B. Ed. प्रथम वर्ष

2018-20

Course of Study
for
B. Ed 1st year

प्रथम वर्ष

T.U. Archive

२०६८-७० साल

प्रथम वर्ष

CONTENTS

Subjects	Full Marks	Page
Foundation of Education and Curriculum Development	100	1
Educational Psychology	100	6
Specialization		
Introduction to Linguistics	100	15
Reading and Writing	100	21
Health and Physical Education I	100	25
Health and Physical Education II	100	30
Introduction to Modern Mathematics and Statistics	100	36
Algebra and Geometry	100	42
Biology	100	49
Chemistry	100	59
Bhasha Bigyan Ra Nepali Bhasha	100	66
Economic Theory	100	72
Economics of Development and Planning	100	76
Regional Geography	100	79
Systematic Geography	100	84
Modern Nepal	100	89
India Under British Regime	100	95
Political Theory	100	99
International Relations	100	103
Nepali Gaddhya Ra Natak	100	106

FOUNDATION OF EDUCATION & CURRICULUM DEVELOPMENT



Full Marks : 100
Theory

This course is designed to give the student teachers necessary background in the sociological and philosophical foundations of education, and curriculum development. History of Nepalese education and recent trends in the thinking on education are also introduced.

Objectives.

After the completion of this course, the prospective teachers will be able to :

a. explain the principal tenets of the four schools of educational philosophy (naturalism, idealism, realism, and pragmatism) with special reference to their respective positions on the objectives of education, educative process, concept about the roles of the students and teachers, and major orientation of the curriculum and its practice;
b. describe the relation between society and education, the modes of socialization, the social process;
c. discuss the sources and principles of curriculum development;
d. explain the importance of some of the current alternative thinking on education;
e. describe briefly the Nepalese system of education from ancient to modern days with special reference to the orientation of curriculum and its practice;

Contents

Part I: Foundations of Education

UNIT I. Sociological Foundation

1. Sociology of Education
   - Definition of Society
   - Definition of Educational sociology
   - Scope of educational sociology
   - Scope of education
   - Relationship between education and society
   - Relationship between school and community
   - Functions of education in society (conservative, neutral, progressive, revolutionary)

2. Socialization
   - Meaning and importance of socialization
   - Modes of Socialization (repressive and permissive)
   - Directedness in socialization (tradition-directedness, inner-directedness, other -directedness)

3. Social Interaction
   - Meaning and importance of social interaction
   - Elements of social interaction
   - Patterns of social interaction (cooperation, conflict, accomodation, assimilation, exchange)
   - Classification of social interactions (by number of persons, by degree of intimacy, by social process)

4. Agencies of socialization
   - Home
   - School

- Community
- Peer group
- Association

UNIT II. Philosophical Foundation

1. Meaning of philosophy
2. Relation between education and philosophy
3. Study of naturalism, idealism, realism, and pragmatism with special reference to
   a) Objectives of education
   b) educative process
   c) roles of students and teachers
   d) curriculum orientation and practice.

Part II

UNIT III. Modern Thinking on Education

Study of some modern thinking and forces that generated alternative approaches to education

1. Education and social policy
   - The social factors in selection
   - Equality of educational opportunity
2. Education as Investment for Development
3. Lifelong education, nonformal education, and other approaches to education (correspondence courses, distance learning, media based education such as radio education)

UNIR IV. Curriculum Development

1. Meaning of curriculum
2. Sources of influences on curriculum (contemporary society, learners, learning process, disciplines)

3. Principles for curriculum development (objectives learning experiences, organization of experiences, evaluation of experiences)

4. Curriculum development in Nepal.

Recommended Books

Aryal, Krishna R. Education for the Development of Nepal. Kathmandu.

Bhatia, B.D. Theory and Principles of Education. Delhi: Baba, House Book- Sellers and publishers, 1972.

Brown, F.J. Educational Sociology. Englewood Cliffs, New Jersey: Prentice-Hall Inc., or, Tokyo: Charles E. Tuttle Company, 1970 (Modern Asian Edition)

Ministry of Education, National Education System Plan. 1971-76 Kathmandu: Ministry of Education, 2028 B.S.

Ottaway, A.K.C. Education and Society. London: Routledge & Kegan Paul, 1970.

Tyler, Ralph. W. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago, 1967.

References

Brubacher, John S. Modern Philosophies of Education. Bombay: Tata McGraw Hill Publishing Co. Pvt. Ltd., 1966.

Education in Nepal. Bureau of Publications, College of Education, 1956.

Ministry of Education, HMG. Sarbangin Rastriya Sikshaya Samiti Ko Pratibedan.

Ministry of Education, HMG. Mid-Term Evaluation of NESP. Kathmandu: Ministry of Education, 2033 B.S.

Ross, James S. Groundwork for Educational Theory. London: George G. Harper & Co. Ltd., 1964 (Indian edition, 1964.)

Seetharamu, A.S. Philosophies of Education. New Delhi (110027); Ashish Publishing House, 1978.

Thankur, A.S. The Philosophical Foundation of Education. New Delhi: National Publishing House. 1977.

Wood, Hugh B. Development of Education in Nepal

Jayaswal, S. Education and Society. Lucknow: Prakashan Kendra, N.D. (For areas not covered by the above reference, handouts should be prepared).

EDUCATIONAL PSYCHOLOGY

First Year and One Year B.Ed.

Full Marks : 100
Theory

This is an introductory course on educational psychology. It is designed to orient the student teachers to the basic types and factors effecting the learning process, with their implications for classroom teaching; and the development characteristics of the adolescents with a view to understand the total personality development. It also deals with the role of evaluation in education in general, and evaluation techniques for use in classroom in particular.

Objectives

After the completion of this course, the student teachers will be able to:

a. describe the concept of learning and also give the behavioristic and cognitive views about learning process;
b. differentiate learning from behavioral changes that occur due to biogical causes;
c. point out the basic issues in learning;
d. describe the process involved in learning different catagories of learning and its implications in teaching;
e. identify different conditions essential for efficient learning and describe how to manage these conditions in classroom learning and teaching;
f. mention some innovations in classroom instruction;
g. describe the principles and characteristics of human development and explain the interrelationship between learning and development;

h. mention the main tasks of adjustment in adolescence;

i describe and explain the characteristics of physical, intellectual, emotional and social development of adolescent;

j. explain the psychodynamics of abnormal behaviour in adolescent;

k. suggest some remedial measures for behavioral problems of the adolescent;

l. explain the role of evaluaion in education;

m. construct evaluation tools such as unit test and rating scales for use in classroom situation;

n. analyse and use test results for better teaching and remedial instruction;

o. identify and describe characteristics and uses of standardized tests;

p. design evaluation programme for the secondary school.

Contents

Part I: Human Development

UNIT I. Introduction (Recapitulation)

1. Principles and characteristics of human development;
2. purpose and importance of studying human development
3. methods of studying human development Cross Sectional and Longitudinal.

UNIT II. Puberty

1. Characteristics of puberty
2. Criteria of puberty
3. Causes of puberty
4. Age of puberty
5. The puberty growth spurt
6. Body changes at puberty
7. Effects of puberty changes
8. Sources of concern
9. Hazards of puberty
10. Unhappiness at puberty

UNIT III. Adolescence

1. Characteristics of adolescence
2. Developmental task of adolescence
3. Physical changes during adolescence
4. "Storm and stress"
5. Social changes during adolescence
6. Some adolescent interests
7. Changes in morality
8. Sex interests and sex behaviour
9. Family relationships during adolescence
10. Personality changes during adolescence
11. Hazards of adolescence

Part II: Psychology of Learning

UNIT IV. Introduction

1. Learning: as a process and product, Views about how learning occurs.

2. Learning and human behaviour - importance of learning in acquisition and development of behabiour

3. Entering behaviour. Different aspects of entering behaviour and their role in learning

UNIT V. Learning Process

1. Brief review of Classical & operent conditioning, Trial & Error and Insightful learning

2. Cognitive Learning: learning as information processing.

3. Learning by Identification - Bandura's View

4. Multiple Learning: Gagne's eight types

5. Some typical problems and general issues in learning

UNIT VI. Applications of Learning in Teaching

1. Learning and teaching skills-Verbal and Psychomotor

2. Learning and teaching concepts and principles

3. Learning and teaching problem-solving and creativity

4. Factors involved in learning and managing above factors for effective classroom instruction.

UNIT VII. Instructional Technology

1. Programmed Instruction
2. Use of radio, films, tape recorder, teaching machines, computer etc. in classroom instruction

UNIT VIII. Efficient Learning

1. Interaction between motivations & Learning: and the role of motivation in learning and teaching

2. Reinforcement schedule, and managing different reinforcement schedule in class room teaching

3. Perception and learning--interactions; use of learning principles

4. Learning and memory-intcrrelationship and inter action, Neurophysiology of memory; different views about reletention and forgeting and techniques to remember.

5. Transfer of learning-transfer as the function of: discipline of mind, identical elements involved and generalization process; Main factors to be considered in better transfer of learning.

6. Learning and Thinking-Learning as problem solving process and adjustment process; realistic & unrealistic dimension of thinking & creative imagination

7. Frustration and adjustment Mechanism.

Part III. Evaluation

UNIT IX. Introdouction to Evaluation

1. Rationale for evaluation

2. A broader view of evaluation - student evaluation and program evaluation; evaluation in relation to educational planning (school level), educational process, and educational attainments; formative evaluation for program development; summative evaluation for program validation.

3. Uses of evaluation

UNIT X. Basic Concepts in Measurement

1. Reliability-meaning and types (stability, consistency, equivalency), methods of estimating (excluding computation)

2. Validity-meaning and types, methods of estimating validity (excluding computation)

3. Standardization-procedure and norms

4. Criterion-referenced measurement.

UNIT XI. Teacher made Tests

1. Needs for better classroom tests

2. Steps in construction of a test (including specification chart)

3. Types of test items-essay and short-answer; alternate response, multiple choice and matching-their characteristics, uses, advantages and limitations

4. Arrangement and reproduction of a test

UNIT XII. Administration, Scoring, Alalysis and Use of Test Results

1. Scoring of essay test - methods: improving the scoring of essay test.

2. Objective test - penalty for guessing

3. Item analysis - difficulty level, discrimination index, power of distractors

4. Measures of central tendency - mean, median, mode, percentile ranks, and measures of dispersion-quartile deviation, standard deviation and standard score (Z & T).

5. Uses of test results

UNIT XIII. Other Devices of Evaluation

1. Observation - rating scale, checklists

2. Anecdotal and cumulative records

3. Self-report, self-evaluation

4. Unobstrusive evaluation

6

UNIT XIV School Evaluation Program

Oganization and administration of an evaluation programs in school situation-- scope, schedule and use (including evaluation scheme for secondary schools of Nepal)

Recommended Books

Dececco & Crawford. The Psychology of Learning and Instruction, Prentice Hall New Delhi - 11001.

Bhatia, H.R. A Test Book of Educational Psychology. The Macmillan Company of India, Ltd. Delhi, 1977.

Thyne, J.M., The psychology of learning and Techniques of Teaching Unibooks University of London Press Ltd.

Skinner, D.E. Educational Psychology. Printice Hall of India, Private Ltd. New Delhi (Fourth Edition) 1977.

Hurlock. E.B. Developmental Psychology, Tata McGraw Hill Publishing Company Ltd. New Delhi, India (Fourth Edition) 1978.

Remmers, H.H., Gage, N.L., Rummel, T.F. A Practical Introduction to the Measurement and Evaluation, Kanpur, Delhi, Universal Book Stall, Second Edition, 1967.

Ebel Robert, Measuring Educational Achievement. Englewood Cliffs, New Jersey, Printice Hall, 1965.

Shrestha, G.M., Parikshya Ra Mulyankan, Kathmandu, T.U., IOE, UNICEF, Second Edition, 2034.

Educational Ministry, Examination Section, Antarik Mulyankan Nirdeshan Pustika.

Reference

Gall & W-d. Critical Issues in Educational Psycho.ogy. Little Brown & Company, Boston Toronto.

Hilgard & Bower. Theories of Learning, Prentice Hall, India.

INTRODUCTION TO LINGUISTICS

Full Marks : 100
Theory

This course provides a basic orientation to general linguistics and applied linguistics relevant to the teachers of English in secondary schools in Nepal.

Objectives.

On completion of this course the students will be able to:

a. understand fundamentals of general linguistics and applied linguistics;
b. understand the relevance of linguistics to language teaching;
c. understand the basic techniques of applied linguistics;
d. apply the above techniques in a class room situation;
e. understand linguistic terminology in common use in books dealing with the English language teaching;
f. speak English with an acceptable pronunciation so as to provide a better model for their pupils.

Contents

UNIT I. Preliminaries of Linguistics
UNIT II. Phonology
UNIT III. Grammar
UNIT IV. Constrastive Analysis
UNIT V. Error Analysis
UNIT VI. Linguistics and Language Teaching

Contents in Detail

UNIT I. Preliminaries of Linguistics

1. Definition of Linguistics: The scientific study of language
2. Linguistics as a scientific discipline
3. Branches of linguistics
4. Definition of language: A voluntary vocal system of human communication
5. Characteristics of language
6. Difference between language and animal communication
7. Varieties of language: Dialect, register, idiolect
8. Language as a system of systems
9. Levels of language: Phonology, Morphology, syntax and Semantics
10. Speech and writing
11. Content word and structure word
12. Lexical meaning and grammatical meaning
13. Language and Parole (Competence and performance)
14. Descriptive vs prescriptive grammar

UNIT II. Phonology

1. Phonetics and phonology
   a. Distinction between the two
   b. Distinction between phone, phoneme and allophone
   c. Distinction between phonemic and phonetic transcriptions

2. Diagram of organs of speech

3. English phonology
   a. Consonants and vowels: definitions, inventory, phonemic transcriptions, charts and diagram, descriptions and classifications
   b. Allophonic variations of voiceless stops (aspirated vs unaspirated), lateral (dark vs syllabic vs non-syllabic), and nasals (syllabic vs non-syllabic)
   c. Syllabic structure: CO-3VCO-4(C)(C)(C)V(C)(C)(C)(C) syllable types: open vs closed, number of syllabes in a word
   d. Contextual variations: assimilation, elision, weak forms, linking r' and intrusive 'r', pron unciation of s' and 'ed' suffixes.
   e. Word stress, sentence stress and intonation (Note: 1. the model of English pronounciation to be followed is that of RP, 2. Phonemic symbols to be followed are those given in Daniel Jones' 'An Outline of English phonetics'

UNIT III. Grammar

1. Grammatical units and their hierarchy: morphology and syntax

2. Morphology
   a. Definition of morpheme
   b. Free and bound morpheme
   c. Structural classification of words: simple and complex (composite, reduplicated, and derived affixation, modification)

3. Syntax
   a. phrases: NP, VP, AP, Advp, PP
   b. sentences: simple and complex (conjoining and embedding)
   c. Transformation: Negative, contraction, passive, question

4. Word classes: noun, verb, adjective, adverb, particle

5. Grammatical functions: subject, object, complement, adjunct

6. Grammatical categories: gender, number, person, case, tense, aspect, mood, (modality)

UNIT IV. Contrastive Analysis

1. Assumptions of constrastive analysis

2. Theory of transfer: positive and negative transfers

3. Practical work on constrastive analysis

UNIT V. Error Analysis

1. Stages in error analysis: recognition, description, and explanation
   a. Recognition: definition of an error and mistake, distinction between mistake, error, slip or lapse

b. Description: Types of error: phonological, graphological, grammatical, lexical, and stylistics

c. Explanation: Sources or causes of errors: L1 interference, analogical creation, overgeneralization, hypercorrection, difficulties inherent in the target language itself

2. Practical work on error analysis

UNIT VI. Linguistics and language teaching

The usefulness of linguistics in language teaching

Evaluation

Written examination: 100%

Recommended Books

Crystal, David. Linguistics. England: Penguin Books. 1971.

Palmer, Frank. Grammar. England: Penguin Books, 1971.

Pit Corder, S. Introducing Applied Linguistics. England: Penguin Books 1973.

Wilkins, D.A. Linguistics in Language Teaching. London: Edward Arnold 1972. (ELBS 1967)

Gimson, A.C. Introduction to the pronunciation of English. London: Edward Arnold. 1962. (ELBS 1975)

Lyons, John. Introduction to Theoretical Linguistics. London: CUP 1968.

Reference Books

Abercrombie, D. Studies in Phonetics and Linguistics. London: Edward Arnold. 1972 (ELBS), 1967)

Allen, J.P.B. & Pit Corder, S. (ed) Edinburgh Course in Applied Linguistics. London: OUP. 1973-75. Vols. 1,2,3

Dipietro. Language Structures in Contrast

Fraser, H & O. Donnel. Applied Linguistics and the Teaching of English. London: Longman. 1969.

Halliday, M.A.K., McIntosh, Angus and Strevens, Peter. The Linguistic Sciences and Language Teaching London: Longman. 1964 (ELBS 1970)

Lado, Robert. Linguistics Across Culture. University of Michigan Press. 1957.

Nickel, Gerhard. (ed) Papers in Contrastive Linguistics. London: CUP. 1971.

Arnold, G.G. & Gimson, A.C. English Pronunciation Practices. London: Hodder & Stonghton. 1965.

Gimson, A.C. Practical Course of English Pronunciation London: Edward Arnold. 1975.

Jones, D. An outline of English Phonetics (Indian Edition)

READING AND WRITING

Full Marks: 100
Theory

The course is designed with a view to develop the skill of faster reading with comprehension and giving the students practice in various types of writing.

Objective

On completion of this course the students will be able to:

a. use a dictionary for reading and writing purposes;
b. read and assimilate books and articles written in English thus enabling them to keep up their knowledge of the English language after their formal training period has ended and in a situation where they may not have the opportunity to use English outside the class-room;
c. Write paragraph, letters, dialogues and essays;
d. take notes from a text;
e. summarize the contents of a passage;
f. speak English more fluently.

Contents

UNIT I. Use of Dictionary for Reading Purposes.
UNIT II. Intensive Reading
UNIT III. Faster Reading
UNIT IV. Extensive Reading
UNIT V. Spelling
UNIT VI. Use of Dictionary for Writing Purposes
UNIT VII. Paragraph Writing
UNIT VIII. Letter Writing
UNIT IX. Dialogue Writing
UNIT X. Note - taking

UNIT XI. Summary Writing
UNIT XII. Essay Writing
UNIT XIII. Precis Writing and Abstracting
UNIT XIV. Report Writing

Contents in Detail

UNIT I. Use of Dictionary for Reading Purposes

1. Miscellaneous information in the dictionary
2. Exercises on the above

UNIT II. Intensive Reading

1. Exercises to train students to understand in detail the meaning of a passage

UNIT III. Faster Reading

1. Exercises to train students to increase their speed

UNIT IV. Extensive reading

1. Exercises to train students to hold in the mind long stretches of materials and to make relations between sections

2. Comprehension of longer passages and excercises to test comprehension

3. Excersises from English medium newspapers and magazines

UNIT V. Spelling

1. Noun-verb differences
2. Optional spellings
3. Common abbreviations
4. Exercises on the above
5. Rules to avoid spelling mistakes

UNIT VI. Use of Dictionary for Writing purposes

1. Use of the monolingual dictionary (with special reference to the Advanced Learner's Dictionary of Current English) - abbreviations used, use of verb patterns, checking of collocations of words

2. Exercises on the above

UNIT VII. Paragraph Writing

1. The topic sentence
2. Unity
3. Coherence
4. Odering
5. Connectives

UNIT VIII. Letter Writing

1. Personal letters
2. Business letters
3. Letters of application
4. Letters of sympathy
5. Post-card writing
6. Invitation

UNIT IX. Dialogue Writing

1. Characteristics of a good dialogue
2. Exercises on dialogue writing

UNIT X. Note-taking

1. Importance
2. How to make notes

UNIT XI. Summary Writing

UNIT XII. Eassy Writing

1. Characteristics
2. Types

UNIT XIII. Precis writing and abstracting

UNIT XIV. Report Writing

Types : 1. Newspaper reports
2. Letter reports

Evaluation

Written examination: 100%

Recommedned Books

Chaplen, Frank. Paragraph Writing. London: CUP. 1970

Fry, Edward. Teaching Faster Reading. London: CUP. 1963

Goden. Practical Letter Writing.

Narayanswami, V.R. Strengthen Your Writing. Orient Longman. Bombay

Spencer, D.H. English Conversation Practice. CUP. (Indian Print)

Webster, Owen. Read Well and Remember. ELBS. (to be used for faster, intensive and extensive reading)

Widdowson, H.G. English Studies Series 8 CUP. (ELBS)

Reference Book

Van Ek, J.A. (ed) The Threshold Level for Modern Language Learning in Schools. London: Council of Europe. 1976.

HEALTH AND PHYSICAL EDUCATION I

Full Marks : 100
Theory

The first part of this course is designed to provide knowledge about the concept of health and health education, the objectives and scope of health education. The concept of school health education programme, its role in promoting and encouraging healthful conditions and living practices for the students and other personnel is emphasized.

The second part is designed to provide knowledge about the concept, aims and objectives, foundations and development of physical education. Planning and lay-out of games and sports facilities and organizing competitions also are emphasized.

Objectives:

After the completion of this course the prospective teachers will be able to :

a. describe the concept of health and health education
b. explain the economic implication of health;
c. explain the scope, aims and objectives of health education;
d. expalin the socio-cultural context of health education;
e. describe the relationship between health education and other subjects;
f. explain the concept of school health education programme;
g. explain the aspects and the functions of school health service, healthful school living and health instruction;
h. discuss the role of school community participation for the successful operation of school health education programme;

i. describe the concept of physical education;
j. describe the aims and objectives of physical education;
k. describe the foundations of physical education;
l. describe the development of physical education;
m. plan and organize games and sports facilities;
n. describe the measurements of grounds and courts of physical activities;
o. construct fixtures for different competitive activities;
p. organize competitions in different activities.

Contents

Part 'One' Health Education

UNIT I. Introduction to Health and Health Education

1. Concept of health
   a. Meaning and definition of health
   b. Health and disease spectrum
   c. Health and its economic implication

2. Health education
   a. Meaning of health education
   b. Aims and objectives of health education
   c. Place of health education in education
   d. Scope of health education
   e. Socio-cultural context of health education
   f. Health education and its relation with other sciences (Biological Sciences included health, political science, Eccnomics, Geography, Anthropology, Sociology, Education)

UNIT II. School Health Education Programme

1. a. Meaning
   b. Objectives
   c. Needs and importance
   d. Areas and scope

2. School health services
   a. Meaning and objectives of school health service
   b. Appraisal aspects of school health service
      - Health examination and Screening Test
      - Teacher observation on common observable health problems
      - First aid and emergency care
      - School clinic
      - Health records
   c. Preventive aspects of school health services
      - Communicable diseases control and immunization
      - prevention of accident in and out of the school.
      - School policy regarding isolation of students and closing of the schools
   d. Remedial aspects of school health services
      - Health counseling and guidence
      - Safety measures and education
      - Referral programme

3. Healthful school environment
   a. Meaning and objectives of healthful school environment
   b. Physical environment-school plant; sanitation facilities & nutrition programme
   c. Mental environment - Human relationship among pupils, teachers and other personnel; school programme; daily

scheduling; pleasant atmosphere

4. Health Instruction
   a. Meaning and objectives
   b. Types of instruction - formal, informal & nonformal planned, incidental, integrated, correlated
   c. Planning of health instruction in school work plan, unit plan and lesson plan

5. Home school and community relationship
   a. School programme for community participation - PTA, parents day, lecture, seminar & exhibition
   b. School participation in community immunization programme, cleaniliness compaign & public health education

6. Organization of School health education programme
   a. Formation of a committee to implement school health programme in school
   b. Functions of the committee and the responsibility of health education teacher

7. Evaluation of school health education programme

Part 'Two' Physical Education

UNIT III. Introduction to physical Education

1. Meaning of Physical education

2. Aims and objectives of physical education

3. Foundation of physical education
   a. Biological
   b. Physiological
   c. Sociological
   d. Psychological

4. Development of physical education
   a. historical roots
   b. present status of games and sports
   c. Development in Asia (esp. in Nepal)

UNIT IV. Planning and Organization

1. Planning and lay-out of games and sports facilities
   a. factors determining lay-out of facilities
   b. measurement of courts and grounds, tracks, jumping pits and throwing circles.

2. Organizing competitions
   a. Construction of league and knock-out fixture
   b. Construction of time table of the athletic meet
   c. Organization of track and field competition

Recommended Books

Bedi, Y.P. Public Health and Hygiene, Ananda Publishing House 1974.

Hachensmith, C. History of Physical Education

Kolboure, Edurin D. and Wilson G. Smile (ed.) Human Ecology & Public Health. London: The Mcmillan Company. 1968.

Pradhan, Hari Bhakta. Swasthya Shiksha

Pradhananga, Yogendra. Nepal Ma Swasthya Tatha Swasthya Sewa.

HEALTH AND PHYSICAL EDUCATION

II

Full Marks: 100
Theory & Practical
50% 50%

The first part of this course is designed to give knowledge of the structure and functions of different systems and organs of the human body and the second part is designed to provide practical experiences in fundamental skills of Volleyball, Athletics, P.T. and Drill, Tenikoit and Kho-Kho. The appropriate usage of lead-up activities and the officiating of the various physical education disciplines are included.

Objectives

After the completion of this course the prospective teachers will be able to:

a. explain the structure and functions of the cells, tissues and organs of the human body;
b. explain the structure and the functional processes of the different systems of the human body;
c. identify the endocrine glands and explain their functions;
d. determine the relationship between the body system and health;
e. explain the structure and functions of sense organs;
f. perform the prescribed skills to a satisfying extent;
g. demonstrate and explain the components of the skills;
h. explain the rules and regulations of the prescribed P.E. disciplines;
i. officiate tournaments of competitions.

Contents

Part 'One': Health Education

Theory

UNIT I. The Human Body Organ

1. The cell-structure and functions
2. The tissues-classification, structure & functions
3. Body organs-classification and functions

UNIT II. Review of the Following System

1. The skeletal system
2. The muscular system
3. The digestive system
4. The excretory system
5. The respiratory system
6. The circulatory system

UNIT III. Study of the Following Systems

1. The nervous system
   a. The central Nervous system-structure and function of nerve cell, cerebrum, cerebellium and spinal cord
   b. The peripheral Nervous system
   c. Autonomic nervous system-sympathetic and parasympathetic
   d. Relation of the nervous system to the nusculer and other system of the body
2. The Endocrine System
   Function of pituitory, pineal, thymus, thyroid, parathyroid, Adrenal and Gonads
3. The reproductory system
   a. Structure and function
   b. The menstrual cycle and ovulation
   c. Reproductory process
   d. Health care during pregnancy and child care

e. Need, importance and methods of Family planning

UNIT IV. The Sense Organs

1. Structure and functions of skin, eye, ear, tongue and nose

2. Care and hygiene of the sense organs

Part 'Two': Physical Education

Practical

UNIT V. Volley Ball

1. Passing - simple and straight; with change of direction; overhead pass; setting for spike; with backward roll-over

2. Digging -simple and straight; with change of direction; while diving forward and sideward

3. Service Techniques - underhand, overhead (Tennis) and hook-service

4. Spiking - approach; take-off; simple spike; feint

5. Blocking - single, double and triple block; block - shield; retrieving the ball

6. Systematic play - Defensive and offensive play, team tactics

7. Officiating - Rules and Regulations; Measurement; Conducting Tournaments

UNIT VI Athletics

1. Running
   a. Sprint
   b. Middle Distance

c. Cross country
d. Relay Races (Shuttle and Round Relay)

2. Longjump
   a. Approach, Take-off, action in the air and landing of

   i. Squat style ii. Hang style
   iii. Hitch Kick style

3. Highjump
   a. Approach, Take-off, action in the air and landing of
      i. Scissor's kick style
      ii. Belly Roll Style (Straddle)

4. Shotput (Perry O'Brian Style)
   a. Standing position
   b. Gliding
   c. Follow through

5. Javelin Throw-Grip, Approach, Rhythm, Transition of javelin, Throw, Follow through

6. Application of Circuit - Training for athletic purposes

7. Officiating and organisation of competition meets of the mentioned disciplines

UNIT III. P.T. and Drill

Exercises to develop different body parts such as:

1. P.T.
   a. Bending neck forward, backward and sideward
   b. Bending waist forward, backward, and sideward
   c. Raise hands upwards, forwards, sidewards

d. Standing on one leg and changing each leg at a time
e. Splitting legs sideward, backward, forward and upward

2. Drill
a. Standing position, attention, stand at ease
b. Right Turn, Left Turn, About Turn
c. Mark time and Halt
d. Quick March, Slow march
e. Right turn, left turn, about turn, while marching
f. Eyes right, while standing and marching
g. Drilling in single, double and triple file
h. Guard of honour of salute
i. Flag handling

UNIT IV. Tenikoit

1. Throwing Technique
2. Receiving Techniques
3. Team - Cooperation
4. Officiating

UNIT V. Kho-Kho

1. Chasing and defending
2. Short, Middle and Long Turn at the poles
3. Getting up in a crosslane
4. Officiating

Recommended Books

Haiso, Haruo. Volleyball ko Sadharan Gyan; Kathmandu, National Sports Council; 2033.

National Sports Council: Volleyball Rule Book; Kathmandu, 2033.

Bowerman, W. Coaching Track and Field; 1975.

George, J.T. School Athletic Administration. 1966

Lawther, J.D. The Learning of Physical Skills. 1968.

Basnet, Narendra, B. Sareer Kriya Bigyan. Kathmandu, 2033.

Diarmoru. Basic Physiology. Madras: India Book House

Pearce, Evelyn C. Anatomy Physiology for Nurves. London: Faber & Faber Ltd. 1968.

Institute of Medicine. Anatomy & Physiology

Rowett. Basic Anatomy & Physiology. London: John Murry, 1966.

Berry Basketball for Schools. 1970.

Garden Championship.Basketball. 1961.

Butler Playgrounds: Their Administration and Operation. 1950.

Meyer, S. Team Sports for Women. 1947.

INTRODUCTION TO MODERN MATHEMATICS AND STATISTICS

Full Marks: 10
Theory

This course deals with set theory, logic, concepts of geometry and topology. It is intended to acquaint students with fundamental notions and ideas of introductory statistics which are invaluable for all teachers who would like to make a quantitative analysis of educational process. Further, attempt is made to present statistics in the form of applied mathematics.

Objectives

After the completion of this course prospective teachers will be able to:

a. manipulate operation on sets and apply techniques of set in the solution of problems;
b. investigate the truth or falsity of statements;
c. recall the historical development of different geometries;
d. solve the topological problems;
e. organize, present and make a preliminary analysis of raw data;
f. describe and interpret given data in terms of central tendencies and dispersion;
g. state the meaning of probability in simple terms and calculate the probability of the occurence of events;
h. describe the use and properties of binomial and normal distribution and their applications;
i. interpret the meaning of coefficient of correlation and regression co fficients;
j. compute the correlation coefficient and regression coefficient; and
k. give various examples of the random veriables and their distributions.

Contents

UNIT I. Sets

1. Set notation

2. Kinds of Sets (Equal sets, one-to-one correspondence, equivalent sets, empty set, unit set, finite set, infinite set, universal set complementory set, disjoint set, overlapping sets, sub-set)

3. Operation with sets (definition of union of sets, closure, commutativity and associativity of union of sets, definition of intersection of sets, closure, commutativity and associativity of intersection of sets, diagrammetical proof of distributivity of intersection over union, distributivity of union over intersection and De Morgan's Laws)

4. An application of set theory

5. Sets of numbers

6. Cardinal numbers of infinite sets

UNIT II. Symbolic Logic

1. Introduction
2. Statements
3. Connectives
4. Truth tables and logical statements
5. Conditional statements
6. Valid and invalid statements

UNIT III. Concepts of Geometry

1. The evolution of geometry
2. Euclidean geometry
3. Non-Euclidean geometry
4. Projective geometry

UNIT IV. Transformation Geometry

1. Reflections
2. Translations and rotations
3. Size transformation
4. The inversion transformation

UNIT V. Topology

1. The strange word to topology (what is topology, topology and geometry, how geometric figures change in topology)
2. Application of topology (Koeneigsberg bridge problem and network, Euler's discoveries about networks, Euler's formula for network and four-colour problem)
3. Topological classification of surfaces (The genus of a surface, Euler characteristic of surface, one-sided surface and Euler's formula for polyhedra)

UNIT VI. Introduction and Graphic Representation

1. Introduction (definition and use of statistics, educational surveys, questionnaire framing and data collection - primary, & secondary data)
2. Frequency Distribution (grouped and ungrouped selecting a random sample, classification of data, frequency distribution and cumulative frequency distribution)
3. Graphical Representation (histogram, frequency polygon, frequency curve, cumulative frequency curve (or ogive), pie chart, cumulative frequency band diagrams, bar charts, multiple bar and band charts, pictograms)

UNIT VII. Measures of Central Tendencies

1. Introduction (the meaning of central tendency) significance of the measures of central tendency
2. Measures of central tendency: mean (A.M., G.M., H.M.) median, mode, relation between measures of location and the types of frequency curves (positively or negatively skewed)
3. Percentile ranks and percentiles (partition values)

UNIT VIII. Measures of Dispersion

1. Introduction, significance of measures of dispersion, definition of the term-dispersion.

2. Measure of dispersion: range, the mean absolute deviation, variance and standard deviation, quartile deviation, coefficient of variation, moments, skewness and kurtosis;

UNIT IX. Probability

1. Definition of probability

2. Theorems on probability (theorems of total probability, compound probability and Bayes theorem)

3. Set-theoretic formulation of probability theory

4. Problem on probability

UNIT X. Random Variables and Probability Functions

1. Discrete and continuous random variables

2. Probability and distribution functions of discrete random variables

3. Problems on probability and distribution functions

UNIT XI. Functions of Random Variables

1. Mathematical expectation
2. Covariance
3. Chebyschev's Inequality
4. Problems on expectation

UNIT XII. Binomial and Normal Distribution

1. Binomial Distribution

2. Normal Distribution

3. Approaximating Binomial to Normal distribution

4. Problems on Binomial and Normal distribution

UNIT XIII. Simple Correlation and Regression

1. Correlation (definition of correlation, significance of correlation, limits of the correlation, the scatter diagram and computation formulae of correlation coefficient)

2. Regression (Linear regression, equations of regression and regression coefficient)

Recommended Books

Miller, C.D. and Heeren, V.E. Mathematical Ideas: An Introduction

Saxena, H.C., Elementary Statistics

Murray, R.S. & Spiegel, R. Theory and problems of Statistics (Schaum's outline series)

Lectures note prepared by IOE.

References

Rapport, S. & Wright, H. Mathematics.

Gans, D. Introduction to Non-Euclidean Geometry.

Meserve, B.E. & Sobel, M.A. Introduction to Mathematics

Kapur J.N. and Saxena H.C. Mathematical Statistics

Gupta, S.C. & Kapur, V.K. Fundamentals of Mathematical Statistics.

Blakeshe and Chinn, Introductory Statistics and Probability (Houghton Miffin Company, Bostion).

Shrestha, H.B. Probability Theory and its Introductory Approach

Garrett, H.E. Statistics in Education and Psychology

ALGEBRA AND GEOMETRY

Full Marks: 100
Theory

This course deals with higher algebra along with the elementary ideas of abstract algebra. It presents Euclidean Geometry in Modern notation and includes some new ideas like convexity, mappings and separation axioms. It also provides an analytic study of locuses in the plane and a basic treatment of analytic geometry in 3 space with applications in solid geometry.

Objectives

After the completion of this course prospective teachers will be able to:

a. understand various theorms in inequality and apply them to solve problems;
b. find expenential and logarithmic series;
c. test the convergency of a given series by using suitable tests;
d. understand the nature and properties of determinents and apply them in solving problems;
e. understand the algebra of matrix and solve the system of equations by matrix method;
f. investivate relations between the roots and the coefficients of equations of the degree;
g. understand some of the elementary properties in the general theory of equations;
h. understand the meanings of relations and mappings;
i. demonstrate the understanding of the structure of groups and rings;
j. present and use the most important theorems of Euclidean geometry;
k. demonstrate axiomatic techniques in proving theorems;
l. us, a modern set notation in describing geometrical relations;

m. perform basic and more advanced geometical constructions;
n. analyze and solve geometrical problems;
o. understand the structure of space and special relations;
p. understand the properties of loci like ellipse, parabola;
q. describe analytically simple point sets like point, line and plane and relations between them in 3-spaces; and
r. give some applications of analytical reasoning in solid geometry.

Contents

UNIT I. Inequalities

1. Definitions
2. Manipulation of inequalities
3. Factorisation
4. Sum and product of two numbers
5. Greatest value of a product
6. Arithematic and Geometric means
7. Weighted means
8. Maxima and minima
9. Mean of the nth powers and its general case

UNIT II. Exponential and Logarithmic Series

Expansion of a^x, e^x and log $(1 + x)$

UNIT III. Convergence of Series

1. Definition of infinite series and its convergence
2. Some general theorems on infinite series
3. Ratio test, root test and their examples
4. Discussion on convergency of auxiliary series

5. Comparison test and its problems

6. Alternating series and its convergence

7. Exponential, Binomial and logarithmic series

UNIT IV. Determinants

1. Difinition and expansion of a determinant
2. Properties of determinants
3. Minors and cofactors of a determinant
4. Multiplication of determinants

UNIT V. Matrices

1. Definition and algebra of matrices
2. Types of matrices
3. Solution of simultaneous quations
4. Rank of a matrix
5. Consistency of simultaneous equations

UNIT VI. Polynomials and Theory of Equations

1. Definition of polynomia and retional integral algebraic equation

2. Remainder theorem & factor theorem

3. Division of a polynomial by x - c

4. Zeros of polynomial

5. Discussion on Descarte's rules of signs (results only)

6. Relation between roots and coefficients and its application

7. Transformation of Equations

VII. Relations and Mappings

1. Definition and examples of relations

2. Definition and examples of equivalence relation

3. Definition of partition; and proof of "an equivalence relation defined in a set decomposes the set into disjoint equivalence classes"

4. Definition of mapping (domain and range of mapping)

5. Definition and examples of into and Onto mapping using venn Diagrams

6. Difinition and examples of one-one and many-one mapping

7. Definition, examples and related theorems on inverse mapping, identity mapping, equal mapping and composite mapping.

UNIT VIII. Group

1. Group; properties of group; examples of groups - groups of numbers, gropus of symmetrics, permutation group; symmetric group; integral powers of an element; Cayloy's theorem

2. Subgroup and their simple properties

UNIT IX. Rings and Fields

1. Definition of ring and examples of ring

2. Properties of ring

3. Zero divisors (proof of theorem "a ring R is without zero divisors if the concellation law for multiplication holds in R")

4. Definition and illustrations of the rings (commutative ring; a ring with unit element, an integral domain; division ring)

5. Definition and illustration of field (proofs of "a field has no proper divisors of zero" and "a finite integral domin is a field")

UNIT X. Review

Discussion of some proofs, problems and constructions concering foundations, congruence and parallelism.

UNIT XI. Similarity

1. The parallel - proportion theorem
2. Similar triangles
3. The pythagorean theorem
4. Similar and congruent polygons

UNIT XII. Convexity

1. Plane convex figures
2. Convex solids

UNIT XIII. Area and Volume

1. Area
2. Volume

UNIT XIV. Circles and Arcs

1. Angle and arc properties of circles
2. Some tangency properties of circles

UNIT XV. Analytic Geometry in 2 space

1. Rectangular coordinates & polar coordinates
2. Parabola
3. Ellipse
4. Hyperbola (rectangular and asymptotic forms)
5. Tangents and normals at the given point to the above conic sections

UNIT XVI. Coordinate Systems in 3 - space

1. Rectangular coordinates
2. Polar coordinates
3. Spherical coordinates
4. Some simple transformations

UNIT XVII. Linear Spaces

1. Length of segment, equation of a line and distance between point and line
2. Equation of a plane relations between plane and line, and distance between point and plane
3. Intersection of planes
4. Analysis of simple solids like parallelepiped, pyramid and prism
5. Alternative description of point sets in space by vectors

...nded books

Chandrika Prasad, Text Book of Algebra & Theory of Equations

Pant, C.D. Coordinate Geometry

Schenkel, H. Analytic Geometry in the plane and in 3-space. Mathematics Education Department, Kirtipur, IOE.

References

Hall and Knight, Higher Algebra

Mathur, S.B. Elementrary Modern Algebra.

Saran, N. and Goyal, J.K. Introduction to Modern Algebra

Kelly, Paul J and Ladd, Norman E., Geometry.

BIOLOGY

Full Marks: 100
Theory & Practical
(T = 80%, P=20%)

This course is designed to provide prospective teachers adequate background on important fields of basic as well as modern bio-science. It includes all the bio-science related to the teaching of science in secondary schools. The theoretical portion carries 80 marks and the practical portion caries 20 marks. Students are required to secure pass marks separately in each.

Objectives

After the completion of this course, the prospective teachers will be able to:

a. run the class in bio-science properly at secondary school;
b. organize and design required experiments, demonstrations and other lab-activities in bio-science at secondary school;
c. explain the biosphere and its content;
d. state the importance of biology in human life;
e. state & explain the physiological activities of biomes;
f. identify the biological specimens;
g. prepare chart of biomes included in course;
h. prepare temporary slides of various tissues & organs of biomes;
i. identify the common diseases of plants & human parasites;
j. dissect a given animal to show its internal organ.

Contents

Part I: Botany

UNIT I. General Characteristics and Classification of the following importance orders of plants

1. Algae
   a. Cynophyta - Chroocacales, Nostocales
   b. Chloraophyta - Volvocales, utrichales,
   c. Charophyta - Charales
   d. Pyrophyta -Gymnodinials,
   e. Chrysophyta - Heterosiphonales,
   f. Phaeophyta - Eclocarpales,
   g. Rbodophyta - Nomalionales,

2. Fungi
   a. Phycomycetes - Chytridiales, mucorales
   b. Ascomycetes - Aspergillales, pezizales
   c. Basiomycetes - ustilaginales, Agaricales
   d. Deuteromycetes -

3. Bryophyta
   a. Hepaticopsida - Marchantales
   b. Authoceropsida - Anthoceretales
   c. Bryopsida -- Polytrichales

4. Pteridophyta
   a. Psilopsida - Psilotales
   b. Lycopsida - Lycopodales
   c. Sphenospida - Equisetales
   d. Pterospsida - Fillicales

5. Gymnosperms
   a. Cycadales
   b. Coniferales
   c. Ginkgales
   d. Gnetales

6. Angiosperm : Dicotyledons
   a. Polypetales - Ranales, Rosales,
   b. Gamopetales - Rubiales, Compositales
   c. Monochlamydeas - Polygonales Eupherbeales

7. Monococyledones
   a. Microspormae - orchidaceae
   b. Glumeceae - Gramineae

UNIT II. Habit, Habitate, Structure and Life-cycle of the following plants

1. Algae - Nostoc
2. Fungi - Agaricus
3. Bryophyta - Marchantia
4. Pteridophyta - Equisetum
5. Gymnesperm - Pinus
6. Angiosperm - Maize and Pea Plant

UNIT III. Plant Physiology

1. Ascent of sap (mechanisms, factors & theories)

2. Translocation (meachanisms, factors & theories)

3. Digestion & Assimilation (mechanism only)

4. Respiration (glycolysis and Krebs cycle)

5. Nitrogen fixation

6. Growth hormones

UNIT IV. Econimic Botany

Sources and Economic importances of the following plant products.
1. Morphin
2. Camphor

3. Rubber.

UNIT V. Cytogenetic and Embryology

1. Concept of gene & gene action, chemical nature of chromosomes

2. General principles of plant breeding & probability

3. Linkage, crossing over, sex determination and inheritance (introductory lectures with examples)

4. Embryology of a dicotyledons plant

UNIT VI. Parasitology

1. Parasitism & Immunity

2. Virus - Symptions, mode of transmission & control measure of the diseases - TMV, PMV, BMV

3. Bacteria - Symptoms, mode of transmission & control measure of the diseases caused by the following Bacteria - Erwinia caratavora, xanthomonus spp. Baccillus amylovora

4. Three fungal diseases of plant - late blight of potato, ustilago, puccinia

UNIT VII. Taxonomy

General discription, economic importance with floral formula and floral disgrams of the following families of plants:

1. Monocot - graminacea, liliaceae, Musacea
2. Dicot - Renunculaceae, Compositae, Rosaceae

UNIT VIII. Histology of Vascular Plants

1. Difference between dicot & monocot root and stem and between dorsiventral and osisobilateral leaves.

2. Secondary growth of dicotyledon plants.

Practical Works

1. Collection, preservation, identification & classification of collected plants

2. Permanent slide preparation of lower plants, & t.S. of root, stem & leaf.

3. Temperary slide preparation of root tip and bud to study various stages of cell division

4. Temporary slide preparation of plant diseases included in the course.

5. Experiments on plant physiology included in the course

6. T.S. of dicot plant to study secondary growth. (Permanent slide)

7. Preparation & Identification of the families included in the course

8. Field Trip for collection of plants & Taxonomic study.

Part II: Zoology

UNIT IX. General Characteristics and Classification of the following important orders of animals

1. Protozoa Lobosa, Euglenoidina, gregarinida, Hemmos- portidea, Holocticha, poritricha

2. Porifera - Homocoela, Heterocoela

3. Coelenterata - Hydroidia, Siphonophora, Actiniaria

4. Helminthes - Begenea, Taenioidea, Ascarodia

5. Arthropoda - Decapoda, Orthoptera, Anoplura, Odonata Diptera, Lepidoptera, Coleoptera, Hemiptera

Annelida - Errantia, Sedentaria

Mollusca - Pulmonata, Fillibranchiata, Decapoda, Octopoda

Echinodermata - Articulata, Foreipulata, Cryptozowa

Chordata

a. Teleostomi - Elupeiformes, Cypriniformes, Ophiocephaliformes
b. Amphibia - Eurodela, Anura
c. Reptilia - Chelonia, Squamata, Crocodilia
d. Aves - Columbiformes, Calliformes, Psittaciformes
e. Mammalia - Montremata, Marsupialia Chiroptera, Primates, Rodentia, Carnivera, Sirenia.

UNIT X. <u>Habit, Habitat, Structure & Reproduction of the following animals</u>

1. Protozea - Paramecium
2. Coelenterata - Hydra
3. Helminthes - Teenia
4. Arthopoda - Housefly
5. Chordata - frog

UNIT XI. Animal Physiology

Organs and mechanisms of the following systems as examplified by one lower (earth-warm) & one higher animal (frog).

1. Digestion
2. Respiration
3. Excretion
4. Circulation
5. Nervous system

UNIT XII. Eco-zoology

General introduction including economic importance:

1. Fishery
2. Poultry
3. Animal Husbandry

UNIT XIII. Parasitology

1. Three human parasites - Wuchereria banerefti (Filaria) Malaria Parasite and Schistosoma measures of diseases caused by them;

2. Parasitic arthropods of Man & Domestic animals (lice, ticks, bugs, fleas, flies, mosquitoes) with special reference to the disease caused by them and possible remidies.

UNIT XIV. Histology & Embryology of Higher Animals

1. General microscopic study of oesophaugus, stomach Inteftime, Heart, Liver, Blood, Lungs, Kindney, Skin, Ovary & Testes (Frog, Rabbit)

2. Development of a frog

UNIT XV. Environmental Biology

1. Balance in Nature
2. Population Explosion
3. Causes and factors of population explosion; its controlling measure with reference to Nepal

UNIT XVI. Behavioral Science

1. General behaviour of animals
2. Behavioral adaptation of birds (Sexual, Territorial & migratory)
3. Behavioral adaptation of social insects (Bee, Termite)

Practical Works:

1. Collection, preservation,
2. Identification & Classification of collected animals
   a. Lower animals
   b. human parasites
3. Microscopic slide study of the organs of higher animal included in the course.
4. Dissection of a frog to study internal anatomy
5. Chart preparation of Embryology of a frog
6. Fielf trip for collection, preservation, Identification, and slide preparation of various fauna.

Note:

Students are required to submit

1. Practical record books
2. Herbarium & Collected lower plants
3. Collected animals
4. Prepared slides & charts.

Recommended Books

Bell, Peter R. & Wordcock, C.L.K. The Diversity of Gre n Plants. Edward Arnold Publishers, Ltd.

BSCS. An Inquiry Into Life

BSCS Yellow. Molecules to Man

Colbert. Evolution of Vertebratses

Dutt. A.C. Text Book of Botany. (for degree students)

Dr. Bhatta, D.D. Economic Botany of Nepal

Dr. Elemming. Flora & Faun. of Nepal

Green Version BSCS. High School Biology

Hill. Eco. Botany

Koromondy. Readings in Ecology

Loovy & Sickcvitz. Cell Structure & Function. Amerind Publishing Co. N.Y.

Lull. Organic Evolution

Layer. Principles of Taxonomy

Patin. Fundation of Embryology

Felezar and Reid. Microbiology

Itainton, Forest of Nepal

Smith, Cryptogamic Botany Vol. I & Vol. II

Smith, Harold. Conservation of Natural Resources

Swamson, C.P., Merze & Young. Cytogenetics

Vidyarthi, Text Book of Zoology.

White, M.J.D. The Chromosome

Winchester. Biology.

CHEMISTRY

Full Marks: 100
Theory & Practical
(80 T + 20 P)

This course is designed to introduce the prosepective School Science teachers to the fundamental knowledge of Organic Chemistry with adequate background in physical, Inorganic, Organic Chemistry & Biochemistry. This course is so designed that the teachers will be able to deal the Chemistry portion of the Secondary School Science. The theoretical Course Covers 80 marks and the practical 20 marks. Students are required to secure pass marks seperately in both.

Objectives

After the completion of the theoritical course the prespective teachers will be able to:

a. deal with the chemistry science courses confidently & systematically in secondary school science classes;
b. use available resources in teaching chemistry;
c. introduce structure of an atom using Bohr's model
d. introduce the concept of electronic theory of valency;
e. balance redox equations;
f. explain periodicity of properties of elements;
g. explain the chemistry of a few selected metal, non-metal & compounds
h. explain the fundamental principles of analytical and organic chemistry
i. explain the elementary idea of chemistry of carbohydrate protein, fat, Hormone, Vitamins & minerals.

Contents

UNIT I. Atomic Structure

1. Pastulates of Bahr's model atom
2. Derivation of energy equation, Bahr's model atom.
3. Evidences for a draw backs of Bahr's atomic theory

UNIT II. Theoretical Background to Analytical Chemistry

1. Common ion effects & solubility product
2. Buffer solutions & PH of a solution
3. Acids & Bases
4. Acidimetry & Alkalimetry
   a. titration
   b. Indicators & its choice
   c. Equivalent weight of acid, alkali & oxidising and reducing agents
   d. standard solution - normality, molarity & percentage strength
5. Redox titration.

UNIT III. Chemical Bonding

1. Introduction to valency - Electronic theory
2. Types & characteristics of bonds, Hydrogen bonding

UNIT IV. Oxidation and Reduction

1. Rules for finding Oxidation number
2. Balancing of redox reactions by oxidation state method

UNIT V. Classification of Elements

1. Modern Periodic Law
2. Periodic properties of elements

UNIT VI. Chemical equilibrium

1. Law of Mass action
2. Factors incfluencing equilibrium constant
3. Lechatelier's principle

UNIT VII. Group study and Chemistry of selected Elements & Compounds

1. Comparative study of the elements belonging to group I.a. (alkalimetals) & Group VII A (halogens);

2. Preparation, properties & uses of HNO_3,, NH_3 properties and uses of KMno4 K2cr207 (excluding manufacturing process)

UNIT VIII. Detection and Estamation of Elements

1. Detection of Carbon, Hydrogen, Oxygen, Nitrogen, Halogen, Sulphur.

2. Estimation of nitrogen by Kjeldahl's Method

UNIT IX. Structural concept of Organic Molecules

1. Atomic and Melecular orbitals
2. Tetracovalency of carbon atoms
3. Hybridisation of Orbitals in carbon atom
4. Inductive & electrometric effect, resonance.

UNIT X. Empirical and Molecular Formula

1. Calculation of empirical & molecular formulas

2. Determination of Molecular weight of a volatile substance by Vector Meyers Method

UNIT XI. Isomerism

1. Introduction
2. Structural & Stereoisomerism
3. Resolutions
4. Racemisations & Tautomerism

UNIT XII. Reactions and their Mechanisms

1. Homolytic and heterolytic bond fissions

2. Energy requirement of a reaction

3. Electrophiles, Carboniumion, nucleophiles, & Carbonion - Introductory treatment

4. Types of reactions such as substitution, addition, elimination & rearrangement.

UNIT XIII. Classification and Systematic Nomenclature

1. Principal Series of organic compounds
2. Division into classes - functional groups
3. Homologuous series
4. Naming of organic compounds by IUPAC rules

UNIT XIV. Chemistry of Organic Compounds

Chemistry of ethyl alchohol, acetaldehyde, acetone, acetic acid, ethylamine, benzene, nitrobenzene, phenol, aniline (excluding manufacturing process)

UNIT XV. Chemistry of Carbohydrate, Protein & Lipid

1. Difinition & classification of Carbobydrate, protein & lipid;

2. Structure & properties of glucose, protein & fat

3. Epimeyisation, Mutarotation & motabol .m of glucose

4. Process of manufacture & properties .of sugar

UNIT XV . Chemistry of Hormones, Vitamins and Minerals

1. Definition & classification of Hormones & Vitamins

2. Functions of steroid hormones

3. Sources, structure, functions & deficiency diseases of Vitamins A.C.D & B - Complex

4. Sources & functions of a few important minerals - Ca, P, Na and Cl.

Recommended Books

Bahl & Bahl. Essentials of Physical Chemistry.

Satya Prakash, G.D. Tuli & S.K. Basu. Advanced Inorganic Chemistry.

Pahl & Bahl, Advanced Organic Chemistry

S.K. Das, Gupta Bio Chemistry

CHEMISTRY PRACTICAL

This course is designed to build practical skills, among the prospective school science teachers, in the field of chemistry.

This chemistry practical course carries 20 marks.

Objectives

After the completion of this course, the prospective teachers will be able to:

a. idenfity unknown salt mixtures into respective cations & anions;
b. prepare standard solutions of the given substances;
c. standardise the given solution volumetrically;
d. determine the percentage purity of the given substance volumetrically;
e. detect elements & functional groups in the goven organic compounds;
f. identify the supplied carbohydrates;
g. perform tests for proteins & facts;
h. perform organic compounds;
i. Perform chromatographic analysis;
j. Prepare report on a field trip.

Contents

1. Qualitative analysis of mixture of two unknown salts containing the following anions & cations Cl^-, Br^-, I^-, Co_3^-, So_4^{--}, No_3^-, Pb^{++}, Cu^{++}, Fe^{+++}, Al^{+++}, Ni^{++}, Zn^{++}, Ca^{++}, Mg^{++}

2. To standardise the given Potassium permangnate solution with standard oxalic acid solution

3. To standardise the given sodium thiouslphate solution with the helop of standard potassium dichromate solution

4. To determine the percentage purity of calcium carbonate in the given marble sample volumetrically

5. Detection of elements & functional groups in an organic compound. Functional groups may include Aliphatic carboxylic acid, Aldehyde & Ketones; Phonol, Aromatic acids, aldehydes, Ketones and amine, and carbohydrates.

6. Identification of carbohydrates which may include glucose, fructese, sucres, starch.

7. Tests for proteins and fats.

8. Preparation of organc compounds
   a. Acetyl Salicylic acid (Aspirin)
   b. Phenolpthalein

9. Chromatographic analysis (T.L.C.) of colored Pigments in plant loaves, flowers & writing inks;

10. Field trip- sugar Industry / other related chemical industry.

Recommended Books

S.P. Dhoubhadel, K.P. Pradhan & S.M. Joshi, Chemistry practical Guide.

N.K. Vishnoi, Advanced Practical Organic Chemistry

N.B. Students are required to submit record of practical works for evaluation.

भाषाविज्ञान र नेपाली भाषा

प्रथमपत्र — पूर्णाङ्क: १००
सैद्धान्तिक

यो पाठ्यांश भाषाविज्ञानसम्बन्धी विभिन्न कुराको सामान्य परिचयका साथै नेपाली भाषाको विशेष परिचयका लागि राखिएको हो ।

उद्देश्य

क. भाषाका विशेषता र उपयोगिता बताउन,
ख. भाषाविज्ञानका क्षेत्र र शाखाको सामान्य परिचय दिन,
ग. भाषाका उच्चारण व्यवस्था र लेख्यव्यवस्थासम्बन्धी सामान्य जानकारी दिन,
घ. वाक्यविज्ञान, रूपविज्ञान र अर्थविज्ञानको सामान्य परिचय दिन,
ङ. नेपाली भाषाको सन्दर्भमा पदभेद र तिनका कार्यहरू बताउन,
च. नेपाली भाषाको शब्दनिर्माण प्रक्रियाअनुसार विभिन्न किसिमका शब्दहरूको निर्माण गर्न,
छ. नेपाली भाषाका वाक्यनिर्माण र वाक्यान्तरण प्रक्रियाको विशेष जानकारी दिन,
ज. नेपाली भाषाका मौखिक र लिखित प्रयोग एवं प्रस्तुतीकरणसम्बन्धी विविध रूपको परिचय दिन,
झ. नेपाली भाषाको उत्पत्ति, विकासक्रम र यसको वर्तमान स्थितिको वर्णन गर्न ।

पाठ्यविषयको विवरण:

एकाइ एक: भाषा र भाषाविज्ञानको परिचय

१. भाषाका विशेषता
२. भाषा, भाषिका र व्यक्तिभाषा
३. भाषाको अध्ययन र यसको उपयोगिता
४. भाषाविज्ञान र यसको क्षेत्र

एकाइ दुई: भाषाविज्ञानसंग सम्बन्धित शाखाहरूको सामान्य परिचय

१. समकालिक भाषाविज्ञान र कालक्रमिक भाषाविज्ञान

२. तुलनात्मक भाषाविज्ञान र व्यतिरेकी भाषाविज्ञान
३. सैद्धान्तिक भाषाविज्ञान र प्रायोगिक भाषाविज्ञान
४. सामाजिक भाषाविज्ञान
५. मनोभाषाविज्ञान

एकाइ तीन: ध्वनिविज्ञान र वर्णविज्ञान

१. ध्वनिविज्ञान
   क. ध्वनि अवयव र श्वासप्रवाह
   ख. स्वर र व्यञ्जन ध्वनिहरूको उच्चारण प्रक्रिया तथा वर्गीकरण
२. वर्णविज्ञान
   क. वर्णसिद्धान्त: व्यतिरेक, परिपूरक वितरण र मुक्त परिवर्तन
   ख. वर्णभेद: खण्डीय वर्ण, (स्वर, व्यञ्जन), खण्डेतर वर्ण (मात्रा, अनुनासिकता, बलाघात, सुर) र अक्षर
३. कथ्य र लेख्य भाषाका विशेषता तथा भिन्नता ।

एकाइ चार: व्याकरण र अर्थविज्ञान

१. व्याकरण
   क. परिचय: व्याकरण र अर्थ, आधिकारिक (प्रस्तावित) व्याकरण र वर्णात्मक व्याकरण
   ख. रूपविज्ञान: रूप, संरूप र शब्द, व्युत्पादन प्रक्रिया र रूपायन प्रक्रिया तथा रूपसरणि
२. अर्थविज्ञान
   क. अर्थ र प्रसंग
   ख. अभिधामूलक अर्थ र लक्षणामूलक अर्थ

एकाइ पाँच: पदभेद वा शब्दवर्ग र तिनका कार्य

१. पदहरूको वर्गीकरण
२. नाम, र सर्वनामका प्रकार र तिनका कार्य
३. विशेषणका प्रकार र तिनका कार्य
४. क्रियाका प्रकार (काल र पक्ष) तथा भाव (अर्थ)
५. अव्ययका प्रकार र तिनका कार्य

एकाइ छः शब्दनिर्माण (व्युत्पादन) प्रक्रिया

१. उपसर्गद्वारा शब्दनिर्माण

निम्नलिखित तत्सम उपसर्ग र तिनका योगले बनेका शब्द र शब्दार्थको विस्तृत ज्ञान र अभ्यास - प्र, परा, अप, सं, अनु, अव, निस्, निर्, दुस्, दुर्, नि, अभि, प्रति, परि, आ, सु, उत्, वि, उप, अधि, अति ।

२. कृदन्तद्वारा शब्दनिर्माण

निम्नलिखित नेपाली र तत्सम कृत् प्रत्यय र तिनका योगले बनेका शब्द र शब्दार्थको विस्तृत ज्ञान र अभ्यास -

क. अन, अत, अनी, आ, आउ, आन, औना, आर, अन्ते, ती, एस, आदि ।

ख. ति, अक, एका, त, इत, अ, ई, अन, अण, उक, तव्य, अनीय, अणीय, य, न, आदि ।

३. तद्धितद्वारा शब्दनिर्माण

निम्नलिखित नेपाली र तत्सम प्रत्यय तथा तिनका योगले बनेका शब्द र शब्दार्थको विस्तृत ज्ञान र अभ्यास -

क. एटो, एली, एलो, औंटो, एरी, आरो, औंरो, औंरा, औंले, आरू, एल, अडी, आडी, इया, इयार, इयाँ, दार, ची, एत, यौली, आत, आन, आली, आइलो, अरी, तथा सर्वनाम तद्धितान्त र संख्यातद्धितान्त प्रत्यय आदि ।

ख. तर, तम, इय, ईय, ईण, य, इम, इमा, म, इक, इका, क, मान्, वान्, ची, ई (करण, भवन) आदि ।

४. समास र सान्धिक सन्धिद्वारा शब्द-निर्माण

क. नेपाली सामान्य शब्द र तत्सम शब्दका अव्ययीभाव, तत्पुरूष, कर्मधारय, द्विगु, द्वन्द्व र बहुव्रीहि तथा अलुक् (विभक्ति वा संयोजक लोप नहुने) समासको विस्तृत ज्ञान र अभ्यास ।

ख. समास भएका तत्सम शब्दमा हुने सन्धिसम्बन्धी नूल नियमहरू (गुण, वृद्धि, दीर्घ, हल् र विसर्गको ओकारसम्बन्धी)

५. नेपाली भाषाका अनुकरणात्मक शब्दको विस्तृत ज्ञान र अभ्यास

६. नामधातुद्वारा शब्दनिर्माण - नाम, विशेषण, अव्यय र अनुकरणात्मक शब्दबाट बनेका धातु र मिलित क्रिया

७. नेपाली द्वित्व प्रक्रियाको ज्ञान र अभ्यास - जस्तैः नामबाट - छोरा छोरा, घरैघर, सर्वनामबाट - जो जो को को विशेषणबाट - रातैराता, कालैकाला, क्रियाबाट - जान्छ जान्छ, अव्ययबाट - पछिपछि, परपर, अनुकरणात्मक शब्दबाट - सरसर, सन्याकसुरुक, स्वाँ स्वाँ आदि ।

एकाइ सातः वाक्यनिर्माण प्रक्रिया

१. वाक्यका उद्देश्य र विधेय तथा तिनको विस्तार

२. व्याकरणात्मक धाराहरू

३. संगति (मेल) र शासन (विभक्ति नियम सरल र तिर्यक् कारक समेत),

क. सामान्य र आदरार्थी वाक्यमा पदहरूको लिङ्ग, वचन र पुरुषको मेल वा संगति ।

ख. वाक्यमा आएका कारक - विभक्तिहरू (ले, लाई, आदि) र यिनका सरल तथा तिर्यक्रूपको ज्ञान र प्रयोग गर्ने अभ्यासः उदाहरणार्थ; सेतो घोडा, सेता घोडाले, भएकाले, जानाले, खानासाथ, यस कूराले आदि ।

४. वाक्यमा पदक्रम

५. पद, पदावली, उपवाक्य, वाक्य र समग्र कथन

६. वाक्यका प्रकार (सरल, संयुक्त, मिश्र र मिलित वाक्यहरू) को विस्तृत ज्ञान र अभ्यास ।

एकाइ आठः वाक्यान्तरण प्रक्रिया

१. कर्तृ, कर्म र भाववाच्य
२. करण र अकरण
३. वाक्य संश्लेषण
४. वाक्य विश्लेषण (वाक्यखण्डको उपवाक्यका बीचको पारस्परिक सम्बन्ध समेत देखाउने)
५. उक्तिपरिवर्तन (प्रत्यक्ष कथनलाई अप्रत्यक्ष कथनमा बदल्ने)

एकाइ नौः विभिन्न प्रसंगका नेपाली भाषिक रूपको परिचय

१. मौखिक भाषा प्रयोगमा हुने विविध रूपको पहिचानः औपचारिक, अनौपचारिक । स्तरीय, सामान्य ।
२. लिखित भाषा प्रयोगमा हुने विविध रूपको पहिचान - समाचार, चिठ्ठी, निवेदन, विश्लेषण, साहित्य आदि ।
३. विभिन्न भाषाबाट प्रभावित नेपाली भाषाका रूपको विवेचन - संस्कृत, अंग्रेजी, हिन्दी ।
४. विभिन्न विषयका प्रस्तुतीकरणमा प्रयुक्त नेपाली भाषाका विशिष्ट शब्दावली तथा वाक्यगठनको अध्ययन (माध्यमिक तहका विज्ञान, गणित, शिक्षा, भूगोल, नागरिक जीवन, स्वास्थ्य र शारीरिक शिक्षा, व्यावसायिक शिक्षा आदि ।

एकाइ दशः नेपाली भाषाको उत्पत्ति, विकासक्रम तथा यसको वर्तमान स्थिति

१. नेपाली भाषाको उत्पत्ति र विकासक्रमको संक्षिप्त परिचय
२. नेपाली भाषाका भाषिका तथा उपभाषिका
३. नेपालका भाषाहरू र राष्ट्रभाषाको रूपमा नेपाली भाषाको नेपालका अन्य भाषाहरूसंग सम्बन्ध
४. नेपाली भाषाको स्तरीकरण र क्षमता विस्तारका निम्ति प्रयत्न
क. हलन्त बहिस्कार आन्दोलन

ख. चन्द्रिका व्याकरणको प्रकाशन तथा भाषा-प्रकाशिनी समितिको गठन

ग. नेपाली भाषामा पत्रपत्रिका र पुस्तकहरूको प्रकाशन

घ. भर्खैवादी आन्दोलन तथा संस्थागत तथा वैयक्तिक प्रयत्नहरू

पाठ्य एवं सहायक पुस्तक

१. चूडामणि बन्धु, भाषाविज्ञान, साझा प्रकाशन ।

२. चूडामणि बन्धु, नेपाली भाषाको उत्पत्ति, साझा प्रकाशन ।

३. बालकृष्ण पोखरेल, राष्ट्रभाषा, (दोस्रो संस्करण) साझा प्रकाशन ।

४. बालकृष्ण पोखरेल, नेपाली भाषा र साहित्य, रत्न पुस्तक भण्डार ।

५. बालकृष्ण पोखरेल, पाँच सय वर्ष, साझा प्रकाशन

६. सोमनाथ शर्मा, मध्यचन्द्रिका, पुस्तक संसार, विराटनगर ।

७. मोहनराज शर्मा, शब्दरचना र वर्णविन्यास, त्रि.वि. पाठ्यक्रम विकास केन्द्र ।

८. कृष्णप्रसाद पराजुली, राम्रो रचना मीठो नेपाली, सहयोगी प्रकाशन, काठमाडौं ।

९. ताना शर्मा, नेपाली साहित्यको इतिहास, सहयोगी प्रकाशन, काठमाडौं ।

१०. रोहिणीप्रसाद भट्टराई, बृहत् नेपाली व्याकरण, ने.रा.प्र.प्र., काठमाडौं ।

११. त्रि.वि. पाठ्यक्रम विकास केन्द्र, अनिवार्य नेपाली शिक्षण निर्देशन, (व्याकरण खण्ड० २०३६ ।

१२. जनक शिक्षा सामग्री केन्द्र, माध्यमिक विद्यालयका विभिन्न विषयका पाठ्यपुस्तकहरू, २०२८ ।

ECONOMIC THEORY

Full Marks: 100
Theory

This is an introductory course designed to acquaint students with the theory of demand, price-output determination in various market structures. A brief summary of macro-economic analysis and macro-economic problems like unemployment and inflation. It also includes an elementary study on Money, Banking and Public Finance.

Objectives

After the completion of this course, the prospective teachers will be able to :

a. explain the theory of demand via utility analysis and indifference curve analysis;
b. explain the process of price-output determination in various market structure.
c. explain the theories of Rent, Wages, Interest and profit;
d. state and explain the Keynesion theory of Income and Employment.
e. analyse the causes of unemployment and inflation and suggest possible remedies;
f. describe the functions of money and explain the index number and the quantity theory of Money; and
g. explain the principle and scope of public finance.

Contents

Part I

UNIT I. Introduction

1. Main problems in Economics - Scarcity, Growth and Distribution.

2. The Split between Micro and Macro economics

UNIT II. Micro-Economic Theory

1. Theory of Demand
   a. Utility analysis - the Concept of marginal utility, Law of diminishing marginal utility and law of equi-marginal utility.
   b. market demand and supply - the market demand curve, the market supply curve and Law of Demand
   c. Elasticity of demand-meaning, price, income and cross elasticity and measurement of elasticity
   d. Indiference curve Analysis - meaning and properties of indifference curve, consumer's equilibrium and derivation of demand Curves.

2. The Law of variable proportion

3. Equilibrium of firm and industry - the concept of cost, fixed and variable costs, total, average and marginal cost, short run and long run cost curves. The concept of revenue, total, average and marginal revenue, equilibrium of firm and industry.

4. Market structures - Perfect Competition - features and price output determination; Monopoly - features and price-output determination; Monopolistic Competition - features and price output determination; Oligopoly - features and price - output determination.

5. Theories of Dirstribution
   Rent-Ricardian and Modern Theory of Rent, Quasi Rent, Wages - Marginal productivit theory and Modern theory.
   Interest - classical theory, Loanable fund theory, Liquidity perference theory, Keynesian theory and modern theory;

Profit - Risk bearing theory and uncertainty bearing theory.

UNIT III. Micro-Economic Analysis

1. The concepts of National Income - GNP and NNP

2. Keynesian Theory of Income and Employment

3. Determinants of Income and Employment - propensity to consume and Inducement to invest

4. The concept of multipliar and Accelarator

UNIT IV. Macro-Economic Policy and Problems

1. Unemployment - Symptoms, types and remedies

2. Inflation - causes, effects and remedies

3. Trade cycle - Meaning, phases and characteristics.

Part II

UNIT V. Money and Banking

1. Nature, Function and Forms of Money

2. Index Numbers (Simple & Weighted) and the Quantity theory of Money and the Cambridge Equation

3. Evolution and kinds of banks

5. Functions of commercial banks and central banks

UNIT VI. Public Finance

1. Nature, Role and principle of public finance

2. Principles and classification of public Expenditure

3. Sources of public revenue, principles and classification of taxes, shifting and incidence of taxes

4. Nature and classification of public Debt.

Recommended Books

Ahuja, H.C. Advanced Economic Theory: Micro Economic Analysis

Gupta, K.R. Macroeconomics

Lipssy, R.G. An Introduction to position Economics

Stanien, A.W. and Hague, D.C. A Text Books of Economic Theory

Watson, D.S. Price Theory and Its Uses

Samulson, P.A. Economics

Dweet, K.K. Modern Economic Theory

Growther, G. An Outline of Money

Vaish, Monetary Theory

Sayrs, R.S. Modern Banking

Dekock. Central Banking

Mehta, Public Finance

Mukerjee, S. Principles of Public Finance.

ECONOMICS OF DEVELOPMENT AND PLANNING

Full Marks : 100
Theory

This course aims at acquainting students with the basic problems of and measures for economic development together with the strategies of economic planning for development.

Objectives

After the completion of this course, the prospective teachers will be able to:

a. explain the meaning of economic development and identify its indicator;
b. describe the characteristics of underdeveloped countries and identify the basic requirements in economic development;
c. identify and analyse the measures for economic development;
d. describe the characteristics of development plan and identify and analyse the strategies of planning for development.

Content

UNIT I. Basic problems of Economic Development

1. Meaning of economic development

2. Indicators of economic development

3. Characteristics of under-developed countries economic characteristics, demographic characteristics, technological characteristics, and socio-cultural and political characteristics.

4. Basic requirements in economic development- indigenous base, removal of market inperfections, structural changes, capital formation, investment criteria, natural and

human resources, technological growth and socio-cultural requirements, changes in cultural attitudes, social values and institutions and political and administrative set-up.

UNIT II. Theories of Economic Development

1. Rostow's stages of economic growth
2. Classical theory of economic development
3. Marxian theory of economic development
4. Keynesian theory of economic development
5. Lewis' theoory of unlimited supplies of labour

UNIT III. Measures of Economic Development

1. Capital formation - meaning, role, sources, process and capital - output ratio
2. Monetary policy - meaning, role, objectives and instruments
3. Fiscal policy - meaning, role, objectives and instruments - taxation, deficit financing and public borrowing
4. Human capital - meaning, importance, criteria of investment in human capital
5. Foreign trade - meaning and role
6. Foreign capital - meaning, importance and problems
7. Role of public enterprises

UNIT IV. Development Planning

1. Development planning - meaning and need of economic planning and characteristics of a development plan;

2. Planning strategies -choice of techniques (Labour -balanced vs. unbalanced growth approach;

3. The concept of regional planning.

Recommended Books

Higgins, B. Economic Development: problem, principles.

Lewis, W.A. The theory of Economic Growth

Meir, G.M. Leading Issues in Economic Development

Singh, D.S. Economic Development

Jhingan, M.L. The Economic & Development and Planning

Lewis, W.A. Development Planning

REGIONAL GEOGRAPHY

Full Marks: 100
Theory

This course is designed to provide the student - teachers with a general background of the Geography of Asia and Europe together with the regional account of the Geography of Anglo-America. It devotes forty percent of the time to the regional accounts of Anglo-America and the remaining sixty to the Geography of Asia and Europe.

Objectives

After the completion of the course, the student teachers will be able to :

a. describe the geographical environment of Asia , Europe and Anglo-America;
b. identify & explain the major natural resources of Asia, Europe and Anglo-America
c. point out and describe the major economic activities of Asia, Europe and Anglo-America;
d. explain the relationship between environment and the people of Asia, Europe and Anglo-America;
e. describe the nature, characteristics and problems of different regions of Anglo-America.

Content

Part I: Asia

UNIT I. Structure and Physiography

UNIT II. Climate

1. Factors of climate
2. Climatic conditions
3. Climatic regions

UNIT III. Natural Resources

1. Mineral resources - problems of mineral exploitation

2. Power resources - production and distribution of Coal, Mineral Oil and Hydro-electricity.

UNIT IV. Agriculture

1. Characteristics of agriculture

2. Ecological condition and distribution of major agricultural crops - rice, tea, cotton and rubber

UNIT V. Industry

1. Production and distribution of iron and steel and cotton textile industry
2. Problems of industrialization

UNIT VI. Transportation

1. Railway transportation

UNIT VII. Population

1. Factors of population distribution

2. Growth, distribution and density pattern of population

3. Trends and problems of population

Part II: Europe

UNIT VIII. Structure and Physiography

UNIT IX. Climate

1. Factors of climate
2. Climatic conditions
3. Climatic regions

UNIT X. Power Resources

1. Production and distribution of coal & hydroelectricity

UNIT XI. Agriculture

1. Viticulture with special reference to France

2. Dairy farming with special reference to Denmark and Netherlands.

UNIT XII. Industry

1. Production and distribution of Iron and steel industry

UNIT XIII. Transportation

1. Railway transportation
2. Inland water transportation

UNIT XIV. Population

1. Growth, distribution and density pattern of population

2. Trends and problems of population

Part III: Regional Study of Anglo-America

UNIT XV. Physiography

UNIT XVI. Climate

1. Climatic factors
2. Climatic conditions
3. Climatic region

UNIT XVII. Natural Resources

1. Soil resources

UNIT XVIII. Agriculture

1. Agricultural belts

UNIT XIX. Population

UNIT XX. The Basis of Regional Division

UNIT XXI. Detailed study of Selected Regions related to

(N.E. Anglo-America, Atlantic coastal plain and piedmont Region, Cotton Belt Region, Agricultural Interior and Pacific Coast)

1. Resources-study of major minerals & power resources and associated problems

2. Agriculture - nature and characteristics of major farming and associated problems

3. Industry - study of major industries and associated problems.

4. Transportation - distribution of major means of transportation and associated problems

5. Population - growth, distribution & trends of population and associated problems.

Recommended Books

Carnish, W.B. Modern Geography : Asia

Cressey. Asia's Land and People

Stamp, Dudley. Asia

Singh, L.D. Asia

Robinson. Monsoon Asia

Coysh and Hund. Modern Geography: Europe

Gottman. Geography of Europe

Shackleton. Europe

Jones & Brayan. North America

Smith, J. Russel & Phillips, M. Odden. North America

Taylor, Griffith. Canada

Watson, J. Wreford. North America

White & Night. Regional Geography of Anglo-America

Robinson. North America

SYSTEMATIC GEOGRAPHY

Full Marks: 100
Theory

This course is designed to provide the student teachers with a comprehensive knowledge of the physical, human and economic aspects of geography. It devotes forty percent of the total time to the physical geography and the remaining sixty to the human and economic ones.

Objectives

After the completion of this course, the prospective teachers will be able to:

a. describe the origin, structure, face and features of the earth;
b. describe the distribution of the major economic activities of the world;
c. examine the nature of relationship between man and environment.

Content

Part I : Physical Geography

UNIT I. Scope and Importance of Physical Geography

UNIT II. Selected Hypotheses on the origin of the earth

Kant & Laplace, Chamberlin & Moulton, Jeans & Jeffreys, H.N. Russel & R.A. Lyttleton, F. Hoyle, C. Von Weit Zsacker & A. Ottoschmidt.

UNIT II. Structure of the Earth

UNIT IV. Location of a place - Latitude and Longitude

UNIT V. Diastrophism - Landforms associated with Diastrophism

UNIT VI. Mountain Building and Associated Theories

1. Theory of Isostasy
2. Theory of Continental Drift
3. Theory of Geosyncline

UNIT VII. Rocks

1. Formation & Characteristics
2. Role of rock in the evolution of landscape

UNIT VIII. Study of Important processes leading to the formation and evolution of:

1. Fluvial topography
2. Glacial topography
3. Arid topography

UNIT IX. Climate

1. Air masses and fronts

2. Classification of climate (Koppen's and Thornewait's)

UNIT X. Soil

1. Characteristics and world distribution of major soil groups.

UNIT XI. Vegetation

1. Characteristics and world distribution of major vegetation groups.

UNIT XII. Ocean

1. Ocean deposits
2. Coral reef

Part II Human Geography

UNIT XIII. Introduction to Human Geography

UNIT XIV. Development of Human Geography

Contribution made by A.V. Humbolt, Karl Ritter, F. Ratzel, Allen Semple, Vidal dela Blache, Jean Brunhes & Isaiah Bowman.

UNIT XV. Man and Environment - The Nature of Relationship between Man and His Environment

UNIT XVI. Human Activities - Human Activities in different Environments with Special Reference to:

1. Hot desert region
2. Cold desert region
3. Equatorial region
4. Monsoon region

UNIT XVII. Population

Growth, distribution, density pattern and migration of world population.

UNIT XVIII. Settlement

1. Functional and morphological characteristics of rural and urban settlement

2. Christaller's theory on the location of settlement

Part III: Economic Geography

UNIT XIX. Meaning, Field and Approaches to Economic Geography

UNIT XX. Geography of Agriculture

1. Distribution and nature of
   a. Primitive farming
   b. Subsistence intensive cultivation
   c. Comercial grain farming

2. Von Thunan's theory on the location of agriculture

UNIT XXI. Geography of Natura Resources

1. Mineral resources
   a. Factors influencing the exploitation of mineral resources

2. Power resources
   a. Distribution and future of coal, mineral oil, hydro-power and nuclear energy

UNIT XXII. Geography of Manufacturing

1. Factors of industrial location

2. Weber's theory on the location of industry

3. World distribution and changing location of iron and steel, cotton textile and petro-chemical industry

UNIT XXIII. Geography of Transportation

1. Inland water transportation.

Recommended Books

Chatterjee, S.K. Physical Basis of Geography

Lake, P. Physical Geography

Holmes, Arthur. Principles of Physical Geography

Wooldriege, S.W. and Morgan, R.S. An Outline of Geo-morphology

Thurnbury. Principles of Geomorphology

Singh, Sabindra. Bhu Akriti Bigyan

Barry and Charly. Atmosphere, Weather and Climate

Miller, Austin, Climatology

Steers, J.A. The Unstable Earth

Worcester. Text Book of Geomorphology

Huntington, Ellsworth. Principles of Human Geography

Money, D.L. An Introduction to Human Geography

Perpillon, A.V. Human Geography

Dubey, R.N. Economic Geography

Robinson. Economic Geography

Robinson. Human Geography

MODERN NEPAL

Full Marks : 100
Theory

This course deals with the development and growth of modern Nepal from Prithivinarayan Shah to the downfall of the Ranas.

Objectives

After the completion of this course the prospective teachers will be able to:

a. analyse the socio-economic and political conditions of Nepal and explain the circumstances leading to the rise and growth of the Gorkha State;
b. identify the contribution of various personalities to the territorial expansion of Nepal and explain the intrigues and strifes following the second phase of unification;
c. analyse the foreign relations of Nepal under Prithivinarayan Shah and Bhimsen Thapa;
d. state and analyse the causes, courses and effects of different wars;
e. examine the political conditions of Nepal from 1839 to 1846;
f. analyse and explain the rise & growth of the Ranas;
g. examine the internal & foreign relation of the Ranas;
h. describe the causes of the downfall of the Rana Regime

Contents

UNIT I. Pre-Unified Nepal

1. Socio-economic and political conditions of the Kathmandu valley.
2. Socio-economic and political conditions of the Baisi & Chaubisi principalities;

3. Founding and Rise of Gorkha State

UNIT II. Unification - First Phase

1. Prithvinarayan Shah and his conquests
2. Prithvinarayan Shah and Trans-Himalayan Trade
3. Prithvinarayan Shah's relation with Chaubisi States (1744-1774)
4. Prithvinarayan Shah's relation with the British India
5. Estimate of Prithvinarayan Shah's achievements

UNIT III. Unification - Second Phase

1. Pratap Singh Shah and his relation with Bahadur Shah
2. Rajendra Laxmi and her achievements
3. Rajendra Laxmi's conflict with Bahadur Shah
4. Bahadur Shah and his achievements
5. Anglo-Nepal relations (1775-1792)
6. Causes, courses and Effects of Nepal-Tibet-China War (1788-92)
7. Bahadur Shah's fall & his contributions

UNIT IV. Internal Intrigues and Strifes

1. Rana Bahadur Shah as a King.
2. Abdication of Rana Bahadur Shah

3. Captain Knox Mission to Nepal and its failure

4. Rana Bahadur Shah's return to Nepal & its consequences

UNIT V. Unification - Third Phase

1. Bhimsen Thapa's Rise
2. Anglo-Nepalese Relation (1803-1814)

UNIT VI. Anglo - Nepal War (1814 - 16)

1. Causes
2. Courses of War
3. Effects of War

UNIT VII. Aftermath of the War

1. Nepal-China Affair (1816)
2. Nepal's involvement with Indian states
3. Bhimsen Thapa's Reforms
4. Downfall of Bhimsen Thapa

UNIT VIII. The Period of Confusion and Chaos (1839-1846)

1. Character of Rajendra Vikarm Shah
2. Involvement of Queens in Politics
3. Rise and fall of Mathbar Singh Thapa
4. Influence of Gagan Singh in Nepal's politics
5. Anglo - Nepal relations

UNIT IX. Establishment of Rana Regime-Jung Bahadur

1. Jung Bahadur's Rise and Career
2. Jung Bahadur's relation with Tibet
3. Jung Bahadur's relation with East-India Company
4. Lakhan Thapa's uprising

5. Jung Bahadur's Reforms and achievements

UNIT X. Internal Strifes and Intrigues - Ranaudip Singh

1. Ranaudip Singh's relation with his relatives
2. 38 Sal Parva
3. Ambitions of Dhir Shamsher
4. Ranaudip's relation with British India

UNIT XI. Bir Shamsher

1. Rise, internal & external policies
2. Reforms

UNIT XII. Failure of the Liberal Experiment - Dev Shamsher

1. Reforms
2. Fall

UNIT XIII. Consolidation of Rana Regime - Chandra Shamsher

1. Internal and external policies
2. Reforms
3. Estimate

UNIT XIV. Bhim Shamsher

1. Internal reforms and intrigues

UNIT XV. Padma Shamsher

1. Internal conditions
2. His efforts for liberal experiment and failure

UNIT XVI. Juddha Shamsher

1. Internal politics
2. Relation with the British India
3. Reforms

UNIT XVII. Mohan Shamsher and Downfall of Rana

1. Mohan's efforts to consolidate his Regime
2. His fall

UNIT XVIII. National Awakening

1. Arya Samaj and its efforts
2. Nepal Praja Parishad & its contribution
3. Nepali Congress & its contribution
4. Revolution in Eastern and Western parts of Nepal
5. Revolution in the Kathmandu Valley
6. King Tribhuvan's Role in overthrowing the Ranas.

Recommended Books

Acharya, Baburam. Nepal Ko Samkshipta Brittant

Nepali, Chittarangan. General Bhimsen Thapa Ra Tatkalin Nepal

Nepali, Chittaranjan. Sri Panch Rana Bahadur Shah

Sharma, Balchandra. Nepal Ko Itihashik Ruprekha

Jain, M.S. Emergence of a New Autocracy in Nepal

Jung, Padma: Life of Maharaja Sri Jung Bahadur of Nepal

Reference

Acharya, Baburam. Sri Panch Bara Maharajadhiraj Prithivinarayan Shah Ko Samkshipta Jivni, 4 Vols.

Chaudhari, K.C. Anglo-Nepalese Relations from the Earlist Times of the British Rule in India till the Gurkha War

Hasrat, Bikram Jit. History of Nepal : As told by its own Contemporary Chroniclers

Hamilton, Erancis Buchanan. An Account of the Kingdom of Nepal

Ramakant. Indo-Nepalese Relation

Rose, Leo E. Nepal : Strategy for Survival

Stiller, Ludwing F. The Rise of the House of Gorkha

Stiller, Ludwing F. The Silent Cry

Husain, Asad: British Government's Relations with the Kingdom of Nepal.

Kant, Rama. Anglo-Nepalese Relations (1817-77).

Majumder, K. Anglo-Nepalese Relations in the 19th Century.

Prasad, Ishwari. The Life and Times of Maharaja Judha Shumsher Jung Bahadur Rana of Nepal

London, P. Nepal 2 Vols.

INDIA UNDER BRITISH REGIME

Full Marks : 100
Theory

This course intends to acquaint the prospective teachers with the size, growth and fall of British Rule in India.

Objectives

After completion of this course, the prospective teachers will be able to:

a. identify and explain the factors responsible for the disintegration of the Mughal Empire in India;
b. state and explain the circumstances leading to the rise and growth of the British Rule in India;
c. analyse the Anglo-Maharatha and Anglo-Sikh political relations, and the causes and effects of wars between them;
d. state and analyse causes, effects and nature of the Indian Sepoy Mutiny of 1857;
e. identify the causes of the failure of the Sepoy Mutiny and explain Nepals involvement in it;
f. describe the socio-economic and political movement from 1858 to 1947.
g. identify the policies pursued by some of the governor generals and viceroys towards the Indian states;
i. describe major reforms attempted during the British Rule in India.

Content

UNIT I. Disintegration of Mughal Empire.

1. Character of the latter Mughal Nobility
2. Fueds and Factions
3. Foreign invasions
4. Rise of new states

UNIT II. Rise of British Hegemony

1. Role of Clibe in founding the British Empire

2. Carnatac wars and their results

3. Battle of Plassey and Buxar, and their results and significance.

UNIT III. Major Events

1. Anglo-Mysore wars - causes and effects.
2. Anglo-Maratha wars - causes and effects;

UNIT IV. Lord Hastings

1. The charter Act of 1813
2. Administrative reforms.

UNIT V. Lord William Bentinck

1. His social and Educational reforms
2. The charter Act of 1833
3. Relation with the Indian states
4. Raja Ram Mohan Roy and Brahma Samaj

UNIT VI. Anglo-Sikha Relations

1. Rise of Raja Ranjit Singh
2. Anglo-Sikh relations

UNIT VII. Dalhousie

1. The second Anglo-Sikh war
2. Annexation of the Punjab
3. Anglo-Burmese Pol. Relations

UNIT XIII. Sepoy Mutiny of 1857

1. Nature
2. Causes

3. Effects

UNIT IX. Lord Lytton

1. The internal policy
2. Frontier Policy

UNIT X. Lord Ripon

1. Local self government
2. Financial decentralization
3. Educational Reform

UNIT XI. Lord Dufferin

1. Internal reforms
2. Third Burmese war

UNIT XII. Lord Curzon

1. Internal Administration
2. Curzon - Kitchner controversy
3. The North-West frontier policies
4. Relations with Tibet

UNIT XIII. The Sruggle for Freedom

1. Growth of Nationalism
2. The Non-cooperation and the Civil Disobedience movement.
3. The struggle for freedom - the final phase (1935-1947)

Recommended Books

Manandhar, Ram Bhakta. British Kalin Bharat Ko Adhunik Itihasa

Mahajan, V.D. British Rule in India and After

Prasad, Iswari. India in the Eighteenth Century

Reference Books

Fraler, R.W. British India

Chhabra, G.S. Advanced Study in the History of Modern India

Gupta, D.C. Indian National Movement

Chaudhari, Mazumdar, & Dutta. Advanced History of India. Part III.

POLITICAL THEORY

Full Marks: 100

This course is designed for Students offering political science as a specialiation.

Objectives

After the completion of this course the prospective teachers will be able to:

a. Explain and analyse the basic ideas of prominent ancient and modern political thinkers;

b. Be familiar with the recent approaches of studying political science.

Contents

Part I

Unit I. Plato

1. Ideal state, justice and decision of labour, philosopher king, education and communism (property and family).

Unit II. Aristotle

1. Family and property.
2. Citizen and slave.
3. Constitution and its kinds.
4. Ideal state.

Unit III. Kautilya

1. State and its elements (Saptang theory).
2. The king.
3. Education for the prince.
4. Inter-state relationship.

Unit IV. Machiavelli

1. Machiavelli as a product of the environment.
2. Theory of Human motive.
3. Political ideas - (state, sovereignty, monarchy, republicanism and nationalism).
4. Morality and religion.

Unit V. Thomas Hobbes

1. Scientiic Materialism.
2. Human Nature.
3. Laws of Nature.
4. State and Sovereignty.

Unit VI. John Locke

1. The contract and the state.
2. The functions of Government.
3. The forms of Government.
4. Natureal Right and Property.

Unit VII. Jean Jacques Roussoau

1. The nature.
2. Emergence of civil society.
3. General will.
4. The Necessity of Government and its forms.

Unit VIII. John Stuart Mill

1. Testatement of utilitarianism.
2. Individual liberty.
3. State and Government.

Unit IX. Karl Marx

1. ialectical Materialism.
2. Economic Interpretation of History.
3. Surplus value.
4. Class conflict.

Unit X. Lenin

1. Contributions of Lenin to Marxism.

Part II

Unit XI. Military in Politics
1. The political strengths and weaknesses of military.
2. The role of military in politics.

Unit XII. National Integration
1. Meaning of National integration.
2. Causes of National disintegration.
3. Ways to promote National integration.

Unit XIII. Behaviouralist Approach in Political Science
1. Meaning of Behaviouralism.
2. Characteristics of Behaviuralism.
3. Features of Behaviouralism.

Unit XIV. System Analysis
1. Meaning of system.
2. Difference between political system and other systems.
3. The concept of Boundary.
4. The relationship between political system and Environment.
5. The basic components of the system: input, output, conversion process, feedback and equilibrium.

Unit XV. Structural Functional Analysis
1. Meaning of political structure and function.
2. The concept of structural substitutability.
3. Types of function.
4. Functional requisites:

Unit XVI. Input Output Analysis

1. Meaning of input and output analysis.
2. Types of input and output.
3. The concepts of conversion process, stress, regulatory mechanism and feedback mechanism.

Unit XVII. Communication Theory

1. Reception system.
2. Decision making.
3. Flows and process-the concepts of channels, loads, load capacity, feedback, lag, gain and lead.

Unit XVIII. Distributive Analysis

1. Nation of power and influence.
2. Nature of values.
3. Value categories.
4. Decision making process and allocation of values.

Unit XIX. Political Culture

1. Meaning of political culture.
2. Classification of political cultures-parochials, subject, and participants.
3. Political sub-cultures.
4. Political socialization.
5. The relationship between political culture and political system.

Recommended Books

Sabine, C.H.: A History of Political Theory.
Suda, T.P.: A History of Political Thought.
Dunning: History of Political Thought.
Wayper: Political Thought.
Foster, M.B.: Master of Political Thought.
Verma, S.P.: Modern Political Theory.
Dahl Robert A.: Modern Political Analysis.
Asirva-dam E.: Political Theory.
Ake, C.: A Theory of Political Integration.
Pye, Lucian & Verba: Political Culture and Political Development.

INTERNATIONAL RELATION

Full Marks: 100

This course is designed for students offering political science as a specialization.

Objectives.

After the completion of this course the prospective teachers will be able to:

a. explain the theoritical aspects of International relations;
b. describe the origin, purpose, functions and role of U.N.;
c. state the objectives of Nepalese Foreign policy, her relations with other countries and her views on various international issues.

Contents

Part I

Unit I. National Power

1. The meaning of power.
2. The Elements of National power.

Unit II. The Balance of Power

1. The meaning of Balance of power.
2. Purpose and principles of Balance of power.
3. Bipolarism and multipolarism.

Unit III. Disarmament

1. The meaning of disarmament.
2. The purposes and principles of disarmament.
3. The problems of disarmament.

Unit IV. National Interest V.s. Global Responsibility

1. Importance of national interest.
2. Importance of global responsibility.
3. Ways to harmonize between the two.

Unit V. Technology and International Relations

1. The effect of technological development in internal relations.

Unit VI. Cold War

1. Meaning of cold war.

Unit VII. United Nations

1. Factors leading to the emergence of the United Nations.
2. Purposes & Principles of United Nations.
3. The role of United Nations in maintaining international peace and security.
4. Brief introduction to the function of the various organs of the united Nations.

Part II

Foreign Policy of Nepal

Unit VIII. Objectives and Principles of Nepal's Foreign Policy

1. Objectives-security and preservation of Independence Economic development, Nepal as a Zone of peace and world peace.

2. Principles-Non-Alignment and Panchasheel.

Unit IX. Nepal's Relation with the Following Countries After 1951

1. India, China and Japan.
2. United States, Soviet Russia and Great Britain.

Unit X. Nepal's Role in the Non-Aligned Movement.

Unit XI. U.N.O. and Nepal

1. Nepal's role in the United Nations.

Recommended Books

Shah, Rishikesh: Nepal and World.
Rose, Leo E.: Nepal Strategy for Survival.
Mihaly, E.B.: Foreign Aid and Politics in Nepal.
Khanal, Y.N.: From Isolation to Transition.
Macridis, Roy C.: Foreign Policy in World Politics.
Muni, S.D.: The Foreign Policy of Nepal.
Pradhan, Viswa: Foreign Policy and Diplomacy of Nepal.
Chakravarti, R.: The Comparative Study of Foreign Policy.
Shrestha, Sita: Nepal and United Nations.

नेपाली गद्य र नाटक

पूर्णाङ्क: १००
सैद्धान्तिक

द्वितीयपत्र

यो पाठ्यांश नेपाली साहित्यका कथा-उपन्यास, निबन्ध र नाटक- एकांकीको स्वरूप, विकासक्रम तथा प्रवृत्तिको विशेष जानकारीका लागि राखिएको हो ।

उद्देश्य

यस पाठ्यांशको अध्ययनबाट विद्यार्थीहरू निम्नलिखित कुराहरूमा समर्थ हुनेछन्

क. कथा-उपन्यास, निबन्ध र नाटक-एकांकीको स्वरूप बताउन,

ख. नेपाली कथा-उपन्यास, निबन्ध र नाटक-एकांकीको विकासक्रमको वर्णन गर्न,

ग. नेपाली कथा-उपन्यास, निबन्ध र नाटक-एकांकीको शैली एवं प्रवृत्तिको जानकारी दिन,

घ. विभिन्न दृष्टिले कथा-उपन्यास, निबन्ध र नाटक -एकांकीको विवेचना गर्न,

ङ. निर्धारित पाठ्यवस्तुका आधारमा प्रमुख कथाकार, उपन्यासकार, निबन्धकार, नाटककार एवं एकांकीकारहरूका विशेषताहरू ठम्याउन ।

पाठ्यविषयको विवरण

खण्ड "क" कथा-उपन्यास अङ्क: ५०

एकाइ एक: कथाको सैद्धान्तिक परिचय, विकासक्रम र पूर्ववर्ती कथाकारका कथाको अध्ययन ।

१. कथाको परिचय (परिभाषा, अङ्ग र वर्गीकरण)

२. नेपाली कथाको विकासक्रम (आख्यान परम्परा र आधुनिक नेपाली कथाको प्रारम्भ, विकासक्रम र मूलभूत प्रवृत्तिहरू)

३. पूर्ववर्ती प्रतिनिधि कथाकारका कथाहरूको विभिन्न (कथावस्तु, चरित्र, घटना, भाषाशैली

उद्देश्य वा विचार, परिवेश, शिल्प आदि)
दृष्टिकोणले अध्ययन तथा विवेचना :
गुरुप्रसाद मैनाली र उनको "अभागी" कथा
पुष्कर समशेर र उनको "स्वार्थत्याग" कथा
विश्वेश्वर प्रसाद कोइराला र उनको
"मधेशतिर" कथा ।

एकाइ दुई: उत्तरवर्ती कथाकारको कथाहरूको अध्ययन
निम्नलिखित कथाकारका कथाहरूको विभिन्न
दृष्टिकोणले अध्ययन र विवेचना:
भवानी भिक्षु - हारजित
गोविन्द गोठाले - चिन्हा
मदनमणि दीक्षित - ग्यास च्याम्बरको मृत्यु
विजय मल्ल - पाटन
इन्द्र राई - जयमाया आफू मात्र .....
दौलत विक्रम विष्ट - आँधी खोला
रमेश विकल - लाहुरी भैंसी
पोषण पाण्डे - भिनाजुको स्वीटर
ईश्वर वल्लभ - आरूको फूल
परशु प्रधान - बक्ररेखा

एकाइ तीन: उपन्यासको परिचय, विकासक्रम र
"मुलुकबाहिर" उपन्यासको अध्ययन

१. उपन्यासको परिचय (परिभाषा अङ्ग र वर्गीकरण)
२. नेपाली उपन्यासको विकासक्रम (प्रमुख मोड र प्रवृत्ति)
३. उपन्यासकार वाङ्देल र उनका प्रवृत्ति
४. विभिन्न दृष्टिकोणबाट "मुलुकबाहिर" उपन्यासको अध्ययन र विवेचन
५. उपन्यासको वैचित्र्यपूर्ण उक्ति र विशिष्ट सन्दर्भ पंक्तिहरूको अध्ययन ।

एकाइ चार: "पल्लो घरको झ्याल" र "शिरीषको फूल" उपन्यासको अध्ययन

१. उपन्यासकार गोविन्द गोठाले र उनका प्रवृत्ति
२. विभिन्न दृष्टिकोणबाट "पल्लो घरको झ्याल" उपन्यासको अध्ययन तथा विवेचना

३. उपन्यासकार पारिजात र उनको प्रवृत्ति
४. विभिन्न दृष्टिकोणबाट "शिरीषको फूल" उपन्यासको अध्ययन र विवेचना
५. उक्त दुवै उपन्यासमा प्रयुक्त वैचित्र्यपूर्ण उक्ति र विशिष्ट सन्दर्भ पंक्तिहरूको अध्ययन

एकाइ पाँच: "सुम्निमा" र "चपाइएका अनुहार" उपन्यासको अध्ययन

१. उपन्यासकार विश्वेश्वर प्रसाद कोइराला र उनको प्रवृत्ति
२. विभिन्न दृष्टिकोणले "सुम्निमा" उपन्यासको अध्ययन र विवेचना
३. दौलत विक्रम विष्ट र उनको प्रवृत्ति
४. विभिन्न दृष्टिकोणबाट "चपाइएका अनुहार" उपन्यासको अध्ययन र विवेचना
५. उक्त दुवै उपन्यासमा प्रयुक्त वैचित्र्यपूर्ण उक्ति र विशिष्ट सन्दर्भ पंक्तिहरूको अध्ययन ।

खण्ड "ख" निबन्ध

अङ्क: १०

एकाइ छ: नेपाली निबन्धको अध्ययन

१. निबन्धको सैद्धान्तिक परिचय
२. नेपाली निबन्धको विकासक्रम
३. निम्नलिखित निबन्धकारका निबन्धहरूको अध्ययन र विवेचना-
(मार्मिक पंक्तिहरूको व्याख्या समेत)

लक्ष्मी प्रसाद देवकोटा - कला र जीवन
बालकृष्ण सम - देशको
हृदयचन्द्रसिंह प्रधान - तसवीर
बदरीनाथ भट्टराई - देशप्रेम
केशवराज पिँडाली - खै खै
श्यामप्रसाद शर्मा - आइमाई साथी
कृष्णचन्द्रसिंह प्रधान - टाइफिट किरमिर
भैरव अर्याल - टाउको
शंकर लामिछाने - तारापुञ्ज, अन्धाको ब्रेल

बालकृष्ण पोखरेल - रूनेको केही विराम छैन

खण्ड "ग" नाटक-एकांकी अङ्क: ४०

एकाइ सात: नाटक-एकांकीको परिचय, विकासक्रम तथा पूर्ववर्ती एकांकीको अध्ययन

१. नाट्य-सिद्धान्तको परिचय
२. नेपाली नाटक र एकांकीको विकासक्रम (प्रमुख मोड तथा प्रवृत्ति)
३. निम्नलिखित दुई एकांकीको विभिन्न दृष्टिकोण (कथावस्तु, चरित्र, सम्वाद, परिवेश, विचार, भाषाशैली, नाटकीयता आदि) ले अध्ययन -
   क. एकांकीकार पुष्कर समशेर र उनको "लक्ष्यहीन" एकांकी
   ख. एकांकीकार सम र उनको "बोक्सी" एकांकी
४. उपर्युक्त दुई एकांकीका विशिष्ट पंक्तिहरूको अध्ययन

एकाइ आठ: उत्तरवर्ती एकांकीकारका एकांकीहरूको अध्ययन

१. निम्नलिखित एकांकीकारका एकांकी-हरूको विभिन्न दृष्टिकोण (कथावस्तु, चरित्र, सम्वाद, परिवेश, विचार, भाषाशैली, नाटकीयता आदि) . ले अध्ययन

   हृदयचन्द्रसिंह प्रधान - मरूभूमिका लेखक
   बदरीनाथ भट्टराई - गलहत्ती
   गोपालप्रसाद रिमाल - माया
   रुद्रराज पाण्डे - संघ चाहियो संघ
   गोविन्द गोठाले - युगको शिकार
   विजय मल्ल - सत्ताको खोजमा

२. उपर्युक्त एकांकीका विशिष्ट पंक्तिहरूको अध्ययन

एकाइ नौः "मुटुको व्यथा" नाटकको अध्ययन

१. नाटककार सम र उनका प्रवृत्ति

२. नाटकका तत्सम्बन्धी पूर्वीय तथा पाश्चात्य दृष्टिकोणबाट "मुटुको व्यथा" को अध्ययन र विवेचना

३. "मुटुको व्यथा" नाटकको वैचित्र्यपूर्ण उक्ति र विशिष्ट सन्दर्भ पंक्तिहरूको अध्ययन

एकाइ दशः "मसान" नाटकको अध्ययन

१. नाटककार गोपालप्रसाद रिमाल र उनका प्रवृत्ति

२. विभिन्न दृष्टिकोण (विचार, परिवेश, चरित्र, कथावस्तु, भाषाशैली नाटकीयता आदि) ले "मसान" नाटकको विवेचना

३. "मसान" नाटकका वैचित्र्यपूर्ण उक्ति र विशिष्ट सन्दर्भ पंक्तिहरूको अध्ययन

पाठ्यपुस्तक

१. साझा प्रकाशन, साझा कथा, साझा प्रकाशन, काठमाडौं ।

२. लैनसिंह वाङ्देल, मुलुकबाहिर, रत्न पुस्तक भण्डार, काठमाडौं ।

३. पारिजात, शिरीषको फूल, पुस्तक संसार, विराटनगर ।

४. गोविन्द गोठाले, पल्लोघरको झ्याल, साझा प्रकाशन ।

५. विश्वेश्वरप्रसाद कोइराला, सुम्निमा, प्रतिनिधि साहित्य प्रकाशन, काठमाडौं ।

६. दौलतविक्रम विष्ट, चपाइएका अनुहार, साझा प्रकाशन, काठमाडौं ।

७. साझा प्रकाशन, साझा निबन्ध ।

८. साझा प्रकाशन, साझा एकांकी ।

९. बालकृष्ण सम, मुटुको व्यथा, साझा प्रकाशन, काठमाडौं ।

१०. गोपालप्रसाद रिमाल, मसान, साझा प्रकाशन, काठमाडौं ।

सहायक पुस्तक

१. केशवप्रसाद उपाध्याय, साहित्य प्रकाश, साझा प्रकाशन, काठमाडौं ।
२. वासुदेव त्रिपाठी, विचरण, भानु प्रकाशन, काठमाडौं ।
३. ताना शर्मा, सम र सनका कृति, साझा प्रकाशन, काठमाडौं ।
४. ईश्वर बराल, झ्यालबाट, साझा प्रकाशन, काठमाडौं ।
५. ईश्वर बराल, सयपत्री, साझा प्रकाशन, काठमाडौं ।
६. साझा प्रकाशन, साझा समालोचना, ।
७. ताना शर्मा, नेपाली साहित्यको इतिहास, सहयोगी प्रकाशन, काठमाडौं ।
८. हिमांशु थापा, साहित्य परिचय, साझा प्रकाशन, काठमाडौं ।

