Times.
UNIT-IV
Constitutional Structure: (a) Formal-Executive, Legislation and Judiciary, (b) Informal Structures- Political Parties and Pressure Groups.

## Readings

1. G.A. Almond and J.S. Coleman, The Politics of the Developing Areas, Princeton NJ, Princeton University Press, 1960.
2. G.A. Almond, and S. Verba, The Civic Culture : Political Attitudes and Democracy in Five Nations, Princeton NJ, Princeton University Press, 1963.
3. L.J.Cantori and A.H. Zeigler (ed.), Comparative Politics in the PostBehaviouralist Era, London, Lynne Reinner Publisher, 1988.
4. O. Dunleavy and B.O' Leary, Theories of Liberal Democratic State, London, Macmillan, 1987.
5. R. Hauge and M. Harrop, Comparative Government and Politics. An Introduction, 5th edn., New York, Palgrave, 1001.
6. H. Finer, Theory and Practice of Modern Government, London, Methuen, 1969.
7. J.C. Johari, Comparative Political Theory: New Dimensions, Basic Concepts and Major Trends, New Delhi, Sterling, 1987.
8. K. Kumar, Revolution : The Theory and Practice of a European Idea, London, Weidenfeld and Nicolson, 1971.
9. R.C. Macridis, The Study of Comparative Government, New York, Doubleday, 1955.
10. R.C. Macridis and R.E. Ward, Modern Political Systems : Europe, and Asia, 2nd edn. Englewood Cliffs NJ, Prentice Hall, 1968.
11. J. Manor (ed.), Rethinking Third World Politics, London, Longman, 1991.
12. R.C. Macridis, Modern European Governments: Cases in Comparative Policy - Making, Englewood Cliffs NJ, Prentice Hall, 1968.
13. L.W. Pey (ed.), Communication and Political Development, Princeton NJ, Princeton University Press, 1963.
14. R.I. Rotberg (ed.), Politics and Political Change : A Journal of InterDisciplinary History Reader, Massachusetts, MIT Press, 1001.
15. H.J. Wiarda (ed.), New Developments in Comparative Politics, Boulder Colorado, Westview Press, 1986.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-III, Political Science (Pass Course) Semester-V Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii) : International Organization-I

Max. Marks: 80
Internal Assessment: 20
Time: 3 Hrs.
Note: Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of nine short answer questions of 2 marks each.

## Unit-I

International Organization: Meaning, Nature and Scope.
Evolution and growth of International Organization.
Unit-II
League of Nations, Structure, Objectives, Functions and Causes of Failure.

## Unit-III

U.N.O.: Origins, Objectives and Principles, Membership, Structure and Functions. Organs of United Nations: General Assembly, Security Councils, Economic and Social Council,
U.N. Secretariat, International Court of Justice

Unit: IV
Specialized Agencies of the United Nations: UNESCO, IMF, ILO, UNICEF, WHO.

## Readings:

1. E. Laurd, A History of the United Nations, London, Macmillan, 1989.
2. W.H. Lewis (ed.), The Security Role of the United Nations, New York, Praegar, 1991.
3. P. Baehr and L. Gordenker, The United Nations in the 1990s, London, Oxford University Press, 1992.
4. K. P. Saxena, Reforming the United Nations : The Challenge and Relevance, New Delhi, Sage, 1993.

# MAHARSHI DAYANAND UNIVERSITY ROHTAK B.A. Part-III, Political Science (Pass Course) Semester-VI Syllabi and Courses of Reading 

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (i) : Comparative Constitutions of UK \& USA

M. Marks : 80

Internal Assessment : 20
Time : 3 Hours
NOTE : Total 10 questions will be set: four each from Part A and Part B and the two from Part C. Candidates will have to attempt five questions in all selecting at least one question from each part. There will be one compulsory multiple choice objective type question.

UNIT-I
Evolution, Conventions, Legacies and Basic features of Constitutions of UK \& USA; Socio-Economic basis of Constitutions of UK \& USA.

UNIT-II
Comparative Study of Executive, Legislature
UNIT-III
Comparative study of Judiciary of U.K. \& U.S.A.
Comparative studies of Structures, Functions and roles of political parties and pressure groups of UK \& USA.

UNIT-IV
Electoral Processes, Voting Behaviour, Bureaucracy of UK \& USA.

## Readings

1. G. Almond et al., Comparative Politics Today : A World View, 7th edn., New York, London, Harper/Collins, 1000.
2. W. Bagehot, The English Constitution, London, Fontana, 1963.
3. J. Blondel, An Introduction to Comparative Government, London, Weidenfeld and Nicolson, 1969.
4. E.S. Griffith, The American System of Government, 6th edn., London, ethuen, 1983.
5. A.Lijphart,(ed.), Parliamentary versus Presidential Government, Oxford and New York, Oxford University Press, 1992.
6. M. Rhodes, P. Heywood and V. Wright, Developments in West European Politics, Basingstoke, Macmillan, 1997.
7. J. Wilson, American Government, 4th edn., Boston Massachusetts, Houghton Miffin, 1997.

## MAHARSHI DAYANAND UNIVERSITY ROHTAK <br> B.A. Part-III, Political Science (Pass Course) Semester-VI Syllabi and Courses of Reading

Note: The candidate will be required to attempt 5 questions in all. Question 1 consisting of (preferably eight) number of short answer type question (having no internal choice) spread over the whole syllabi should be compulsory. The candidate will be required to attempt 4 questions selecting at least one from each unit. All questions will carry equal marks.

## Option (ii) : International Organization-II

Max. Marks : 80
Internal Assessment : 20
Time : 3 Hrs.
Note : Students are required to attempt five questions in all, selecting one question from each unit. Question No. 9 (Short Answers) will be from entire syllabus and is compulsory. This section will consist of nine short answer questions of 2 marks each.

## Unit-I

Regional Organizations, European Community, SAARC, ASEAN
Unit-II
UN and Social Justice: Human Rights, Decolonization.

## Unit-III

Working of the U.N. towards Peace : Peace Making, Peace, Enforcement, Peace building and Peace Keeping, An Assessment of U.N.

## Unit: IV

UN and the Third World; Reforms and Democratization of U.N. System, India's claim for Permanent Membership of the Security Council.

## Readings

1. Richard K. Ashley, "The Eye of Power : The Politics of World Modelling," International Organization, Vol. 37, No. 3, 1983.
2. E. Laurd, A History of the United Nations, London, Macmillan, 1989.
3. W.H. Lewis (ed.), The Security Role of the United Nations, New York, Praegar, 1991.
4. P. Baehr and L. Gordenker, The United Nations in the 1990s, London, Oxford University Press, 1992.
5. Rikhey, Strengthening UN Peace keeping, London, Hurst and Co., 1993.
6. K. P. Saxena, Reforming the United Nations : The Challenge and Relevance, New Delhi, Sage, 1993.

## M.D. University, Rohtak

## B.A. I \& II Semesters (Home Science)

(w.e.f. 2012-2013)
(Passed in BOS meeting held on 05/9/2012)
B.A.(Semester- I)

| Paper Code | Nomenclature <br> Of the Paper | Max <br> Marks | Internal <br> Ass. | Total | Duration <br> of Exam | No of Periods <br> per week |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| HS101 | Home Management <br> (Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| HS102 | Practical <br> (Based on HS 101) | $\underline{25}$ | - | 25 | 3 Hrs. | 06 |
|  |  | Grand Total | $\mathbf{1 0 0}$ |  |  |  |

practical is to be examined after each semester

|  | B.A .(Semester- II) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Paper Code | Nomenclature <br> Of the Paper | Max Internal <br> Marks Ass. | Total | Duration <br> of Exam | No of Periods <br> per week |  |
| HS201 | Hygiene and Applied | 60 | 15 | 75 | 3 Hrs. | 08 |
| HS202 | Science (Theory) <br> Practical <br> (Based on HS 201) | 25 | - | 25 | 3 Hrs. | 06 |

Grand Total
100

## B.A. Ist Semester (Home Science) w.e.f. 2012-2013 Home Management (Theory)

Time : 3 Hrs.
Periods: 8 /week

Max Marks : 60
Int. Assess: 15

Note: 1. Examiner will set nine questions in all, selecting two question from each unit. Q. No. 1 is of objective type having eight sub- parts and covering all units.
2. Candidate will attempt five questions in all selecting one question from each unit \& question No. 1 is compulsory.

## Unit-I

1. Concept of Home Science, definition, meaning and scope of Home Science.
2. Housing-functions of Home, selection of site for an ideal house-soil, locality and orientation.
3. Kitchen garden-meaning and utility of kitchen garden, planning \& raising of kitchen garden, types of manure.

## Unit-II

1. Elements of art-line, texture, form, texture size, shape \& colour. Characteristics of colour and colour schemes.
2. Principles of art-harmony, balance, proportion, rhythm, emphasis, in relation to interior decoration and flower arrangement.

## Unit-III

1. Consumer protection-buying problems of consumer, consumer protection act-rights and duties of consumer.
2. Meaning of Home Management, process of Home Management-planning, controlling and evaluation.
3. Classification of human and material resources, similarities of different resources.

## Unit-IV

1. Management of family resources-money management, meaning, types of income, process of money management, budgeting, keeping of records, evaluation.
2. Time management, process of time management, time plans, peak loads, rest periods.
3. Energy management, process of energy management, fatigues and its types, work simplification-Meaning and Methods.

## References:

1. Ritu Kapur: A Text of Home Science; Vijay, Ludhiana.
2. Saweera Ralhen: Home Management \& Hygience, S. Dinesh, New Delhi
3. H. Kaur: Theory and practice of Home Management, Surjeet, New Delhi
4. P. Nickell: Management in Family Living, Wiley Eastern, New Delhi.
5. B.K. Bakshi: Home Management \& Decoration, Sahitay Prakashan, Agra

## Practical- I (Home Science)

Max Marks : 25

## Time : 3 Hrs.

## Periods: 6 /week

1. Cleaning \& Polishing of Household metals :-Brass, Copper, Silver \& Aluminum
2. Floor Decoration :- Rangoli, Alpana
3. Table Setting \& Table Manners.
4. Preparation of Monthly Budget for various income groups.
5. Care and Cleaning of Household Equipments-Mixer and Grinder, Microwave Oven, Washing Machine and Refrigerator.

> B.A. -- IInd Semester (Home Science)
> Hygiene and Applied Science (Theory)
> (w.e.f. 2012-2013)

Time 3 Hrs.
Max Marks : 60
Periods: 8 / Week
Int. Assess: 15
Note: 1. Examiner will set nine questions in all, selecting two question from each unit. Q. No. 1. is of objective type having eight sub - parts and covering all units.
2. Candidate will attempt five questions in all, selecting one question from each unit \& question No. 1 is compulsory.

## Unit-I

1. Meaning and Objective of Health Education, Health Hazards of Modern Age-Air, Water, Soil, Noise Pollution.
2. Definition of health and hygiene, factors relating to health -- food habits, exercise, rest and sleep and cleanliness of body.
3. Water-importance of water, impurities of water, types of water, sources of contamination and purification of water (natural and domestic methods.).

## Unit-II

1. Definition of infection, infective agents, infectious diseases, communicable diseases, incubation period, modes and channels of transmission of infection, isolation.
2. Disinfectants-Definition, types and methods of disinfection.
3. Immunity -Definition and types of immunity, immunization schedule.

## Unit-III

1. Diseases spread by insects : Malaria.
2. Disease spread by ingestion : Enteric Fever, Dysentery, Cholera.
3. Diseases spread by droplet infections; Measles, Mumps, Diptheria, Tuberculosis.
4. Diseases spread by contact : Leprosy, Tetanus.

## Unit-IV

1. Transmission of heat-Elementary ideas about transmission of heat \& their application in daily life, clothes, utensils, fire place, thermos flasks.
2. Thermometers and J scales of measurement, simple conversions- centigrade to fahrenheit.
3. Evaporation-factors affecting evaporation, refrigeration.

## References :

1. Ritu Kapur : A Text of Home Sciences Vijay, Ludhiana.
2. Saweera Ralhen: Home Management \& Hygience, S. Dinesh, New Delhi
3. Santosh Sharma Tikoo: Resources Management -- Interior decoration \& hygiene.
4. P. Nickell: Management in Family living, Wiley Eastern, New Delhi.
5. B.K. Bakshi: Home Management \& Decoration, Sahitay Prakashan, Agra.
6. Yash Pal Bedi; Social and Preventive medicine, Atma Ram \& Sons, Delhi.

## PRACTICAL- II (Home Science)

Max Marks : 25
Time : 3 Hrs.

## Periods : 6 /week

1. Pottery, painting \& decoration ( At least one pot each)
2. Repair of fuse \& plug.
3. Flower aqrangement-Fresh / Dry
4. Preparation of any two charts in relation to personal hygiene.
5. Preparation of any one article for interior decoration: Soft Toys, Paper Machine, Glass Painting, Fabric Painting, Tie and Dye, etc.

## M.D. University, Rohtak

## B.A. IIIrd \& IVth Semesters (Home Science)

 (w.e.f. 2012-2013)Passed in BOS meeting held on 01/12/2011

| B.A. (Semester- III) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nomenclature | Max | Internal | Total | Duration | No of Periods |
| Of the Paper | Marks | Assessment |  | of Exam | per week |
| Clothing \& Textile (Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| Practical-III(Home Sci.) |  | - | 25 | 3 Hrs. | 06 |
|  | Grand Total |  | 100 |  |  |
| B.A. (Semester-IV) |  |  |  |  |  |
| Human Physiology(Theory) | 60 | 15 | 75 | 3 Hrs. | 08 |
| Practical-IV (Home Sci.) |  | - | 25 | 3 Hrs. | 06 |
|  | Grand | Total | 100 |  |  |

## M.D. UNIVERSITY, ROHTAK <br> Scheme of Examination of B.A.-- IIIrd Semester (Home Science) <br> w.e.f. Session 2012-2013

| Nomenclature of paper | Max Marks | Internal <br> Assessment | Total | Exam Duration |
| :--- | :---: | :---: | :---: | :---: |
| Clothing and Textiles (Theory) | 60 | 15 | 75 | 3 Hrs |
| Practical-III (Home Science) | 25 |  | - | 25 |

CLOTHING AND TEXTILES (Theory)
Max Marks : 60
Periods: 8/ week
Time: 3 Hours
Note:1.The examiner will set nine questions in all selecting two questions from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
Note2.Candidate shall attempt five questions in all selecting one question from each unit. Q.No. 1 will be compulsory.

## Unit-I

Definition and classification of Fibers.
Properties and uses of Different Fibers: Cotton, Silk, Wool and Nylon

## Unit-II

Brief introduction of weaving, basic weaves - plain, twit and satin.
Finishing processes in fabrics
(a) Meaning and Objective of finishes
(b) Different types of Finishes: Calendaring, Sizing, Mercerizing, Crease Resistant.
(c) Dyeing-simple dyeing and resist dyeing, dyeing at various stages.
(d) Types of printing

## Unit-III

Selection of fabrics according to age, season, budget, occupation, figure, fashion and occasion.
Traditional embroideries of India (Phulkari, Kantha, Kashida and Chikankari) Traditional textiles of India : ---
(a) Traditional sarees of India (i, Baluchari, Banarsi, Chanderi, Patola and Bandhani)
(b) Other textiles- (Dhaka, Mulmul, Brocade.)

## Unit-IV

Supplies necessary for Laundry: --
(a) Soaps and Detergents-composition and manufacturing, difference between soaps and detergent
(b) Types and uses of Starches, blues and bleaches.
(c) Different methods of Laundry
(d) Reagents used in Laundry: Acids, Alkalis, Solvents and Absorbents.
(e) Stain removal-classification of stains, methods of removing different types of stains.

## References:

1. Saweera Ralhen, A book of Clothing Textiles and Physiology
2. S. Dinesh, New Delhi.

## PRACTICAL- III (Home Science)

Max Marks: 25
Time :
3 Hrs.
Periods
: 6/
week

1. Preparation of samples: ---
(a) Basic stitches-tacking, running stitch, back stitch, hemming, button hole stitch
(b) Seams-Plain seam, French seam, counter seam, lapped seam
(c) Processes-Gathers into a band --- Pleats (Knife and Box), Darts (Simple and Fish
Dart), Placket Opening (Continuous and Two pieces), Tucks (Pin and Cross)
2. Embroidery-one article of fancy embroidery using at least four stitches.

OR
Six fancy embroidered handkerchiefs with different stitches
3. Knitting: ---(a) Following of knitting instructions
(b) Preparation of two samples of different designs (Minimum size 4" 4 ")
4. Tie and dye
5. Block Printing.

## M.D. UNIVERSITY, ROHTAK <br> Scheme of Examination of B.A. -IVth Semester (Home Science) <br> (w.e.f. Session 2012-2013)

| Nomenclature of paper | Max Marks | Internal <br> Assessment | Total | Exam Duration |
| :---: | :---: | :---: | :---: | :---: |
| Human Physiology (Theory) | 60 | 15 | 75 | 3 Hrs. |
| Practical-IV (Home Science) | 25 | - | 25 | 3 Hrs. |

## HU̇MAN PHYSIOLOGY (Theory)

Max Marks : 60
Periods: 8/ week

## Time: 3 Hours

Note:1. The examiner will set nine questions in all selecting two questions from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
2. Candidate shall attempt five questions in all selecting one question from each unit. Q. No. 1 will be compulsory.

## Unit-I

Animal cell-structure and functions of cell organelles. Skeletal System: Functions, Types of bones, Names of bones and types of joints.

## Unit-II

Digestive System; Parts of Alimentary Canal-Mouth, Pharynx, Oesophagus, Stomach, Small Intestine, and Large Intestine. Digestion and Absorption of food Excretory System: Structure and functions of Kidney, Skin and Lungs

## Unit-III

Circulatory System : --
(a) Composition and Functions of Blood
(b) Heart: Structure and Working
(c) Coagulation of blood
(d) Blood Pressure
(e) Normal levels of hemoglobin, cholesterol, urea, uric acid and glucose in blood

## Unit-IV

Reproductive System: ---
(a) Female reproductive system
(b) Sex Glands (Male and Female)
(c) Menstruation
(d) Fertilization
(e) Pregnancy
(f) Lactation

Endocrine System: --- Functions of different glands-Pituitary, Thyroid, Parathyroid, Adrenal Gland, islets of Langerhans in Pancreas.

## References:--

Sweera Ralhan, A book of Clothing, Textiles and physiology, S. Dinesh, New Delhi PRACTICAL-IV (Home Science)

Max Marks : 25
Time : 3 Hrs.
Periods: 6 /week

1. Different parts of sewing machine, its care, defects and remedies
2. Taking body measurement
3. Drafting of the following:
(i) Child's bodice block and its adaptation to a gathered frock.
(ii) Adult's bodice block and its adaptation to their choice garment
4. Drafting and stitching of the following garments:
(i) Gathered frock (three to eight years old)
(ii) Petticoat
(iii) Salwar \& Kamiz Or Blouse.

## M.D. University, Rohtak

## B.A. ---- Vth \& VIth Semesters (Home Science)

( for the session 2013-2014 and onwards)
(Passed in BOS meeting held on 06/12/2013)

## B.A. (Semester-V)

| Nomenclature Of the Paper | Max <br> Mark | Internal Assessment | Total | Duration of Exam | No of Periods per week |
| :---: | :---: | :---: | :---: | :---: | :---: |
| nd Nutrition (Theory) | 60 | 15 | 75 | 3 Hrs . | 08 |
| - V( Home Sci.) | $\underline{25}$ | - | 25 | 3 Hrs . | 06 |
|  | Grand | Total | 100 |  |  |
| Semester-VI) |  |  |  |  |  |
| Psychology \& r craft (Theory) | 60 | 15 | 75 | 3 Hrs . | 08 |
| al-VI ( Home Sci.) | $\underline{25}$ | - | 25 | 3 Hrs . | 06 |
|  | Grand | Total | 100 |  |  |

## B.A. -- Vth Semester (Home Science) <br> ( for the session 2013-2014 and onwards) <br> Food \& Nutrition (Theory)

Time 3 Hrs.
Periods: 8 / Week

Max Marks : 60
Internal Ass: 15

Note:
3. The examiner will set nine questions in all selecting two question from each unit. Question No. 1 will be of objective type and having eight sub -parts covering all the four units.
4. Candidate shall attempt five question in all selecting one question from each unit. Question No. 1 will be compulsory.

## Unit-I

Food-classification \& functions of food
groups Essential food constituents: ---
Carbohydrates, Protein, Fats, Water, source: functions, recommended daily allowances, effect of deficiency and excess of these food constituents
Vitamins-A, D, C, B1, B2, Niacin

Minerals - Calcium, Phosphorus \& Iodine.
Food source, functions, recommended daily allowances, effects of deficiency \& excess of the above.

## Unit-II

Importance and methods of cooking. Effect of cooking on different nutrients. Methods of cooking, their advantages and disadvantages:
Moist heat-Boiling, Stewing, steaming. Dry heat-Roasting, grilling, baking. FryingShallow and deep
Microwave cooking in brief

## Unit-III

Methods of enhancing nutritive value of food stuffs: ---
4. Importance of enhancing nutritive value of food stuffs. Methods of enhancing nutritive value of food stuff, sprouting, fermentation, combination, and supplementation.
Food Preservation: ----
3. Importance of food preservation.
4. Causes of food spoilage in brief
5. Methods of food preservation with special emphasis on house hold methods.

## Unit-IV

Meal Planning: --
4. Concept of Balanced diet.
5. Principles of Meal Planning, factors affecting it.
6. Planning meals for : Children-school going child, Adolescents, Adults, Pregnant women and lactating mother.

PRACTICAL - V (Home Science)
(for the session 2013-2014 and onwards)
Time 3 Hrs.
Max Marks : 25
Periods: 6/ Week

1. Preparation of various dishes (at least 2 each) under following heads using different methods of cooking : ----
(a) Beverages,(b) Soups,(c) Desserts,(d) Snacks ,(e)Salads,(f) Breakfast dishes, (g) Main meal dishes

# B.A. --- VIth Semester (Home Science) <br> Child Psychology and Mother craft (Theory) <br> (for the session 2013-2014 and onwards) 

Time 3 Hrs.
Max Marks : 60
Periods : 8 / Week
Internal Ass: 15
Note:
6. The examiner will set nine questions in all selecting two question from each unit. Question No. 1 will be objective type and having eight sub -- parts covering all the four units.
7. Candidate shall attempt five questions in all selecting one question from each unit. Question No. 1 will be compulsory.

## Unit-I

6. Definition, aims, subjects, matter, objective of studying child psychology.

Learning: ---
4. What is learning, importance of learning.
5. Methods of learning.
6. Factors affecting learning.
7. Role of reward and punishment in learning.

## Unit-II

Personality development: -- Nature of personality, Definitions, Types of personality factors affecting the development of personality,

Play: -- Definition, features of play, Difference between work and play, Types of play, importance of play in childhood.
Stages of the development of the child, characteristics and problems of Adolescence, role of parents and teachers in solving their problems.

## Unit-III

The Expectant mother: --
4. Signs of pregnancy
5. Discomforts of pregnancy
6. Ill --effects of an early marriage

## Unit-IV

5. Breast feeding, (b) artificial feeding (c) Weaving Common aliments of childhood: ---
6. Cold, cough, fever.
7. Digestive disturbances-Diarrhoea, Constipation and Vomiting.
8. Skin infections.

# PRACTICAL-VI (Home Science) <br> (for the session 2013-2014 and onwards) 

Time 3 Hrs.
Max Marks : 25
Periods: 6 / Week
7. Planning and preparation of meals for: -- -
6. Pre-school going child and school going child.
7. Adolescents-Boys and Girls
8. Adult
9. Pregnant and lactating mother.
(e) Food Preservation-Pickle, Chutney, Jam, Squash, Morrabba (at least two each:)

## NEW SCHEME

## Scheme of Examination of B.A. $1^{\text {st }}$ Semester Mathematics (w.e.f. 2012-2013)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 111 | Algebra | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 112 | Calculus | 6 periods/ <br> 4 hours per <br> week | 27 | 7 |  |
| 12BAM 113 | Solid <br> Geometry | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Algebra

## Paper: 12BAM 111

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Symmetric, Skew symmetric, Hermitian and skew Hermitian matrices. Elementary Operations on matrices. Rank of a matrices. Inverse of a matrix. Linear dependence and independence of rows and columns of matrices. Row rank and column rank of a matrix. Eigenvalues, eigenvectors and the characteristic equation of a matrix. Minimal polynomial of a matrix. Cayley Hamilton theorem and its use in finding the inverse of a matrix.

## Section - II

Applications of matrices to a system of linear (both homogeneous and non-homogeneous) equations. Theorems on consistency of a system of linear equations. Unitary and Orthogonal Matrices, Bilinear and Quadratic forms.

## Section - III

Relations between the roots and coefficients of general polynomial equation in one variable. Solutions of polynomial equations having conditions on roots. Common roots and multiple roots. Transformation of equations.

## Section-IV :

Nature of the roots of an equation Descarte's rule of signs. Solutions of cubic equations (Cardon's method). Biquadratic equations and their solutions.

## Books Recommended :

1. H.S. Hall and S.R. Knight : Higher Algebra, H.M. Publications 1994.
2. Shanti Narayan : A Text Books of Matrices.
3. Chandrika Prasad : Text Book on Algebra and Theory of Equations.

Pothishala Private Ltd., Allahabad.

## Calculus

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Definition of the limit of a function. Basic properties of limits, Continuous functions and classification of discontinuities. Differentiability. Successive differentiation. Leibnitz theorem. Maclaurin and Taylor series expansions.
Section - II

Asymptotes in Cartesian coordinates, intersection of curve and its asymptotes, asymptotes in polar coordinates. Curvature, radius of curvature for Cartesian curves, parametric curves, polar curves. Newton's method. Radius of curvature for pedal curves. Tangential polar equations. Centre of curvature. Circle of curvature. Chord of curvature, evolutes. Tests for concavity and convexity. Points of inflexion. Multiple points. Cusps, nodes \& conjugate points. Type of cusps.
Section - III :

Tracing of curves in Cartesian, parametric and polar co-ordinates. Reduction formulae. Rectification, intrinsic equations of curve.
Section - IV :

Quardrature (area)Sectorial area. Area bounded by closed curves. Volumes and surfaces of solids of revolution. Theorems of Pappu's and Guilden.

## Books Recommended :

1. Differential and Integral Calculus : Shanti Narayan.
2. Murray R. Spiegel : Theory and Problems of Advanced Calculus. Schaun's Outline series. Schaum Publishing Co., New York.
3. N. Piskunov : Differential and integral Calculus. Peace Publishers, Moscow.
4. Gorakh Prasad : Differential Calculus. Pothishasla Pvt. Ltd., Allahabad.
5. Gorakh Prasad : Integral Calculus. Pothishala Pvt. Ltd., Allahabad.

# Solid Geometry 

## Paper: 12BAM 113

Max. Marks:
$5 \times 4=20$
$1 \times 6=6$
Total $=26$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

General equation of second degree. Tracing of conics. Tangent at any point to the conic, chord of contact, pole of line to the conic, director circle of conic. System of conics. Confocal conics. Polar equation of a conic, tangent and normal to the conic.

## Section-II :

Sphere: Plane section of a sphere. Sphere through a given circle. Intersection of two spheres, radical plane of two spheres. Co-oxal system of spheres Cones. Right circular cone, enveloping cone and reciprocal cone. Cylinder: Right circular cylinder and enveloping cylinder.

Section-III :
Central Conicoids: Equation of tangent plane. Director sphere. Normal to the conicoids. Polar plane of a point. Enveloping cone of a coincoid. Enveloping cylinder of a coincoid.

## Section-IV :

Paraboloids: Circular section, Plane sections of conicoids.
Generating lines. Confocal conicoid. Reduction of second degree equations.

## Books Recommended

1. R.J.T. Bill, Elementary Treatise on Coordinary Geometry of Three Dimensions, MacMillan India Ltd. 1994.
2. P.K. Jain and Khalil Ahmad : A Textbook of Analytical Geometry of Three Dimensions, Wiley Eastern Ltd. 1999.

## NEW SCHEME

Scheme of Examination of B.A. $2^{\text {nd }}$ Semester Mathematics
(w.e.f. 2012-2013)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Theory | linternal <br> Assessment | Total |  |
| 12BAM 121 | Number <br> Theory and <br> Trigonometry | 6 periodss <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 122 | Ordinary <br> Differential <br> Equations | 6 periods/ <br> 4 hours per <br> week | 27 | 700 |  |
| 12BAM 123 | Vector <br> Calculus | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Number Theory and Trigonometry 

## Paper: 12BAM 121

Max. Marks:

$4.5 \times 4=18$ $1.5 \times 6=9$ Total $=27$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

Divisibility, G.C.D.(greatest common divisors), L.C.M.(least common multiple)
Primes, Fundamental Theorem of Arithemetic. Linear Congruences, Fermat's theorem. Wilson's theorem and its converse. Linear Diophanatine equations in two variables

> Section - II :

Complete residue system and reduced residue system modulo m. Euler's $\varnothing$ function Euler's generalization of Fermat's theorem. Chinese Remainder Theorem. Quadratic residues. Legendre symbols. Lemma of Gauss; Gauss reciprocity law. Greatest integer function [x]. The number of divisors and the sum of divisors of a natural number $n$ (The functions $d(n)$ and $\sigma(n)$ ). Moebius function and Moebius inversion formula.

> Section -III :

De Moivre's Theorem and its Applications. Expansion of trigonometrical functions. Direct circular and hyperbolic functions and their properties.

Section-IV:
Inverse circular and hyperbolic functions and their properties. Logarithm of a complex quantity. Gregory's series. Summation of Trigonometry series.

## Books Recommended :

1. S.L. Loney : Plane Trigonometry Part - II, Macmillan and Company, London.
2. R.S. Verma and K.S. Sukla : Text Book on Trigonometry, Pothishala Pvt. Ltd. Allahabad.
3. Ivan Ninen and H.S. Zuckerman. An Introduction to the Theory of Numbers.

## Ordinary Differential Equations

Paper: 12BAM 122

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I :

Geometrical meaning of a differential equation. Exact differential equations, integrating factors. First order higher degree equations solvable for $\mathrm{x}, \mathrm{y}, \mathrm{p}$ Lagrange's equations, Clairaut's equations. Equation reducible to Clairaut's form. Singular solutions.

## Section-II :

Orthogonal trajectories: in Cartesian coordinates and polar coordinates. Self orthogonal family of curves.. Linear differential equations with constant coefficients. Homogeneous linear ordinary differential equations. Equations reducible to homogeneous linear ordinary differential equations.

## Section-III :

Linear differential equations of second order: Reduction to normal form. Transformation of the equation by changing the dependent variable/ the independent variable. Solution by operators of non-homogeneous linear differential equations. Reduction of order of a differential equation. Method of variations of parameters. Method of undetermined coefficients.
Section - IV :

Ordinary simultaneous differential equations. Solution of simultaneous differential equations involving operators $x(d / d x)$ or $t(d / d t)$ etc. Simultaneous equation of the form $d x / P=d y / Q=$ $\mathrm{dz} / \mathrm{R}$. Total differential equations. Condition for $\mathrm{Pdx}+\mathrm{Qdy}+\mathrm{Rdz}=0$ to be exact. General method of solving Pdx $+\mathrm{Qdy}+\mathrm{Rdz}=0$ by taking one variable constant. Method of auxiliary equations.

## Books Recommended :

1. D.A. Murray : Introductory Course in Differential Equations. Orient Longaman (India). 1967
2. A.R.Forsyth : A Treatise on Differential Equations, Machmillan and Co. Ltd. London
3. E.A. Codington : Introduction to Differential Equations.
4. S.L.Ross: Differential Equations, John Wiley \& Sons
5. B.Rai \& D.P. Chaudhary : Ordinary Differential Equations; Narosa, Publishing House Pvt. Ltd.

## Vector Calculus

## Paper: 12BAM 123

Max. Marks:

$5 \times 4=20$
$1 \times 6=6$
Total $=26$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Scalar and vector product of three vectors, product of four vectors. Reciprocal vectors. Vector differentiation. Scalar Valued point functions, vector valued point functions, derivative along a curve, directional derivatives
Section - II

Gradient of a scalar point function, geometrical interpretation of grad $\Phi$, character of gradient as a point function. Divergence and curl of vector point function, characters of Div $\vec{f}$ and Curl $\vec{f}$ as point function, examples. Gradient, divergence and curl of sums and product and their related vector identities. Laplacian operator.

## Section - III

Orthogonal curvilinear coordinates Conditions for orthogonality fundamental triad of mutually orthogonal unit vectors. Gradient, Divergence, Curl and Laplacian operators in terms of orthogonal curvilinear coordinates, Cylindrical co-ordinates and Spherical co-ordinates.
Section - IV

Vector integration; Line integral, Surface integral, Volume integral.
Theorems of Gauss, Green \& Stokes and problems based on these theorms.

## Books Recommended:

1. Murrary R. Spiegal : Theory and Problems of Advanced Calculus, Schaum Publishing Company, New York.
2. Murrary R. Spiegal : Vector Analysis, Schaum Publisghing Company, New York.
3. N. Saran and S.N. NIgam. Introduction to Vector Analysis, Pothishala Pvt. Ltd., Allahabad.
4. Shanti Narayna : A Text Book of Vector Calculus. S. Chand \& Co., New Delhi.

## NEW SCHEME

## Scheme of Examination of B.A. $3^{\text {rd }}$ Semester Mathematics <br> (w.e.f. 2013-2014)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 231 | Advanced <br> Calculus | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 232 | Partial <br> Differential | 6 periods/ <br> 4 hours per <br> week | 27 | 7 |  |
|  | Equations |  |  |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Advanced Calculus

## Paper: 12BAM 231

Max. Marks:<br>$4.5 \times 4=18$<br>$1.5 \times 6=9$<br>Total $=27$

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Continuity, Sequential Continuity, properties of continuous functions, Uniform continuity, chain rule of differentiability. Mean value theorems; Rolle's Theorem and Lagrange's mean value theorem and their geometrical interpretations. Taylor's Theorem with various forms of remainders, Darboux intermediate value theorem for derivatives, Indeterminate forms.

## Section - II

Limit and continuity of real valued functions of two variables. Partial differentiation. Total Differentials; Composite functions \& implicit functions. Change of variables. Homogenous functions \& Euler's theorem on homogeneous functions. Taylor's theorem for functions of two variables.

## Section - III

Differentiability of real valued functions of two variables. Schwarz and Young's theorem. Implicit function theorem. Maxima, Minima and saddle points of two variables. Lagrange's method of multipliers.

## Section - IV

Curves: Tangents, Principal normals, Binormals, Serret-Frenet formulae. Locus of the centre of curvature, Spherical curvature, Locus of centre of Spherical curvature, Involutes, evolutes, Bertrand Curves. Surfaces: Tangent planes, one parameter family of surfaces, Envelopes.

## Books Recommended:

1. C.E. Weatherburn : Differential Geometry of three dimensions, Radhe Publishing House, Calcutta
2. Gabriel Klaumber : Mathematical analysis, Mrcel Dekkar, Inc., New York, 1975
3. R.R. Goldberg : Real Analysis, Oxford \& I.B.H. Publishing Co., New Delhi, 1970
4. Gorakh Prasad : Differential Calculus, Pothishala Pvt. Ltd., Allahabad
5. S.C. Malik : Mathematical Analysis, Wiley Eastern Ltd., Allahabad.
6. Shanti Narayan : A Course in Mathemtical Analysis, S.Chand and company, New Delhi
7. Murray, R. Spiegel : Theory and Problems of Advanced Calculus, Schaum Publishing co., New York

# Partial Differential Equations 

Paper: 12BAM 232

Max. Marks:
$4.5 \times 4=18$
$1.5 \times 6=9$
Total $=27$
Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Partial differential equations: Formation, order and degree, Linear and Non-Linear Partial differential equations of the first order: Complete solution, singular solution, General solution, Solution of Lagrange's linear equations, Charpit's general method of solution. Compatible systems of first order equations, Jacobi's method.

## Section - II

Linear partial differential equations of second and higher orders, Linear and non-linear homogenious and non-homogenious equations with constant co-efficients, Partial differential eqution with variable co-efficients reducible to equations with constant coefficients, their complimentary functions and particular Integrals, Equations reducible to linear equations with constant co-efficients.

## Section - III

Classification of linear partial differential equations of second order, Hyperbolic, parabolic and elliptic types, Reduction of second order linear partial differential equations to Canonical (Normal) forms and their solutions, Solution of linear hyperbolic equations, Monge's method for partial differential equations of second order.

Section - IV
Cauchy's problem for second order partial differential equations, Characteristic equations and characteristic curves of second order partial differential equation, Method of separation of variables: Solution of Laplace's equation, Wave equation (one and two dimensions), Diffusion (Heat) equation (one and two dimension) in Cartesian Co-ordinate system.

## Books Recommended:

1. D.A.Murray: Introductory Course on Differential Equations, Orient Longman, (India), 1967
2. Erwin Kreyszing : Advanced Engineering Mathematics, John Wiley \& Sons, Inc., New York, 1999
3. A.R. Forsyth : A Treatise on Differential Equations, Macmillan and Co. Ltd.
4. Ian N.Sneddon : Elements of Partial Differential Equations, McGraw Hill Book Company, 1988
5. Frank Ayres : Theory and Problems of Differential Equations, McGraw Hill Book Company, 1972
6. J.N. Sharma \& Kehar Singh : Partial Differential Equations

## Statics

## Paper: 12BAM 233

Max. Marks:

| $5 \times 4=20$ |
| :--- |
| $1 \times 6=6$ |
| Total $=26$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Composition and resolution of forces. Parallel forces. Moments and Couples.

> Section - II

Analytical conditions of equilibrium of coplanar forces. Friction. Centre of Gravity.

> Section - III

Virtual work. Forces in three dimensions. Poinsots central axis.
Section-IV
Wrenches. Null lines and planes. Stable and unstable equilibrium.

## Books Recommended:

1. S.L. Loney : Statics, Macmillan Company, London
2. R.S. Verma : A Text Book on Statics, Pothishala Pvt. Ltd., Allahabad

## NEW SCHEME

## Scheme of Examination of B.A. $4^{\text {th }}$ Semester Mathematics

(w.e.f. 2013-2014)

| Paper Code | Title of the Paper | Allocation of Periods | Maximum Marks |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Theory | Intternal Assessment | Practical | Total |
| 12BAM 241 | Sequences and Series | $\begin{aligned} & \hline 6 \text { periods/ } \\ & 4 \text { hours per } \\ & \text { week } \\ & \hline \end{aligned}$ | 27 | 6 | -- | 100 |
| 12BAM 242 | Special Functions and Integral transforms | $\begin{aligned} & 6 \text { periods/ } \\ & 4 \text { hours per } \\ & \text { week } \end{aligned}$ | 27 | 7 | -- |  |
| 12BAM 243 | Programming in C and Numerical Methods | 6 periods/ 4 hours per week | 20 | -- | 13 |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Sequences and Series 

## Paper: 12BAM 241

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Boundedness of the set of real numbers; least upper bound, greatest lower bound of a set, neighborhoods, interior points, isolated points, limit points, open sets, closed set, interior of a set, closure of a set in real numbers and their properties. Bolzano-Weiestrass theorem, Open covers, Compact sets and Heine-Borel Theorem.

## Section - II

Sequence: Real Sequences and their convergence, Theorem on limits of sequence, Bounded and monotonic sequences, Cauchy's sequence, Cauchy general principle of convergence, Subsequences, Subsequential limits.
Infinite series: Convergence and divergence of Infinite Series, Comparison Tests of positive terms Infinite series, Cauchy's general principle of Convergence of series, Convergence and divergence of geometric series, Hyper Harmonic series or p-series.

## Section - III

Infinite series: D-Alembert's ratio test, Raabe's test, Logarithmic test, de Morgan and Bertrand's test, Cauchy's Nth root test, Gauss Test, Cauchy's integral test, Cauchy's condensation test.

## Section - IV

Alternating series, Leibnitz's test, absolute and conditional convergence, Arbitrary series: abel's lemma, Abel's test, Dirichlet's test, Insertion and removal of parenthesis, re-arrangement of terms in a series, Dirichlet's theorem, Riemann's Re-arrangement theorem, Pringsheim's theorem (statement only), Multiplication of series, Cauchy product of series, (definitions and examples only) Convergence and absolute convergence of infinite products.

## Books Recommended:

1. R.R. Goldberg : Real Analysis, Oxford \& I.B.H. Publishing Co., New Delhi, 1970
2. S.C. Malik : Mathematical Analysis, Wiley Eastern Ltd., Allahabad.
3. Shanti Narayan : A Course in Mathematical Analysis, S.Chand and company, New Delhi
4. Murray, R. Spiegel : Theory and Problems of Advanced Calculus, Schaum Publishing co., New York
5. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
6. Earl D. Rainville, Infinite Series, The Macmillan Co., New York

## Special Functions and Integral Transforms

Paper: 12BAM 242

## Max. Marks: <br> $4.5 \times 4=18$ <br> $1.5 \times 6=9$ <br> Total $=27$

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Series solution of differential equations - Power series method, Definitions of Beta and Gamma functions. Bessel equation and its solution: Bessel functions and their properties-Convergence, recurrence, Relations and generating functions, Orthogonality of Bessel functions.

## Section - II

Legendre and Hermite differentials equations and their solutions: Legendre and Hermite functions and their properties-Recurrence Relations and generating functions. Orhogonality of Legendre and Hermite polynomials. Rodrigues’ Formula for Legendre \& Hermite Polynomials, Laplace Integral Representation of Legendre polynomial.

## Section - III

Laplace Transforms - Existence theorem for Laplace transforms, Linearity of the Laplace transforms, Shifting theorems, Laplace transforms of derivatives and integrals, Differentiation and integration of Laplace transforms, Convolution theorem, Inverse Laplace transforms, convolution theorem, Inverse Laplace transforms of derivatives and integrals, solution of ordinary differential equations using Laplace transform.

> Section - IV

Fourier transforms: Linearity property, Shifting, Modulation, Convolution Theorem, Fourier Transform of Derivatives, Relations between Fourier transform and Laplace transform, Parseval's identity for Fourier transforms, solution of differential Equations using Fourier Transforms.

## Books Recommended:

1. Erwin Kreyszing : Advanced Engineering Mathematics, John Wiley \& Sons, Inc., New York, 1999
2. A.R. Forsyth : A Treatise on Differential Equations, Macmillan and Co. Ltd.
3. I.N. Sneddon : Special Functions on mathematics, Physics \& Chemistry.
4. W.W. Bell : Special Functions for Scientists \& Engineers.
5. I.N. Sneddon: the use of integral transform, McGraw Hill, 1972
6. Murray R. Spiegel: Laplace transform, Schaum's Series.

## Programming in C and Numerical Methods

Part-A (Theory)
Paper: 12BAM 243

> | Max. Marks: |
| :--- |
| $3.5 \times 4=14$ <br> $1 \times 6=6$ <br> Total $=20$ <br> Time: 3 Hours |

Note:- The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 3.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions ( each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Programmer's model of a computer, Algorithms, Flow charts, Data types, Operators and expressions, Input / outputs functions.

## Section - II

Decisions control structure: Decision statements, Logical and conditional statements, Implementation of Loops, Switch Statement \& Case control structures. Functions, Preprocessors and Arrays.

## Section - III

Strings: Character Data Type, Standard String handling Functions, Arithmetic Operations on Characters. Structures: Definition, using Structures, use of Structures in Arrays and Arrays in Structures. Pointers: Pointers Data type, Pointers and Arrays, Pointers and Functions.
Solution of Algebraic and Transcendental equations: Bisection method, Regula-Falsi method, Secant method, Newton-Raphson's method. Newton's iterative method for finding pth root of a number, Order of convergence of above methods.

Section - IV
Simultaneous linear algebraic equations: Gauss-elimination method, Gauss-Jordan method, Triangularization method (LU decomposition method). Crout's method, Cholesky Decomposition method. Iterative method, Jacobi's method, Gauss-Seidal's method, Relaxation method.

## Books Recommended:

1. B.W. Kernighan and D.M. Ritchie : The C Programming Language, $2^{\text {nd }}$ Edition
2. V. Rajaraman : Programming in C, Prentice Hall of India, 1994
3. Byron S. Gottfried : Theory and Problems of Programming with C, Tata McGraw-Hill Publishing Co. Ltd., 1998
4. M.K. Jain, S.R.K.Lyengar, R.K. Jain : Numerical Method, Problems and Solutions, New Age International (P) Ltd., 1996
5. M.K. Jain, S.R.K. Lyengar, R.K. Jain : Numerical Method for Scientific and Engineering Computation, New Age International (P) Ltd., 1999
6. Computer Oriented Numerical Methods, Prentice Hall of India Pvt. Ltd.
7. Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill Publishing Co. Ltd.
8. Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill Publishing Co. Ltd.
9. Babu Ram: Numerical Methods, Pearson Publication.
10. R.S. Gupta, Elements of Numerical Analysis, Macmillan's India 2010.

## Part-B (Practical)

Max. Marks: 13
Time: 3 Hours
There will be a separate practical paper which will consist simple programs in C and the implementation of Numerical Methods, studied in the paper 12BAM 243 (Part-A).

## NEW SCHEME

## Scheme of Examination of B.A. $5^{\text {th }}$ Semester Mathematics

(w.e.f. 2014-2015)

| Paper Code | Title of the <br> Paper | Allocation <br> of <br> Periods | Maximum Marks |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Total |
| 12BAM 351 | Real Analysis | 6 periods/ <br> 4 hours per <br> week | 27 | 6 |  |
| 12BAM 352 | Groups and <br> Rings | beriods/ <br> 4 hours per <br> week | 27 | 7 |  |
| 12BAM 353 | Dynamics | 6 periods/ <br> 4 hours per <br> week | 26 | 7 |  |
|  |  |  |  |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

## Real Analysis

## Paper: 12BAM 351

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Riemann integral, Integrabililty of continuous and monotonic functions, The Fundamental theorem of integral calculus. Mean value theorems of integral calculus.

## Section - II

Improper integrals and their convergence, Comparison tests, Abel's and Dirichlet's tests, Frullani's integral, Integral as a function of a parameter. Continuity, Differentiability and integrability of an integral of a function of a parameter.

## Section - III

Definition and examples of metric spaces, neighborhoods, limit points, interior points, open and closed sets, closure and interior, boundary points, subspace of a metric space, equivalent metrics, Cauchy sequences, completeness, Cantor's intersection theorem, Baire's category theorem, contraction Principle

## Section - IV

Continuous functions, uniform continuity, compactness for metric spaces, sequential compactness, Bolzano-Weierstrass property, total boundedness, finite intersection property, continuity in relation with compactness, connectedness , components, continuity in relation with connectedness.

## Book s Recommended:

1. P.K. Jain and Khalil Ahmad: Metric Spaces, $2^{\text {nd }}$ Ed., Narosa, 2004
2. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
3. R.R. Goldberg : Real analysis, Oxford \& IBH publishing Co., New Delhi, 1970
4. D. Somasundaram and B. Choudhary : A First Course in Mathematical Analysis, Narosa Publishing House, New Delhi, 1997
5. Shanti Narayan : A Course of Mathematical Analysis, S. Chand \& Co., New Delhi
6. E.T. Copson, Metric Spaces, Cambridge University Press, 1968.
7. G.F. Simmons : Introduction to Topology and Modern Analysis, McGraw Hill, 1963.

## Groups and Rings

## Paper: 12BAM 352

Max. Marks:

| $4.5 \times 4=18$ |
| :--- |
| $1.5 \times 6=9$ |
| Total $=27$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Definition of a group with example and simple properties of groups, Subgroups and Subgroup criteria, Generation of groups, cyclic groups, Cosets, Left and right cosets, Index of a sub-group Coset decomposition, Largrage's theorem and its consequences, Normal subgroups, Quotient groups,

## Section - II

Homoomorphisms, isomophisms, automorphisms and inner automorphisms of a group. Automorphisms of cyclic groups, Permutations groups. Even and odd permutations. Alternating groups, Cayley's theorem, Center of a group and derived group of a group.

## Section - III

Introduction to rings, subrings, integral domains and fields, Characteristics of a ring. Ring homomorphisms, ideals (principle, prime and Maximal) and Quotient rings, Field of quotients of an integral domain.

Section - IV
Euclidean rings, Polynomial rings, Polynomials over the rational field, The Eisenstein's criterion, Polynomial rings over commutative rings, Unique factorization domain, R unique factorization domain implies so is $\mathrm{R}[\mathrm{X} 1, \mathrm{X} 2 \ldots . . \mathrm{Xn}]$

## Books Recommended:

1. I.N. Herstein : Topics in Algebra, Wiley Eastern Ltd., New Delhi, 1975
2. P.B. Bhattacharya, S.K. Jain and S.R. Nagpal : Basic Abstract Algebra (2 ${ }^{\text {nd }}$ edition).
3. Vivek Sahai and Vikas Bist : Algebra, NKarosa Publishing House.
4. I.S. Luther and I.B.S. Passi : Algebra, Vol.-II, Norsa Publishing House.
5. J.B. Gallian: Abstract Algebra, Narosa Publishing House.

## Dynamics

Paper: 12BAM 353

> | Max. Marks: |
| :--- |
| $5 \times 4=20$ |
| $1 \times 6=6$ |
| Total $=26$ |

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions (each carrying 5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Velocity and acceleration along radial, transverse, tangential and normal directions. Relative velocity and acceleration. Simple harmonic motion. Elastic strings.

## Section - II

Mass, Momentum and Force. Newton's laws of motion. Work, Power and Energy. Definitions of Conservative forces and Impulsive forces.

## Section - III

Motion on smooth and rough plane curves. Projectile motion of a particle in a plane. Vector angular velocity.

## Section - IV

General motion of a rigid body. Central Orbits, Kepler laws of motion. Motion of a particle in three dimensions. Acceleration in terms of different co-ordinate systems.

## Books Recommended:

1. S.L.Loney : An Elementary Treatise on the Dynamics of a Particle and a Rigid Bodies, Cambridge University Press, 1956
2. F. Chorlton : Dynamics, CBS Publishers, New Delhi
3. A.S. Ramsey: Dynamics Part-1\&2, CBS Publisher \& Distributors.

## NEW SCHEME

## Scheme of Examination of B.A. $6^{\text {th }}$ Semester Mathematics (w.e.f. 2014-2015)

| Paper Code | Title of the <br> Paper | Allocation <br> of Periods | Maximum Marks |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  | Theory | Internal <br> Assessment | Practical | Total |
| 12BAM 361 | Real <br> Complex <br> Analysis | 6 periods/ <br> 4 hours per <br> week | 27 | 6 | ---- |  |
| 12BAM 362 | Linear <br> Algebra | 6 periods/ <br> 4 hours per <br> week | 27 | 7 | 100 |  |
| 12BAM 363 | Numerical <br> Analysis | 6 periods/ <br> 4 hours per <br> week | 20 | --- |  |  |

Note:- The other conditions will remain the same as per relevant ordinance and rules and regulations of the University.

# Real and Complex Analysis 

Paper: 12BAM 361
Max. Marks:
$4.5 \times 4=18$
$1.5 \times 6=9$
Total $=27$
Time: 3 Hours
Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Jacobians, Beta and Gama functions, Double and Triple integrals, Dirichlets integrals, change of order of integration in double integrals.

## Section - II

Fourier's series: Fourier expansion of piecewise monotonic functions, Properties of Fourier Coefficients, Dirichlet's conditions, Parseval's identity for Fourier series, Fourier series for even and odd functions, Half range series, Change of Intervals.

Section - III
Extended Complex Plane, Stereographic projection of complex numbers, continuity and differentiability of complex functions, Analytic functions, Cauchy-Riemann equations. Harmonic functions.

## Section-IV

Mappings by elementary functions: Translation, rotation, Magnification and Inversion. Conformal Mappings, Mobius transformations. Fixed pints, Cross ratio, Inverse Points and critical mappings.

## Books Recommended:

1. T.M. Apostol: Mathematical Analysis, Narosa Publishing House, New Delhi, 1985
2. R.R. Goldberg : Real analysis, Oxford \& IBH publishing Co., New Delhi, 1970
3. D. Somasundaram and B. Choudhary : A First Course in Mathematical, Analysis, Narosa Publishing House, New Delhi, 1997
4. Shanti Narayan : A Course of Mathematical Analysis, S. Chand \& Co., New Delhi
5. R.V. Churchill \& J.W. Brown: Complex Variables and Applications, $5^{\text {th }}$ Edition, McGraw-Hill, New York, 1990
6. Shanti Narayan : Theory of Functions of a Complex Variable, S. Chand \& Co., New Delhi.

## Linear Algebra

## Paper: 12BAM 362

Max. Marks:<br>$4.5 \times 4=18$<br>$1.5 \times 6=9$<br>Total $=27$

Time: 3 Hours

Note: The question paper will consist of five sections. Each of the first four sections(I-IV) will contain two questions(each carrying 4.5 marks) and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions(each carrying 1.5 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section-I

Vector spaces, subspaces, Sum and Direct sum of subspaces, Linear span, Linearly Independent and dependent subsets of a vector space. Finitely generated vector space, Existence theorem for basis of a finitely generated vactor space, Finite dimensional vector spaces, Invariance of the number of elements of bases sets, Dimensions, Quotient space and its dimension.

## Section - II

Homomorphism and isomorphism of vector spaces, Linear transformations and linear forms on vactor spaces, Vactor space of all the linear transformations Dual Spaces, Bidual spaces, annihilator of subspaces of finite dimentional vactor spaces, Null Space, Range space of a linear transformation, Rank and Nullity Theorem,

Section - III
Algebra of Liner Transformation, Minimal Polynomial of a linear transformation, Singular and non-singular linear transformations, Matrix of a linear Transformation, Change of basis, Eigen values and Eigen vectors of linear transformations.

## Section-IV

Inner product spaces, Cauchy-Schwarz inequality, Orthogonal vectors, Orthogonal complements, Orthogonal sets and Basis, Bessel's inequality for finite dimensional vector spaces, GramSchmidt, Orthogonalization process, Adjoint of a linear transformation and its properties, Unitary linear transformations.

## Books Recommended:

1. I.N. Herstein : Topics in Algebra, Wiley Eastern Ltd., New Delhi, 1975
2. P.B. Bhattacharya, S.K. Jain and S.R. Nagpal : Basic Abstract Algebra (2 ${ }^{\text {nd }}$ edition).
3. Vivek Sahai and Vikas Bist : Algebra, Narosa Publishing House.
4. I.S. Luther and I.B.S. Passi : Algebra, Vol.-II, Narosa Publishing House.

## Numerical Analysis

## Part-A (Theory)

Paper: 12BAM 363

Max. Marks:

| $3.5 \times 4=14$ |
| :---: |
| $1 \times 6=6$ |
| Total $=20$ |
| Time: 3 Hours |

Time: 3 Hours

Note:- The question paper will consist of five sections. Each of the first four sections (I-IV) will contain two questions (each carrying 3.5 marks), and the students shall be asked to attempt one question from each section. Section-V will contain six short answer type questions (each carrying 1 marks) without any internal choice covering the entire syllabus and shall be compulsory.

## Section - I

Finite Differences operators and their relations. Finding the missing terms and effect of error in a difference tabular values, Interpolation with equal intervals: Newton's forward and Newton's backward interpolation formulae. Interpolation with unequal intervals: Newton's divided difference, Lagrange's Interpolation formulae, Hermite Formula.

## Section - II

Central Differences: Gauss forward and Gauss's backward interpolation formulae, Sterling, Bessel Formula.
Probability distribution of random variables, Binomial distribution, Poisson's distribution, Normal distribution: Mean, Variance and Fitting.

## Section - III

Numerical Differentiation: Derivative of a function using interpolation formulae as studied in Sections -I \& II.
Eigen Value Problems: Power method, Jacobi's method, Given's method, House-Holder's method, QR method, Lanczos method.
Section - IV

Numerical Integration: Newton-Cote's Quadrature formula, Trapezoidal rule, Simpson's onethird and three-eighth rule, Chebychev formula, Gauss Quadrature formula.
Numerical solution of ordinary differential equations: Single step methods-Picard's method. Taylor's series method, Euler's method, Runge-Kutta Methods. Multiple step methods; Predictor-corrector method, Modified Euler's method, Milne-Simpson's method.

## Books Recommended:

1. Babu Ram: Numerical Methods, Pearson Publication.
2. R.S. Gupta, Elements of Numerical Analysis, Macmillan's India 2010.
3. M.K. Jain, S.R.K.Iyengar, R.K. Jain : Numerical Method, Problems and Solutions, New Age International (P) Ltd., 1996
4. M.K. Jain, S.R.K. Iyengar, R.K. Jain : Numerical Method for Scientific and Engineering Computation, New Age International (P) Ltd., 1999
5. C.E. Froberg : Introduction to Numerical Analysis (2 ${ }^{\text {nd }}$ Edition).
6. Melvin J. Maaron : Numerical Analysis-A Practical Approach, Macmillan Publishing Co., Inc., New York
7. R.Y. Rubnistein : Simulation and the Monte Carlo Methods, John Wiley, 1981
8. Radhey S. Gupta: Elements of Numerical Analysis, Macmillan Publishing Co.

## Part-B (Practical)

Max. Marks: 13
Time: 3 Hours
There will be a separate practical paper which will consist simple programs in C and the implementation of Numerical Methods, studied in the paper 12BAM 363 (Part-A).

## SCHEME OF B.A. (PASS COURSE) SEMESTER SYSTEM (PSYCHOLOGY) 2014-17

| Class | Nomenclature of paper | Internal Assess. | Theory | Time |
| :---: | :---: | :---: | :---: | :---: |
| B.A.(Sem.-I) | Introduction to Psychology | 15 | 60 | 3 Hours |
| -do- | Practical |  | 25 | 3 Hours |
| B.A.(Sem.-II) | Experimental Psychology | 15 | 60 | 3 Hours |
| - do- | Practical |  | 25 | 3 Hours |
| B.A.(Sem.-III) | Social Psychology | 15 | 60 | 3 Hours |
| -do- | Practical |  | 25 | 3 Hours |
| B.A. (Sem.-IV) | Developmental Psychology | 15 | 60 | 3 Hours |
| -do- | Practical |  | 25 | 3 Hours |
| B.A.(Sem.-V) | Psychopathology | 15 | 60 | 3 Hours |
| -do- | Practical |  | 25 | 3 Hours |
| B.A. (Sem.-VI) | Applied Psychology | 15 | 60 | 3 Hours |
| -do- | Practical |  | 25 | 3 Hours |

## B.A. (PASS COURSE) PSYCHOLOGY SYLLABUS (2014-17)

## B.A. (Semester-I) <br> INTRODUCTION TO PSYCHOLOGY <br> (2014-15)

Theory: 60
Internal Assessment: 15
Time: 3 hours
Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

## UNIT-I

Psychology: History, Emergence as Science, Subject matter.
Methods of Psychology: Experimental, Observation, Survey.

## UNIT-II

Sensory Processes: Visual, Auditory - Structure and Functions of Eye and Ear.
Perception: Nature, Perception of form - Figure and ground, Perceptual Organization, Depth Perception-cues.

## UNIT-III

Emotion: Nature, Bodily changes. Theories of Emotion: James-Lange, Cannon-Bard and Schachter-Singer.

Motivation: Nature, Biological and Psychological Motives.

## UNIT-IV

Personality: Nature, Determinants of personality, Type and Trait approach.
Intelligence: Nature, Theories: Spearman, Thurstone, and Cattell.

## References:

Atkinson, R.L., Atkinson, R.L, et al. (1985) Introduction to Psychology. N. Y.: HBJ Publishers.
Singh, A.K. (2009) Uchattar Samanaya Manovigyan. Delhi: Moti Lal Banarsidas.
Singh, A. \& Singh, U. (1984). Prayogatamak Manovigyan. Bhiwani: Vedic Prakashan.
Singh, R. \& Shyam, R. (2008) Adhunik Sangyanatmak Manovigyan. Panchkula: Haryana Sahitya Akadami.

## B. A. (Semester-I) PRACTICAL

M.Marks : 25

Time : $\mathbf{3} \mathbf{h r s}$.

1. $\mathrm{EPQ} / \mathrm{EPI}$
2. Retinal color zones/Color Blindness
3. Sound Localization
4. Study of emotions.
5. Simple reaction time
6. Verbal Test of Intelligence.
7. Performance Test of Intelligence/RPM.
8. Observation (Speed \& accuracy)
9. Experiment on form perception/Depth Perception
10. Test of Motivation.

Note: Students are to conduct and report at least 6(six) practicals.
The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

## UNIT-I

Attention: Nature, Characteristics, and types.
Psychophysics: Problems of Psychophysics and Methods (Classical).

## UNIT-II

Learning: Definition, Factors affecting, Trial and error learning, Insight learning, Classical and Operant conditioning.

## UNIT-III

Memory: Definition, Stages, STM and LTM - Methods to Study Memory.
Forgetting: Factors leading to forgetting, Pneomonics.
UNIT-IV
Problem solving: Stages of problem solving, Convergent and Divergent thinking.
Statistics: Frequency Distribution, Graphical presentation of data, Measures of central tendencies.

## References:

Atkinson, R.L., Atkinson, R.L, et al. (1985) Introduction to Psychology. N. Y.: HBJ Publishers.
D' Amato, M.R. (2001) Experimental Psychology: Methodology, Psychophysics and Learning. New Delhi: McGraw Hill.

Singh, A.K. (2009) Uchattar Samanaya Manovigyan. Delhi: Moti Lal Banarsidas.
Singh, A. \& Singh, U. (1984). Prayogatamak Manovigyan. Bhiwani: Vedic Prakashan.
Singh, R. \& Shyam, R. (2008) Adhunik Sangyanatmak Manovigyan. Panchkula: Haryana Sahitya Akadami.

## B.A. (Semester-II)

PRACTICAL
M.Marks : 25

Time : $\mathbf{3} \mathbf{h r s}$.

1. Serial Position Effect.
2. Experiment on STM
3. Experiment on LTM
4. Retroactive Inhibition
5. AL by method of contstant stimuli
6. DL by method of limits.
7. Muller-Lyre Illusion
8. Problem Solving
9. Bilateral Transfer of Training/ Maze Learning
10. Span of Attention.

Note: Students are to conduct and report at least 6 (six) practicals. The examiner will allot one practical at the time of examination.

Theory: 60
Internal Assessment: 15
Time: 3 hours
Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

## UNIT-I

Introduction: Nature, subject matter, Sociometric method.
Socialization: Nature, Process and Agents of Socialization.

## UNIT-II

Group: Types and functions; Social Norms: Meaning, Characteristics and formation.
Leadership: Types, Function, Theories- Trait, Situational, and Interactional.

## UNIT-III

Attitudes: Characteristics, Development and Attitude change.
Prejudice: Nature, Development and Stereotypes.

## UNIT-IV

Prosocial Behaviour: Nature, Determinants ,Cognitive Model.
Aggression: Nature, determinants and prevention.

## References:

Baron, R.A. and Byrne, D. (2008) Samajik Manovigyan (Hindi Sanskaran). Delhi: Pearson.
Chaube S.P. (1985) Social Psychology. Agra: Educational Publishers.
Perlman, D. and Cozbty, P.C. (1983). Social Psychology. New York: CBS College Publishing.
Rai, B.C. (1989) Social Psychology. Delhi: Sultan Pub.
Singh, A.K. (2009). Samaj Manovigyan ki Rooprekha . Delhi: Moti Lal Banarsidas.

1. Sociometry
2. Measurement of Attitude
3. Altruism Scale
4. Stereotypes
5. Anger Expression/Aggression Scale
6. Prejudice Scale
7. Leadership Styles
8. Social Facilitation
9. Rosenwig's P.F. Test/Norm formation
10. Social Conformity

Note: Students are to conduct and report at least 6(six) practicals.
The examiner will allot one practical at the time of examination.

## B.A. (Semester-IV)

DEVELOPMENTAL PSYCHOLOGY
(2015-16)
Theory: 60
Internal Assessment: 15
Time: 3 hours
Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

UNIT-I

Human Development; Concept and principles
Factors in human development; Biological, Social and Cultural

## UNIT-II

Prenatal development, determinants and stages.
Infancy: Characteristics, Hazards and adjustment.

## UNIT-III

Childhood: Characteristics, Perceptual, Motor, Emotional, Cognitive Development.
Adoloscents: Characteristics and problems of adoloscents and adjustment.
UNIT-IV
Adulthood: Early adulthood, late adulthood and aging-Changing patterns and problems.
Measures of variability: Quartile deviation, Standard deviation.

## References:

Berk, L.E. (2004). Development Through the Life Span. Delhi: Pearson Education.
Hurlock, E.B. (2001) Developmental Psychology: A life-span approach. New Delhi: Tata McGraw Hill.

Lal, J.N., \& Srivasstava, A. (2001) Modern Developmental Psychology. Agra: Vinod Pustak Bhandar.
Sheffer, D.R. \& Katherine, K. (2007). Developmental Psychology: Childhood And Adolescence NewYork: Thomson Wadsworth.

Santrock, J.W. (1997). Life Span Development. Dubuque: Brown and Benchmark.
Singh, R. \& Shyam, R. (2008) Comprehensive Statistics for Behavioural Sciences (in Hindi). Sanjay Prakashan, Delhi.
M.Marks : 25

Time : 3 hrs.

1. Cognitive Development
2. Emotional Maturity Scale
3. Parent-Child Relationship
4. Self Concept
5. Youth Problem Inventory
6. Self Esteem Inventory
7. Study of values
8. Family Environment Inventory
9. Impulsiveness Scale
10. Case Study

Note: Students are to conduct and report at least 6(six) practicals. The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

## UNIT-I

Concept of normality and abnormality.
Models of Psychopathology: Biological, Psychodynamic, Behavioural, and Cognitive.

## UNIT-II

Classification of Psychopathology: Need for classification, DSM system.
Diagnostic Assessment: Case history, Interview, Projective techniques.

## UNIT-III

Anxiety Based Disorders: GAD, OCD, and Phobic disorders-Symptom and Causes.
Substance/drug abuse - Causes, Consequences and Rehabilitation.

## UNIT-IV

Mood disorders: Unipolar and bipolar-Symptoms and causes.
Schizophrenia: Nature, types, and causes.

## References:

Anand, V. and Srivastva, R. (2003). Manovikriti Vigyan, Delhi: Moti Lal Banarsi Das.
Carson, R.C.; Butcher, J.N., et al. (2007). Abnormal Psychology. (13 ${ }^{\text {th }}$ Ed.) New Delhi: Pearson Education.

Davison, G.C. \& Neale, J.M. (1998). Abnormal Psychology (7 ${ }^{\text {th }}$ Ed.) New York: Willy.
Sarason, I.G. and Sarason, B.R. (2005). Abnormal Psychology: The Problem of Maladaptive Behaviour ( $10^{\text {th }}$ Ed.) New Delhi: Pearson Education Inc.
Singh, A.K. (2006). Adhunik Asamanya Manovigyan, Delhi: Moti Lal Banarasi Das.
Srivastava, D.N. (1991) Adhunik Asamnya Manovigyan (6 ${ }^{\text {th }}$ Ed.) Agra: Sahitya.
M.Marks : 25

Time : 3 hrs.

1. Clinical Interview
2. CAQ
3. TAT
4. WAT
5. Depression Inventory
6. Anxiety Scale
7. WAIS
8. Emotional Intelligence
9. PGI Memory Scale
10. DMI

Note: Students are to conduct and report at least 6 (six) practicals.
The examiner will allot one practical at the time of examination.

Note: - (i) The question paper will comprise of nine questions, each carrying 12 marks.
(ii) Question No. one will be compulsory comprising of 06 short answer questions each carrying 02 marks (each to be answered in 30 words)
(iii) Remaining eight questions (essay type) would be set unit-wise (two questions per unit) and the candidate would attempt atleast one question from each unit.

## UNIT-I

Applied Psychology: Meaning, History, fields, and careers in psychology.
Organizational Psychology: Nature, Scope, objectives, and development.

## UNIT-II

Guidance: Objectives, Principles, types of guidance, Organization of guidance programme.
Counselling: Need, Principles, Special areas, and Types of Counselling.

## UNIT-III

Health Psychology: Meaning, Scope and Objectives; Concept of health and illness.
Psychological factors in physical illness, Life style and health, Stress and coping.

## UNIT-IV

Forensic psychology: Psychology and Law, Eyewitness Memory; Accuracy and improvement.
Statistics: Correlation- Meaning, Rank difference, and Product moment method.

## References: -

Annastasi, A (1979) Fields of Applied Psychology (2 $2^{\text {nd }}$ ed.) U.S.A.: McGraw. Hill. Garrett, H.E. (2005) Statistics in Psychology and Education. Delhi: Paragon Ind. Pub. Goldstem, A.P.;

Krasner, L. (1989) Modern Applied Psychology. New York: Pergamon Press. Rao, S.N.
(2004). Guidance and Counselling. New Delhi: Discovery Publishing House. Taylor, S.E.
(2006) Health Psychology ( $6^{\text {th }}$ ed.) Delhi: Tata McGraw Hill.

Verma, R.S., Singh, S., \& Sharma, D. (1982). Vayavaharik Manovigyan. Agra: Vinod Pustak Mandir.
M.Marks: 25

Time: 3 hrs.

1. Stress Scale
2. Coping Styles/Wellbeing Scale
3. General Health Questionnaire
4. Life Style Schedule
5. Aptitude Scale
6. Interest Inventory
7. Job Satisfaction
8. Counselling Need Inventory
9. Job Stress Scale
10. Healthiness Scale/Adjustment Inventory

Note: Students are to conduct and report at least 6(six) practicals. The examiner will allot one practical at the time of examination.

## B.A. I Sem

| Paper No. | Name of Paper | Max. Marks | Written | Internal |
| :--- | :--- | :---: | :--- | :---: |
| Paper I | हिंदी अनिवार्य | 100 | 80 | 20 |

## B.A. II Sem

| Paper No. | Name of Paper | Max. Marks | Written | Internal |
| :--- | :--- | :---: | :---: | :---: |
| Paper II | हिंदी अनिवार्य | 100 | 80 | 20 |

## B.A. III Sem

| Paper No. | Name of Paper | Max. Marks | Written | Internal |
| :--- | :--- | :---: | :---: | :---: |
| Paper III | हिंदी अनिवार्य | 100 | 80 | 20 |

## B.A. IV Sem

| Paper No. | Name of Paper | Max. Marks | Written | Internal |
| :--- | :--- | :---: | :---: | :---: |
| Paper IV | हिंदी अनिवार्य | 100 | 80 | 20 |
| B.A. V Sem |  |  |  |  |
| Paper No. | Name of Paper | Max. Marks | Written | Internal |
| Paper V | हिंदी अनिवार्य | 100 | 80 | 20 |
| B.A. VI Sem |  |  |  |  |
| Paper No. | Name of Paper | 100 | 80 | 20 |
| Paper VI | हिंदी अनिवार्य |  | Written | Internal |

# संयुक्त पाठ्यक्रम <br> (महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए) <br> जुलाई २०१३ <br> बी०ए० : प्रथम सेमेस्टर <br> हिन्दी (अनिवार्य) 

समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा : | 〒० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम

- निर्धारित पाठ्यपुस्तक मध्यकालीन काव्य-कुंज : सं० डॉ० रामसजन पाण्डेय प्रकाशक : खाटू श्याम प्रकाशन, १२७६/ $\varphi$, पीर जी मोहल्ला, प्रताप टाकीज़, रोहतक। मोबाइल न० 09991708080
- हिंदी साहित्य का आदिकाल
- काव्यशास्त्र
- वस्तुनिष्ठ प्रश्न

खण्ड--क : मध्यकालीन काव्य-कुंज

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों पर उनके साहित्यिक परिचय, अनुभूतिगत वैशिष्ट्य तथा अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जायेंगे । कवियों की विशिष्ट रचनात्मक प्रवत्ति पर प्रश्न नहीं पूछे जायेंगे ।

खण्ड--ख : हिन्दी साहित्य का आदिकाल
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 हिन्दी साहित्येतिहास लेखन की परम्परा
2 आदिकाल का नामकरण
३ आदिकाल की परिस्थितियॉ
४ आदिकालीन साहित्य की सामान्य प्रवत्तियाँ
ч रासोकाव्य परम्परा : संक्षिप्त परिचय

खण्ड--ग : काव्यशासत्र पर आधारित विषय
१ काव्य के तत्व
२ रस : स्वरूप और अंग
३ रस के भेद
$४$ अलंकार-अनुप्रास, श्लेष, यमक, उपमा, रूपक, उत्प्रेक्षा, अतिशयोक्ति, मानवीकरण, अन्योक्ति, समासोक्ति
छंद-दोहा, चौपाई, सोरठा, बरवै, कुण्डलियाँ, छप्पय, कवित्त, घनाक्षरी शब्दशक्तियाँ : अभिधा, लक्षणा, व्यंजना काव्य-गुण : प्रसाद, माधुर्य और ओज

## खण्ड--घ : वस्तुनिष्ठ प्रश्न

## निर्देश--

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या \& अंक की होगी। पूरा प्रश्न १२ अंक का होगा ।
2

खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\curvearrowleft$ अंक का होगा ।

खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा। प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8
खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न $\_$־乞 अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

4 खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न $\mathcal{y}$ अंक का तथा पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से ఒ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न ᄃ. अंक का होगा ।

संयुक्त पाठ्यक्रम
(महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए)
जनवरी २०१४
बी०ए० : द्वितीय सेमेस्टर
हिन्दी (अनिवार्य)

समय : ३ घण्टे

$$
\begin{array}{ll}
\text { कुल अंक : } & \text { १०० } \\
\text { लिखित परीक्षा : } & \text { ५० अंक } \\
\text { आंतरिक मूल्यांकन : २० अंक }
\end{array}
$$

## निर्धारित पाठ्यक्रम

- ध्रुवस्वामिनी (नाटक) : जयशंकर प्रसाद
- हिन्दी साहित्य का भक्तिकाल
- व्यावहारिक हिन्दी
- वस्तुनिष्ठ प्रश्न


## खण्ड--क : ध्रुवस्वामिनी

पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 'ध्रुवस्वामिनी' नाटक का प्रतिपाद्य
2 'ध्रुवस्वामिनी' नाटक की पात्र-योजना
३ 'ध्रुवस्वामिनी' नाटक की अभिनेयता
8 प्रसाद की नाट्यकला
खण्ड-ख : हिन्दी साहित्य का भक्तिकाल
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 भक्तिकाल की परिस्थितियाँ
२ संत काव्य की प्रवत्तियाँ
३ सूफी काव्य की प्रवत्तियाँ
४ राम काव्य की प्रवत्तियाँ
१. कष्ण काव्य की प्रवत्तियाँ

६ भक्तिकाल : स्वर्णयुग

खण्ड-ग : व्यावहारिक हिंदी

## पाठ्यक्रम में निर्धारित विषय

9 भाषा की परिभाषा
२ भाषा के विविध रूप : बोली, मानक भाषा, राजभाषा, राष्ट्रभाषा, माध्यमभाषा, मातभाषा
३ मानक-भाषा की प्रमुख प्रवत्तियाँ
8 हिन्दी वर्णमाला : स्वर एवं व्यंजन
4 हिन्दी वर्तनी : समस्या और समाधान
६ मुहावरे एवं लोकोक्तियाँ

## खण्ड--घ : वस्तुनिष्ठ प्रश्न

## निर्देश-

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\varsigma$ अंक का होगा ।

खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा। प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8
खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न 乞-乞 अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

4 खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघुत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\psi$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।
$\vartheta$
खण्ड (घ) में पूरे पाठ्यक्रम में से $\varsigma$ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न $\curvearrowleft$ अंक का होगा।
(महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए)
जुलाई २०१३
बी०ए० : ततीय सेमेस्टर
हिन्दी (अनिवार्य)
समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा : | ६० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम

- आधुनिक हिंदी कविता,

प्रधान सं० डॉ० सरिता वशिष्ठ, कुरुक्षेत्रविश्वविद्यालय प्रकाशन, कुरूक्षेत्र

- हिंदी साहित्य का रीतिकाल
- प्रयोजनमूलक हिंदी : हिंदी कंप्यूटिंग और अनुवाद
- वस्तुनिष्ठ प्रश्न

खण्ड--क :. आधुनिक हिंदी कविता

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों के साहित्यिक परिचय, अनुभूतिगत वैशिष्ट्य तथा
अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जाएंगे । कवियों की विशिष्ट रचनात्मक प्रवत्ति पर प्रश्न नहीं पूछे जाएंगे ।

## खण्ड--ख : हिंदी साहित्य का रीतिकाल

पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 रीतिकालीन हिंदी कविता की पष्ठभूमि
२ रीतिकाल का नामकरण
३ रीतिबद्ध काव्य की विशेषताएँ
$४$ रीतिमुक्त काव्य की विशेषताएँ
4 रीतिकालीन काव्य की उपलब्धियाँ
खण्ड--ग : प्रयोजनमूलक हिंदी : हिंदी कंप्यूटिंग और अनुवाद
पाठ्यक्रम में निर्धारित विषय
9 कंप्यूटर : स्वरूप और महत्व
२ ई-मेल : प्रेषण-ग्रहण
३ इंटरनेट : स्वरूप और उपयोगिता
४ मशीनी अनुवाद
4 अनुवाद : परिभाषा और स्वरूप

## खण्ड--घ : वस्तुनिष्ठ प्रश्न

## निर्देश-

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\varsigma$ अंक का होगा ।

३ खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छः लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।
$४$ खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न $\varsigma-\varsigma$ अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।
y खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघुत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\varphi$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।
$७$ खण्ड (घ) में पूरे पाठ्यक्रम में से $\varsigma$ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न 9 अंक का तथा पूरा प्रश्न $\varsigma$ अंक का होगा।
(महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए)
बी०ए० : चतुर्थ सेमेस्टर
जनवरी २०१४
हिन्दी (अनिवार्य)
समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा : | 〒० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम

- कथा क्रम सं० डॉ० रोहिणी अग्रवाल,

प्रकाशक : खाटू श्याम प्रकाशन, १२७६/ $\mathcal{L}$, पीर जी मोहल्ला, प्रताप टाकीज़, रोहतक।
मोबाइल न० 09991708080

- हिंदी साहित्य का आधुनिक काल : गद्य
- पारिभाषिक शब्दावली
- वस्तुनिष्ठ प्रश्न

खण्ड--क : कथाकम

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कहानीकारों के साहित्यिक परिचय, निर्धारित कहानियों के वस्तु पक्ष तथा कला पक्ष पर ही प्रश्न पूछे जाएंगे ।

खण्ड--ख : हिंदी साहित्य का आधुनिक काल : गद्य
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
9 आधुनिक काल की परिर्थितियाँ
२ हिंदी उपन्यास : उद्भव और विकास
3 हिंदी कहानी : उद्भव और विकास
४ हिंदी नाटक : उद्भव और विकास
y हिंदी निबन्ध : उद्भव और विकास

खण्ड--ग : पारिभाषिक शब्दावली
निर्धारित विषय
9 पारिभाषिक शब्दावली : स्वरूप और महत्व
२ पारिभाषिक शब्दावली के गुण
3 पारिभाषिक शब्दावली के निर्माण में सक्रिय विविध सम्प्रदाय : राष्ट्रीयतावादी, अन्तरराष्ट्रीयतावादी, समन्वयवादी ।

## खण्ड-- घ : वस्तुनिष्ठ प्रश्न

## निर्देश

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\varsigma$ अंक का होगा ।

३ खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छ: लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।
$४$ खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न $\varsigma-乞$ अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

ч खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\varphi$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।
$७$ खण्ड (घ) में पूरे पाठ्यक्रम में से $\varsigma$ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न $\varsigma$ अंक का होगा।

## संयुक्त पाठ्यक्रम

(महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए)
बी०ए० : पाँचवाँ सेमेस्टर
ज़ुलाई २०१३
हिन्दी (अनिवार्य)

समय : ३ घण्टे

| कुल अंक : | १०० |
| :--- | :--- |
| लिखित परीक्षा : | 〒० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम

- समकालीन हिंदी कविता, (कुरुक्षेत्रविश्वविद्यालय, कुरुक्षेत्रसम्पादित)
- हिंदी साहित्य का आधुनिक काल : कविता
- प्रयोजनमूलक हिंदी : पत्र लेखन, संक्षेपण तथा पल्लवन
- वस्तुनिष्ठ प्रश्न

खण्ड--क : प्रस्तावित निर्धारित पाठ्यपुस्तक
पंचम सेमेस्टर हिंदी (अनिवार्य) की समकालीन हिंदी कविता पर आधारित पाठ्यपुस्तक (जिसका नामकरण पुस्तक-निर्माण के साथ किया जाएगा) कुरुक्षेत्रविश्वविद्यालय, कुरुक्षेत्रका हिंदीविभाग तैयार करेगा। कुरुक्षेत्रविश्वविद्यालय के हिंदी-विभाग का दायित्व होगा कि पाठ्यक्रम प्रभावी होने से पहले वह पाठ्यपुस्तक विद्यार्थियों को उपलब्ध कराए ।

प्रस्तुत प्रस्तावित पाठ्य पुस्तक में निम्नलिखित रचनाकारों की रचनाओं को शामिल किया जाएगा-
$१$ स० ही० वात्स्यायन अज्ञेय
2 धर्मवीर भारती
३ श्रीनरेश मेहता
$४$ नागार्जुन
ч रघुवीर सहाय
६ कुँवर नारायण
$७$ लीलाधर जगूड़ी

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित कवियों के साहित्यिक परिचय, अनुभूतिगत वैशिष्ट्य तथा अभिव्यक्तिगत सौष्ठव पर ही प्रश्न पूछे जायेंगे । कवियों की विशिष्ट रचनात्मक प्रवत्ति पर प्रश्न नहीं पूछे जायेंगे ।

खण्ड--ख : हिंदी साहित्य का आधुनिक काल : कविता
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न

१ भारतेन्दुयुगीन हिंदी कविता की प्रवत्तियाँ
2 द्विवेदीयुगीन हिंदी कविता की प्रवत्तियाँ
3 छायावाद
$४$ प्रगतिवाद

५ प्रयोगवाद
६ नयी कविता
$७$ समकालीन कविता

## खण्ड--ग : प्रयोजनमूलक हिंदी : पत्रलेखन, संक्षेपण तथा पल्लवन

9 पत्रलेखन : स्वरूप और उसके विविध भेद
२ संक्षेपण
३ पल्लवन

## खण्ड--घ : वस्तुनिष्ठ प्रश्न

निर्देश
9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।
$२$ खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\varsigma$ अंक का होगा ।

3 खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छः लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न 乞-乞 अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

צ खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $y$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से ఒ वस्तुनिष्ठ प्रश्न पूछे जाएंगे । प्रत्येक प्रश्न १ अंक का तथा पूरा प्रश्न $\varsigma$ अंक का होगा।

# संयुक्त पाठ्यक्रम <br> (महर्षि दयानन्द विश्वविद्यालय और कुरुक्षेत्रविश्वविद्यालय के लिए) बी०ए० षष्ठ सेमेस्टर <br> जनवरी २०१४ <br> हिन्दी (अनिवार्य) 

समय : ३ घण्टे

| कुल अंक: | १०० |
| :--- | :--- |
| लिखित परीक्षा: | 〒० अंक |
| आंतरिक मूल्यांकन : २० अंक |  |

## निर्धारित पाठ्यक्रम

- नव्यतर विधाओं पर आधारित पाठ्यपुस्तक, (कुरुक्षेत्र विश्वविद्यालय, कुरुक्षेत्र सम्पादित)
- हरियाणवी लोक साहित्य का इतिहास
- हिंदी पत्रकारिता
- वस्तुनिष्ठ प्रश्न

खण्ड क : प्रस्तावित निर्धारित पाठ्यपुस्तक
षष्ठ सेमेस्टर हिंदी (अनिवार्य) की नव्यतर गद्य विधाओं पर आधारित पाठ्यपुस्तक (जिसका नामकरण पुस्तक-निर्माण के साथ किया जाएगा) कुरुक्षेत्रविश्वविद्यालय, कुरुक्षेत्रका हिंदी-विभाग तैयार करेगा। कुरुक्षेत्रविश्वविद्यालय, कुरुक्षेत्रके हिंदी-विभाग का दायित्व होगा कि पाठ्यक्रम प्रभावी होने से पहले वह पाठ्यपुस्तक विद्यार्थियों को उपलब्ध कराए ।

प्रस्तुत प्रस्तावित पाठ्य पुस्तक में निम्नलिखित लेखकों की रचनाओं को शामिल किया जाएगा-

| $१$ | (निबन्ध) | : बालमुकुन्द गुप्त |
| :--- | :--- | :--- |
| $२$ | (निबन्ध) | : आचार्य रामचन्द्र शुक्ल |
| 3 | (संर्मरण) | : महादेवी वर्मा |
| $४$ | (ललित निबन्ध) | : आचार्य हजारीप्रसाद द्विवेदी |
| $५$ | (ललित निबन्ध) | : विद्यानिवास मिश्र |
| ६ | (व्यंग्य) | : हरिशंकर परसाई |
| $७$ | (यात्रावत्तान्त) | : राहुल सांकत्यायनश्श्श्श्श |

## निर्धारित आलोचनात्मक प्रश्न

पाठ्यक्रम में निर्धारित लेखकों के साहित्यिक परिचय, निबन्धों के वस्तु पक्ष तथा कला पक्ष पर ही प्रश्न पूछे
जाएंगे । श्श्श्श्श्श्श्श्श्श्श्श्श्श
खण्ड--ख : हरियाणवी भाषा और साहित्य का इतिहास
पाठ्यक्रम में निर्धारित आलोचनात्मक प्रश्न
$१$ हरियाणवी भाषा का उद्भव और विकास
२ हरियाणवी भाषा की प्रमुख बोलियाँ
३ हरियाणा की सांग परम्परा : उद्भव और विकास
$\gamma$ हरियाणवी भाषा का आधुनिक साहित्य
(क) हरियाणवी कविता : परिचय और प्रवत्तियाँ
(ख) हरियाणवी का गद्य साहित्य
9 उपन्यास साहित्य
2 कहानी साहित्य

३ नाट्य साहित्य

## खण्ड--ग : प्रयोजनमूलक हिंदी : पत्रकारिता

१ पत्रकारिता : स्वरूप एवं प्रकार
२ शीर्षक की संरचना
3 सम्पादक के गुण और दायित्व
8 फीचर लेखन
ч स्वतंत्र प्रेस की अवधारणा
खण्ड-घ वस्तुनिष्ठ प्रश्न

## निर्देश

9 खण्ड (क) में निर्धारित पाठ्य-पुस्तक में से व्याख्या के लिए चार अवतरण पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो की सप्रसंग व्याख्या करनी होगी । प्रत्येक व्याख्या ६ अंक की होगी । पूरा प्रश्न १२ अंक का होगा ।

2 खण्ड (क) में निर्धारित आलोचनात्मक प्रश्नों में से दो प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को एक प्रश्न का उत्तर देना होगा । यह प्रश्न $\sim$ अंक का होगा ।

3 खण्ड (क) में निर्धारित पाठ्य पुस्तक एवं आलोचनात्मक प्रश्नों में से छः लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५०० शब्दों में किन्हीं चार प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए चार अंक निर्धारित हैं । पूरा प्रश्न १६ अंक का होगा ।

8 खण्ड (ख) में निर्धारित आलोचनात्मक प्रश्नों में से चार प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न $\varsigma-\varsigma$ अंक का होगा । इस प्रकार यह प्रश्न १६ अंक का होगा ।

५ खण्ड (ख) में निर्धारित प्रश्नों में से चार लघूत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को लगभग १५० शब्दों में किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक प्रश्न के लिए पाँच अंक निर्धारित हैं । पूरा प्रश्न १० अंक का होगा ।

६ खण्ड (ग) में निर्धारित पाठ्यक्रम में से चार लघुत्तरी प्रश्न पूछे जाएंगे जिनमें से परीक्षार्थियों को किन्हीं दो प्रश्नों का उत्तर देना होगा । प्रत्येक उप प्रश्न के लिए $\mathcal{y}$ अंक निर्धारित हैं। पूरा प्रश्न १० अंक का होगा ।

७ खण्ड (घ) में पूरे पाठ्यक्रम में से $\varsigma ~ व स ् त ु न ि ष ् ठ ~ प ् र श ् न ~ प ू छ े ~ ज ा ए ं ग े ~ । ~ प ् र त ् य े क ~ प ् र श ् न ~ १ ~ अ ं क ~ क ा ~ त थ ा ~$ पूरा प्रश्न $\varsigma$ अंक का होगा।

