



St. Xavier's College, Kolkata
Department of Education

Theory and Practical papers

**FIRST SEMESTER
JULY TO DECEMBER
TOTAL MARKS 400**

Theory Papers – 300 marks

Paper – 1 (100 Marks)

Foundation and development of education in independent India.

First Half – (50 marks) Foundation of education

Second Half - (50 marks) Development of education in independent India.

Paper – II & III (200 Marks)

Pedagogical analysis of contents and methodology of teaching the school subjects. (Each candidate shall choose two school subjects from the following list.)

1. Bengali
2. English
3. Hindi
4. Geography
5. History
6. Life Science
7. Physical Science
8. Mathematics
9. Political Science

Practical Papers – 100 marks

Paper – IV 100 marks

Teaching Practical

(Each candidate shall have to execute two lessons, one each in the two method papers. Each lesson will carry 50 marks. Candidates will be examined in teaching practical jointly by an external & an internal examiner appointed by the Board of the department of Education, St. Xavier's College).

Marks will be distributed in the following manner.

- | | |
|---------------------------------------|----|
| 1. Voice, exposition, delivery | 10 |
| 2. Presentation with clear objectives | 10 |
| 3. Questioning | 10 |
| 4. Use of teaching aids | 5 |
| 5. Use of black board | 5 |
| 6. Student's participation | 5 |
| 7. Lesson Plan | 5 |

**Total Marks – 50
(For each method paper)**

SECOND SEMESTER

**JANUARY TO JUNE
TOTAL MARKS 600**

Theory papers - 300 Marks

- Paper – V** 100 Marks
Psychology of Learning & Instruction
First half – (50 marks) Psychology of Learning
Second half - (50 marks) Psychological bases of instruction
- Paper – VI** 100 Marks
Educational Management
First half - (50 marks) Institutional management
Second half – (50 marks) Management of Man Power resource
- Paper – VII** 100 Marks
Compulsory Elective Paper
(Each candidate shall select one of the following two subjects)
1. Guidance & Counselling
2. Measurement & Evaluation in Education

Practical Paper – 300 marks

- Paper – VIII** 100 marks
Demonstration of Laboratory practical and / or simulated lesson
(Each candidate will be examined jointly by one external and one internal examiner for demonstration of laboratory practical and or simulated lesson in the following manner.)
- Alternative 1 - For the students with two laboratory based subjects for papers II & III. The students will demonstrate two experiments one each from two subjects and each experiment will carry 50 marks.
- Alternative 2 - For the students with one laboratory based subject and one non-laboratory based subjects for papers II & III. The students will demonstrate one experiment from the lab based subjects and execute one simulated lesson from the not lab based subject and each of these activities will carry 50 marks each.

The topic for simulated lesson will be suggested on the spot by the examiners.

- Paper – IX** 100 marks
Sessional activities related to Pedagogical Analysis for teaching :
- a. Pedagogical analysis of contents – 15 marks for each. The student will have to prepare 3 pedagogical analysis from each method paper:-
1. 1 from Class VI to VIII

2. 1 from Class IX to X
3. 1 from Class XI to XII or from Class IX to X.

Total Marks for two method papers = 30 (15x2)

- b. Achievement Test on papers II & III – 10 marks for each paper –
Total Marks = 20
- c. 40 Lesson plans on papers II & III – 20 marks for each paper –
Total Marks = 40 (20 x 2)
- d. Teaching Aids, used during practice teaching – 5 marks for each paper
Total Marks = 10

Paper – X 100 Marks

Sessional activities related to community outreach activities, action research, psychological testing co-curricular activities – 100 marks.

- | | | |
|---|---|----|
| 1. Community outreach activities | - | 20 |
| 2. Action Research on School activities | - | 20 |
| 3. Psychological Testing | - | 20 |
| 4. Co-curricular activities | - | 20 |
| 5. Viva | - | 20 |

Paper I – Foundations and Development of Education

First half-Foundations of Education

50 Marks

1. Concept and scope of Education
2. Bases of Education-Biological, Psychological, Sociological, Economical
3. Factors of Education and their interrelationship : Qualities and role of a teacher :
Functions of a school.
4. Relationship between Philosophy and Education (Influence of the major schools
of Philosophy).
5. The contributions of Great Educators Rousseau, Froebel Dewey, Tagore, Gandhi,
Vivekananda, Aurobindo
6. Value Education
7. Curriculum-Nature, Concept, Principles of curriculum construction, types of
curriculum, curricular structure at the Primary, Secondary and Higher Secondary
education level in West Bengal.

Second Half-Development of Education in Independent India

50 Marks

1. Synoptic view of Education (stages and types) just before independence.
2. Educational Provision in the Indian constitution

3. University Education Commission (1948 – 49). Recommendation with reference to the following areas :
 - (a) Aims
 - (b) Structure
 - (c) Curriculum
 - (d) Reforms of Examination
 - (e) Rural University
 - (f) Religious and Moral education

4. The Secondary Education Commission (1952 – 53). Recommendation with reference to the following areas :
 - (a) Aims
 - (b) Structure
 - (c) Curriculum
 - (d) Reforms of Examination

Kothari commission (1964 – 66). Recommendation with reference to the following areas :

 - (a) Aims
 - (b) Structure
 - (c) Curriculum
 - (d) Reforms of Examination

5. National Education Policy 1968
6. National Education Policy 1986 and Revised Draft of NPE-1986. Programme of Action 1992.
7. Sarva Shiksha abhiyan (SSA 2000). Main features
8. Contemporary issues in Education with reference to various Commissions, committees and National Policy on Education 1986.
 - (a) Universalization of Elementary Education
 - (b) Women Education
 - (c) Adult and Nonformal Education
 - (d) Technical and vocational Education
 - (e) Distance Education
 - (f) Science Education
 - (g) Teacher Education
 - (h) Equalization of Educational Opportunities.

PAPER II & PAPER III – PEDAGOGICAL ANALYSIS & METHODOLOGY OF TEACHING – 200 MARKS (100 X 2)

(The detailed syllabi is given in the following pages).

Subjects : 1. Bengali

2. English
3. Hindi
4. Geography
5. History
6. Life Science
7. Physical Science
8. Mathematics
9. Political Science.

PEDAGOGICAL ANALYSIS OF CONTENT AND METHODS OF TEACHING IN BENGALI

Pedagogical Analysis of Content and Method of Teaching English

Group-A Pedagogical Analysis of Content 60 Marks

1. Selection of Content
 - (a) One chapter / Episode from the syllabus of class VI-VIII
 - (b) One Prose / Comprehension lesson or poem (either for appreciation or for skill development) from Class IX – X.
 - (c) One Prose Piece or one from the syllabus of Class XI-XII.
2. Pedagogical Analysis :
 - (a) Objective of the lesson-skill and / or Appreciation
 - (b) Identification of the content Unit / Skill
 - (c) Specifying the behavioral out comes.
 - (d) Specifying the method of developing the content unit / skill
 - (e) Selection & strategy of using teaching aids
 - (f) Questioning / Tasks set for the development of the language skills
 - (g) Criterion test.
3. Justifying the inoculation of the content area into the curriculum
4. Objective Test for the Skills / content / unit in terms of behavioral out comes.

Group B – Methods of Teaching English 40 Marks

1. Position of English in India Colonial Vs Post Colonial Perspective introduction of the concepts of Multilingualism and Bilinguals the value of attaining a working Knowledge of English-English as a Library Language, a Link Language, A Link Language for Communication in a Globalised Economy, a World Languages to foster International Brotherhood.
2. Aims and objective of Teaching English :-
 - The Linguistic, Literary and Culture Aims of Teaching English
 - Lanuage Acquisition and Language Learning – The objective of Teaching English as second Language (with Sp. ref to W.B.) in the Secondary and Higher Secondary Stage.

3. Methods and Approaches of Teaching English
 - (i) Grammar Translation Vs The Natural Method
 - (ii) Dr. West's New Method Vs Rabindranath Tagore's Method of Teaching English
 - (iii) Structural Approach Vs The Functional Communicative Approach
 - a) The above mentioned methods / approaches are to be considered critically to delineate the Techniques of developing :-
 - i. Reading Skills for comprehensive and appreciation
 - ii. Listening Skills for comprehension and appreciation
 - iii. Speaking and Writing for communication
 - iv. Grammatical sense
 - v. Vocabulary
 - vi. Creative Writing.
- b) Innovative techniques for the development of the language Skills and Literary Appreciation.

**PEDAGOGICAL ANALYSIS OF CONTENT AND METHOD OF TEACHING
HINDI**

GROUP – A

MARKS : 60

Pedagogical Analysis of Content

**PEDAGOGICAL ANALYSIS AND METHODS OF TEACHING
GEOGRAPHY**

Group A – Pedagogical Analysis of content -

60 marks

1. Selection of content areas :
 - a. One chapter from the Text Books of class VI – VIII
 - b. One chapter from the Text Books of class IX – X
 - c. One chapter from the Text Books of Class XI – XII
2. Pedagogical Analysis :
 - a. Identifying the concepts / unit
 - b. Defining the concepts / summarizing the essence of the units
 - c. Sequence the concepts / units
 - d. Specifying the instructional objectives for each concept / unit
 - e. Selection of teaching strategies
 - f. Selection of teaching aids with notes on their preparation and mode of use

- g. Questioning with reference to specific objectives
- h. Criterion Test

Group B – Methodology of Teaching -

40 marks

1. Aims and objectives of Teaching Geography in school.
2. Principles of framing Geography syllabus for different levels of secondary schools.
3. Correlation of Geography with other branches of science and social sciences
4. Methods of teaching : Story telling, Deductive, Inductive, Observation, Local Geography as a method, Project method, Laboratory, Excursion or field study, CAI and its application.
5. Geography room.

**Pedagogical Analysis of the Contents and Method of Teaching
HISTORY**

Group A – Pedagogical Analysis

60 Marks

1. Selection of Contents
 - a. One chapter from the Syllabus of Class VI – VIII
 - b. One chapter from the Syllabus of Class IX – X
 - c. One chapter from the Syllabus of Class XI – XII
2. Pedagogical Analysis :
 - a. Identifying units and submits
 - b. Summarising the essence of each unit
 - c. Sequencing and re-sequencing the units
 - d. Specifying instructional objectives
 - e. Selection of teaching strategies
 - f. Selection of teaching aids with notes on their preparation and mode of use.
 - g. Questioning with reference to specific objectives
 - h. Criterion test.

Group B – methods of teaching History

40 marks

1. Objectives of teaching History; Modern conception of history. Aims and values of teaching History, Social order, national integration and international understanding. Its place in the school curriculum.
2. How to evaluate history syllabus :
 - a. Selection of facts
 - b. Organisation of facts
 - c. Relevance and effectiveness
3. Hisstory textbooks – Criteria of good textbooks.

4. Teaching methods :
 - a. Lecture
 - b. Discussion
 - c. Question – Answer
 - d. Source
 - e. Biographical
 - f. Dramatisation
 - g. Workshop

5. Knowing history through :
 - a. Excursion
 - (b) Indian Museum

6. Teaching Aids from History L. Collateral studies, Projective and non projective techniques, history room.

**Pedagogical Analysis of the contents and Methods of Teaching of
Life Science**

Group – A : Pedagogical Analysis of Contents

60 marks

1. Construction of pedagogical notes on the content of curricula for classes VI-VIII
 - A. Making topic wise distinction for the syllabus of each class analysis.
 - B. For each topic :-
 - i. conducting content analysis
 - ii. identifying the concepts hierarchically.
 - iii. specifying instructional objectives in behavioral terms
 - iv. teaching strategies
 - v. selecting teaching aids with notes on their preparation, procurement and modes of use
 - vi. Identifying concepts / contents that require demonstration / experimental verification / display & handling of life specimen.
 - vii. designing demonstration procedure / experiment
 - viii. suggesting investigatory or observation based questions to be asked
 - ix. suggesting examples i.e. illustrate concept / contents
 - x. Preparing tests on criterion referenced basis
 - xi. critical evaluation of the effectiveness of the topic with reference to the whole school curriculum further studies, employment, everyday experiences etc.

2. A file containing the above mentioned pedagogical notes on :-
 - i. 1 topic from the syllabus of class VI – VIII
 - ii. 1 topic from the syllabus of class IX – X
 - iii. 1 topic from the syllabus of class XI – XII is to be maintained & submitted as part of sessional activities. Accompanying teaching aids / specimens are to be produced for assessment in Sessional Activities.

3. Construction of an achievement test on any topic in the curriculum of class VI-XII clearly indicating –
 - (i) content analysis
 - (ii) instructional objectives in behavioral terms
 - (iii) table of specification (blue print)
 - (iv) construction of items
4. A file containing the achievement test is to be submitted for sessional activities.

Group – B Methodology of Teaching

40 Marks

1. Aims & objectives of teaching Life Science at school. Relation of Life Science with other school subjects & in particular with Physical Science.
2. Methods of teaching Life Science :
lectures, demonstration projects, heuristics or discovery, laboratory method, programmed instruction, CAI
3. Meaning & scope of the concepts –
Scientific Temper & Science Technology Literacy & the place of Life Science within these concepts . Modes of building up awareness regarding Life Science & the popularization & propagation of Life Science (science fairs & clubs, Field trips & specimen collection / dissection, science magazines & quizzes, science museums & zoos / aquariums, etc.
4. Identification & nurturance of special talents in Life Science.
5.
 - (i) The Nature of Life Science in Laboratory
 - (ii) The use of Computers & models in teaching Life Science
 - (iii) Improvisation of materials & collection of specimen for life science teaching
 - (iv) The role, use & ethics of life specimen in life science teaching
 - (v) Evaluation of :-
 - (i) theoretical knowledge
 - (ii) practical work

**Pedagogical analysis of the contents and methods of teaching :
PHYSICAL SCIENCE**

Group A – Pedagogical analysis of content

60 marks

1. Selection of Contents .
 - a. One topic from the syllabus of Class VI – VIII
 - b. One topic from the syllabus of Class IX – X
 - c. One topic from the syllabus of Class XI – XII
2. Construction of pedagogical notes on the contents of curricula. This will comprise
 - a. Making topic-wise distinction of the syllabus of each class

- b. For each topic
- (i) Conducting content analysis
 - (ii) Identification the concepts hierarchically
 - (iii) Specifying instructional objectives in behavioral terms
 - (iv) Suggesting teaching strategies
 - (v) Selecting teaching aides with notes on their preparation and mode of use.
 - (vi) identifying concepts that require demonstrations or experiments.
 - (vii) Designing demonstration procedure and / or experiments
 - (viii) Suggesting investigatory questions to be asked, suggesting everyday life examples that illustrate the concepts.
 - (ix) Preparing tests on criterion reference basis
 - (x) Critical evaluation of the effectiveness of the topic with reference to the whole school curriculum, further studies, employment, everyday life etc.

Group B – General Methodology of teaching Physical Science 40 marks

1. Aims & objective of teaching physical science in school. Relation of Physical Science with other subject particularly with the life science & mathematics.
2. Methods of teaching physical science-Lectures, Problem solving programmed instruction, CAI project method, demonstration and heuristic method.
3. Meaning and scope of the terms “scientific Tempers” and science Technology literacy. Modes of popularization & science (Science Fair, Science Club, Field Trips, Science Magazine, Science Quiz, Science Museum etc.)
4. Identification & nurturance of special talents in physical science.
5.
 - (i) Improvisation of materials of special talents in physical science teaching
 - (ii) The use of Computers & models in teaching physical science
 - (iii) The nature & others of the physical science laboratory
6. Evaluation
 - (i) Evaluation of theoretical knowledge
 - (ii) Evaluation of practical work

Pedagogical analysis of the contents and methods of teaching Mathematics

Group A : Pedagogical analysis of content : 60 marks

1. Selection of contents
 - (a) One topic from the syllabus of class VI – VIII
 - (b) One topic from the syllabus of class IX – X
 - (c) One topic from the syllabus of class XI – XII

2. Construction of Pedagogical notes on the content. This will comprise .
 - a. Making topic-wise distinction for the syllabus of each class
 - b. For each topic –
 - (i) Conducting content analysis
 - (ii) identifying the concepts hierarchically and identifying the concept on which those concept will be built (previous knowledge).
 - (iii) Specifying instructional objectives in behavioral terms
 - (iv) Suggesting teaching strategies
 - (v) Selecting teaching aids with notes on their preparations & mode of use.
 - (vi) Suggesting investigatory questions to be asked
 - (vii) Suggesting everyday life examples that illustrate the concepts
 - (viii) Preparing tests on criterion reference basis
 - (ix) Critical evaluation of effectiveness of the topics with reference to the whole school curriculum, employment, further studies, everyday life etc.

Group B : Method of Mathematics teaching

40 marks

1. Aims of teaching mathematics in School.
Relation of mathematics with other school subjects.
2. Psychological theories pertaining to the teaching of mathematics; a brief view of piaget, Dienes and Bruner's theories with respect to mathematics teaching.
2. Method of teaching mathematics
 - (i) Inductive and deductive
 - (ii) Synthesis and analysis
 - (iii) Discovery and problem solving
 - (iv) Project method
3. Instructional aids in mathematics teaching
 - (i) need for instructional aids
 - (ii) different types of teaching aids, including calculator, computer & models
 - (iii) mathematics laboratory
4. Teaching of mathematically backward student
 - (i) causes of backwardness in mathematics

- (ii) strategies for remedial teaching of mathematics
5. Evaluation :
- (i) need for assessment in mathematics
 - (ii) different types of assessment in mathematics and their roles in the diagnosis & prognosis of mathematics achievements.

**Pedagogical Analysis and Methods of Teaching
Political Science**

Group A Pedagogical Analysis 60 Marks

1. Selection of Content areas. Three Chapters from the Text Book of Class XI-XII
2. Pedagogical Analysis :
 - (a) Effectiveness of Topic in the School Curriculum
 - (b) Define the Concepts
 - (c) Summarising the essence of the units
 - (d) Sequencing the units
 - (e) Specifying instructional objectives of each unit
 - (f) Selection of Teaching Method
 - (g) Preparation of Necessary Teaching Aids and their utility at different stages
 - (h) Questioning with reference to objectives

Group B Methodology of Teaching 40 Marks

1. Definition & Scope of studying teaching Pol. Sc.
2. Aims, Objectives & Value of Teaching Pol. Sc. with Spl. Reference to the Indian conditions
3. Place of Pol. Sc. in school curriculum
4. Pol. Sc. and other Social Science – with reference to the relation between different branches of Social Sciences.
5. Different methods and techniques of teaching Pol. Sc. – Lecture, Text Book, Discussion, Project, Supervised Study method, Unit Plan, inductive and deductive method and individualized instruction.
6. Use of teaching Aids in Pol. Sc.
7. Importance of Test Book, Periodical journals in the teaching of Political Science.
8. Teacher of Pol. Sc. – Special traits, functions and responsibilities
9. Importance of subject room in the teaching of Pol. Sc.
10. Evaluation and testing.

Paper IV – Teaching Practical

100 Marks (50 x 2)

Each candidate shall have to execute two lessons, one each in the two method papers, each carrying 50 marks.

Paper V Psychology of Learning and instruction

First Half Psychology of Learning 50 Marks

1. Introduction to the psychological bases of Education. Subject matter of Educational Psychology and current trends.
2. Child's developmental Characteristics. Development as a basis of Learning. Meaning of Growth and Development. Language Development. Cognitive Development-Piaget, Moral Development Kohlberg, Psychosocial Development-Erickson. Education and development.
3. Behavioral Theories of learning. Classical Conditioning, Thorndike's Connectionism, Social Cognitive Learning and Behavioral theories applied to teaching.
4. Cognitive approaches to learning. Meaning of learning. Discovery Learning, Cognitive Constructivism, Information Processing as an integrated model of Learning, problem solving, attention, memory as in Information Processing model.
5. Motivation and Student learning : Maslow's theory of Self Actualization, Weiner's Attribution Theory, McIlleland's Achievement Motivation Theory. Factors affecting motivation-curiosity and interest, locus of control, self efficacy, class room environment etc.

Second Half Psychology of Instruction 50 Marks

1. Concept of Teaching and Instruction
2. Students abilities. Intelligence-concept, nature and measurement. Creativity-Concept, factors and nurturing creativity.
3. Instructional Objectives. Taxonomy of Instructional Objectives. Hierarchy of Objectives-Cognitive (Knowledge, Comprehension, Application, Analysis, Synthesis, Evaluation) Affective (Receiving, Responding, Valuing, Organization, Characterization) Psychomotor (Perception, Set, Guided Response, Mechanism, Complex or over Response Adaptation, Origination)
4. Approaches to Instruction. Direct and Indirect, Designs of instruction (Skinner, Markle, Gagne) Technology Based Teaching Strategies (Web based instruction, Multi media, CD-ROM, Intelligent Tutoring System)
5. Class room Management, managing the class room and methods of control.

Paper VI Educational Management 100 Marks

First Half Institutional Management 50 Marks

1. Institutional planning in practice.
2. Leadership in school administration. Head teacher. Teacher's Council.
3. Time table.
4. School services –
 - a. Student self government & discipline
 - b. Organisation of co-curricular activities
 - c. Physical education
 - d. Library
 - e. Health services, sanitation, sex education
 - f. Community services with special reference to literacy drive.
5. Evaluation of achievement of pupils – tools & techniques of evaluation, norm reference test, examination, types of achievement test. Descriptive statistics – central tendency & variability.
6. Inclusive education – identification & scoring of exceptional children, institution modifications for inclusive education, factors for successful integration.

Second Half Manpower & Resource Management

50 Marks

1. Controlling authorities of school administration – the role of central & state government in school administration, West Bengal Board of Secondary Education & Council of Higher Secondary Education & other Boards. Administrative structure of Secondary education with special reference to West Bengal.
2. Supervision & inspection.
3. Educational finance-sources of finance, Kothari commission on Educational Finance. Role of private enterprise on education.
4. Educational planning. Manpower development. Education & Employment.
5. N.P.E. {1986} on educational management
6. Qualitative improvement of Secondary Education. Role of NCERT, SCERT & NCTE.

Paper VII Educational and Vocational Guidance

100 Marks

Compulsory elective Paper

1. Guidance-concept, Principles Types (Educational, Vocational, Personal) Kinds (Individual and Group). Need of guidance (Philosophical, Social and Psychological) with special reference to the secondary and higher secondary stages of education.
2. Techniques for collecting information for guidance and counseling. Intelligence Test, Aptitude Test, Achievement Test, Personality Test, Interest Inventory, Interview, Questionnaire, Rating Scale, Sociometric Test, Anecdotal Records, Cumulative Record Card, Case Study.

3. Concept of Adjustment-Adjustment as Adaptation to the external (environmental demands). Adjustment as balance or integration of Personality. Adjustment as coping with stress. Relationship of the three concepts.
4. Mental Health-Concept of Mental Health as a state of subjective well being and as objectively observable behaviour pattern. Mental Health as a continuum. Relationship of mental health and adjustment.
5. Maladjusted pattern of behaviour in infancy and childhood. Attention deficit disorder and hyperactivity, feeding, eating and sleeping disorder, anxiety, phobia, autism, conduct disorder and disruptive behaviour disorder.
6. Maladjusted pattern of behaviour in Adolescence-Personality disorder, (Paranoid, Schizoid, Antisocial and Narcissistic personality disorder). Substance abuse disorder, Obsessive Compulsive disorder, Somatoform disorder.
7. Common Adjustment Problems in Adolescence, Parental, Social and Educational support for Adolescence.
8. Counselling-Definition, Counselling and Guidance, Psychotherapies, Psycho dynamic, Behaviouristic and Social Learning Approaches. Purpose of counseling and Techniques of counseling. (Direct, Indirect and Eclectic).
9. Vocational Guidance-It's relationship with educational guidance, need for vocational guidance, career information, sources, methods of classification and filing of information and its dissemination.
10. Organization of School Guidance Service (minimum requirements for opening a guidance centre in school) Minimum activities, orientation, students information counseling, placement service, remedial service, follow up service, research activities, Child Guidance Clinic role of school personnel.

Paper VII Measurement and Evaluation in Education

100 Marks

Compulsory Elective Paper

1. Concept of Testing, Measurement and Evaluation.
2. Scales of Measurement-Nominal, Ordinal, Interval and Ratio.
3. Tools and Techniques of Evaluation – Testing, Observation, Enquiry.
4. Criteria of a good measuring instrument-Reliability and Validity.
5. Principles of Construction and Standardization of Tests. Item Analysis, Principles of construction and scoring of tests.

6. Acquaintance with psychological tests in the area.
Intelligence, interest, Aptitude and Personality.
7. Statistical treatment of data. Frequency distribution and graphical representation of data, measures of central tendency and variability, coefficient or correlation by rank difference method and product Moment Method, percentiles, percentile ranks, skewness and kurtosis, normal probability curve, derived scores and standard scores and t-test.

Paper VIII Practical Paper

100 Marks

Laboratory Practical & / or Simulated lesson

The detailed syllabi of laboratory practicals and distribution of marks are furnished in the following pages.

Laboratory practical subjects :

Geography
Life Science
Physical Science

GEOGRAPHY LABORATORY PRACTICAL

Full Marks – 50

Contents

1. Meteorological Instruments -
 - a. Hygrometer
 - b. Fortin's Barometer
 - c. Six's Maximum & Minimum Thermometer.
2. Rainfall Temperature graph of the following climatic regions :
 - a. Equatorial
 - b. Tropical monsoon
 - c. Hot desert
 - d. Mediterranean
 - e. Tundra
3. Cartograms
 - a. Choropleth
 - b. Piegraph
 - c. Bar-graphs – simple, compound, multiple

4. Isotherms of India – January & July
5. Topographical Sheet
 - a. Plain region
 - b. Plateau region
6. Rocks
 - a. Sedimentary
 - b. Igneous
 - c. Metamorphic
7. Project

Distribution of marks will be done on the following heads :

Selection of the instruments / tools	5 marks
Explanation in front of the examiners	10 marks
Written Work	15 marks
Project including viva	10 marks (5+5)
Lab. Note Book including viva	10 marks (5+5)

LIFE SCIENCE LABORATORY PRACTICAL

Full marks 50

Contents

1. Study of laboratory equipments necessary of boding the practical work i.e. microscopes and biology box, etc.
2. Botany
 - a. T. S. of monocot root; e.g. maize
 - b. T.S. of dicot stem; eg. sunflower
 - c. Dissection and description of any common flower, eg. Chinrose

Zoology-Identification of various zoological specimen following their respective phylum, class and specimen characteristics.

Biochemistry-Qualitative analysis test to identify the presence of carbohydrate, protein and fat in the supplied unknown sample.

Physiology

- a. Determination of blood
- b. Determination of physical fitness index by Harvard Step Test Method.

Distribution of marks will be done on the following heads :-

Demonstration of the experiment in the peer group	10
---	----

Choosing of equipments & experimentation procedure	10
Written work in the answer scripts	10
Laboratory note book	5
Project / assignment	10
Viva voce	5

Physical Science Lab Practical

Full Marks – 50

[Experiment – 40
Project - 10]

Contents : Candidate having Physical Science as one of the method subject will have to perform both Physics and Chemistry practical. They will also have to demonstrate their activities to the peer group. In Physics they will have to practice three experiments (at least) from the followings. In final exam, they should perform any one from those. In Chemistry, they will have to practice at least three experiments from the followings and in final exam, they should perform any one from those.

List of Physics experiments :-

- To verify laws of reflection of light
- To verify laws of refraction of light
- To determine unknown resistance using P.O. Box
- To determine value of 'g' using a simple pendulum
- To determine specific gravity of granular solid using specific gravity bottle.
- To determine specific gravity of a solid lighter than water using hydrostatic balance.
- To draw magnetic lines of force of a bar magnet.
- To determine specific gravity of a liquid using specific gravity bottle.

List of Chemistry experiments :-

- To determine strength of an unknown acid / alkali solution
- To identify basic radical present in an inorganic water-soluble salt.

- To prepare a common gas (H₂ / CO₂) and to verify few of its.
- To identify acid radical present in an inorganic water soluble salt.

Distribution of marks :-

Marks are distributed in the following way under the head of different skills :-

(i)	Choosing of equipment and material (for Physics), apparatus and reagents (for Chemistry)	2(Physics) + 2 (Chemistry)
(ii)	Experiments set-up	2(Physics) + 2 (Chemistry)
(iii)	To perform and show experiments	3(Physics) + 3 (Chemistry)
(iv)	To explain to peer group	3(Physics) + 3 (Chemistry)
(v)	Written work	5(Physics) + 5 (Chemistry)
(vi)	L.N.B.	2(Physics) + 2 (Chemistry)
(vii)	Viva-Voce	3(Physics) + 3 (Chemistry)
<hr style="width: 50%; margin-left: auto; margin-right: 0;"/>		
Total :		20(Physics) +20 (Chemistry)

Project : 10 Marks

Besides laboratory experiments students will also have to participate in project activities. These activities performed by the students are to be reported on the basis of which student will be evaluated internally. These projects should be related with school based activities in the field of teaching learning of Physical Science. To undergo these projects, students specifically will be concerned about the followings :-

- Objectives of the project
- Planning of project
- Execution of project
- Collection of data (if any).
- Statistical interpretation (if any).
- Findings
- Educational relevance
- Reporting of project.

Paper IX	Sessional Activities related to Pedagogical Analysis (for two method subjects)	100 Marks (50 x 2)
	Achievement Test on paper II & III	40 Marks (20 x 2)
	Lesson Plans on paper II & III	40 Marks (20 x 2)

ACTION RESEARCH ON SCHOOL BASED ACTIVITIES

School based practical activities constitute an important part of the B.Ed. programme. It is based on the premise that besides regular teaching, a teacher performs a number of other activities in the school. In the B.Ed. programme, the trainees are expected to plan, organize and conduct certain practical activities more systematically & professionally.

The trainees are asked to produce a report of one activity in the specified word limit. It should be well structured, clear & comprehensive.

Each activity should be discussed under the following way or sections :-

1. Name of the activity
2. Objectives
3. Your role
4. Role of the Head Teacher / Principal
5. Product (output of the activity)
6. Evaluation Mechanism

Any one activity should be selected from the following list –

Activity 1 - Maintenance of various registers & records

Maintenance of various registers such as records of students' performance such as progress report, attendance register, admission register, laboratory stock book.

Objectives – to provide you with an opportunity to know the systematic procedure of handling & maintaining records in the school.

Your role - Collect the necessary information to be included in the record. Discuss issues & problems related to the collection & recording of different types of informations & find out the different solutions.

Prepare a report of about 500-600 words on the work the students have done along with copies of records handled by them.

Activity 2 - Addressing the School Assembly

Nature of the activity

Addressing the students in the morning school assembly on the contemporary topics to develop objectives of confidence & effective communication skill.

Your role to identify five different themes or topics & to prepare them for present action on five different occasions. The topics may be on contemporary socioeconomic problems, moral education, population education, national integration, empowerment of socially & economically backward people, women's emancipation, human rights.

Output A report of five – six pages which should include the addresses presented, a brief description of the feedback received from the school teacher and experiences of the student as a B.Ed. trainee.

Activity 3 Preparation of School Time Table

Nature preparation & implementation of time table in your school

Objective To know the systematic procedure of preparing & implementing the time table.

Your role to analyse the existing time table of the school & hold discussions with teachers & principals regarding the preparation to prepare a model time table of a particular class.

Output A report has to be prepared which should include the following:-

1. need & importance of time table
2. analysis of the existing time table (in general)
3. feedback given by the teachers & principal
4. problems faced by the teachers in preparing & implementing the time table.

Activity 4

Organising career talk IPTA meeting / debate / panel discussion / quiz programme

Nature- Organisation of at least one of the above activities.

Objective To help you to acquire skills necessary for systematically organizing & managing co-curricular activities.

A report has to be prepared which should include a brief note of the activity, managerial problems – feedback & its implementation, outcome of the activity, your observation & suggestion for improvement.

Activity 5 – FIELD TRIP

Planning & Organisation of a field trip to a spot which may be a Zoological Park, Museum, Historical Monument, Fair, Akash Bani, Doordarshan Kendra.

Your role to specify the objectives & output of the field trip to formulate the detailed plan of the trip to carry out the plan accordingly. The report should contain planning & organization impact of the students, problems faced & suggestions for organizing a meaningful field trip.

PSYCHOLOGICAL TESTS

Psychology deals mainly with different aspects of human behaviour. In the field of teaching learning this subject has a number of applications. Educational Psychology is that branch of psychology which encompasses this particular area.

It is essential for a teacher to acquire the knowledge of educational Psychology to improve teaching – learning. In order to study the behaviour of learners & to solve the behavioral problems, it is important that a teacher takes some effective concrete measures. This necessitates proper understanding of the practical aspects of the subject as well as the theoretical knowledge. Keeping this point under consideration, the Department of Education. S.X.C. has included Psychology practical in the curriculum of teachers training programme.

Objectives

- i. to acquaint a trainee teacher with different tools & techniques of Psychological testing.
- ii. to help them identify different behavioral problems of learners and to take remedial measures accordingly.
- iii. to improve teacher – student relationship
- iv. to develop the power of conducting educational research.
- v. to provide educational & vocational guidance to the students
- vi. to enable the trainee teacher to appreciate the importance of Psychological testing in the field of education.

Contents :-

A. Trainee teachers will have to administer the following tests on the subjects based on the given problem :

1. Problem - To assess personality of an individual.

Description - Personality is one of the important Psychological traits of a learner. In order to facilitate an integrated development of a learner, a teacher should know how to assess it.

Among different tools & techniques of its measurement, Eyesenck Personlity questionnaire (EPQ) is very

purposeful. It is a systematic compilation of questions that are subject to a sample of population from which the desired information of subject is obtained.

This questionnaire was developed by H.J. Eysenck and sybll B B Eysenck in order to classify the personalities into three groups – introvert, normal or neurotic and psychotic. The questionnaire in brief containing 100 items & the test is of appreciable reliability and validity. The questionnaire also incorporates ‘Lie Score’ adapted in order to detect invalid records.

The trainee teacher is to administer it on an individual subject from which the personality trait of that individual will be assessed.

2. Problem - To assess individual’s intelligence
- Description - Intelligence is one of the important mental abilities of a person. Psychologists have developed a no of intelligence tests to assess this ability – but most of those test contain verbal or non-verbal items loaded with contents related to the culture in which the subject is born and brought up, in order to eliminate such problem of business, it was thought to plan for culture free test by devising items free from cultural contest of learness. Cattell developed a test which contains novel items that are not influenced by any culture. This test can be administered to the subjects of age 4 to adult. The purpose of this test is to get acquainted with administration of Psychological testing as well as to assess intelligence for the purpose of educational & vocational guidance.
3. Problem - To assess modality of learning style of an individual learner.
- Description - Learning is a process of modification of behaviour. Depending upon the same modality utilized by the learners may be divided into three category – auditory, visual & kinesthetic learners. A visual learner mostly uses his vision for leaning, an auditory learner uses auditory sense whereas third group of learner prefers kinesthetic activities for learning.

Learning style of learners & mode of teaching should be highly connected in order to make teaching learning effective. Hence, it is one of the important task of a teacher to assess the modality. Jesuit Educational Association has

prepared a questionnaire to assess this modality. Trainee teacher will have to identify the modality of learners by using this questionnaire and select the method of teaching accordingly.

4. Problem - To assess scholarship ability of learners. Aptitude is the latest potentiality in order to acquire abilities & skills to achieve something. It is an unique combination of ability & personality characteristics of which predisposes a person to do one kind of work better than another & increases his chances of success at it.

There are different aptitude tests among which scholastic aptitude test is very important in classroom situation. We can use the results of such tests for counseling students regarding vocational opportunities.

Director of school education, Govt. of India has conducted such a test on 1900 for talent search examination in order to measure scholastic aptitude of secondary students. Trainee teachers will have to administer this test on the subject group & evaluate their performance. This helps the teacher to predict future progress or to explain the cause of achievement or failure of students in different scholastic areas.

GENERAL PROCEDURE OF CONDUCTING PRACTICALS :-

Psychological testing has the following general steps :

- i. To identify the specific problem.
- ii. To select appropriate apparatus.
- iii. To define the sample on which the test is to be administered.
- iv. To provide general instruction & establishing rapport with the sample group.
- v. Actual administration of the test.
- vi. Recording data.
- vii. Statistical Calculation
- viii. Interpretation
- ix. Reporting.

Evaluation :-

Each experiment contains 20 marks & the full marks is distributed among several steps as following :-

- | | | |
|------|--|---|
| i. | Problem statement | 2 |
| ii. | Selection of apparatus | 2 |
| iii. | Definition of sample | 2 |
| iv. | General instruction & establishing rapport | 2 |
| v. | Actual administration | 2 |

vi.	Recording data	3
vii.	Calculation	2
viii.	Interpretation	2

CO-CURRICULAR ACTIVITIES SYLLABUS

TOTAL MARKS : 20

Objectives

The students will be able to :

- Develop an insight into the meaning and nature of co-curricular activities.
- Understand the historical roots of co-curricular activities and the circumstances that led to its emergence.
- Clarify some misconceptions about co-curricular activities.
- Participate in various co-curricular activities of the college as well as of the department of education of the college.
- Participate in various co-curricular activities organized in other educational institutions.

Expected Learning Outcomes

After going through the co-curricular activity programme the students will be able to :-

- Define the principles of co-curricular activity programme construction
- Organize diverse co-curricular activities
- Appreciate the need for co-curricular activities
- Understand the educational implications of co-curricular activities
- Learn skills for holistic development
- Cultivate special talents and interests
- Discover his or her special abilities and propensities.

Relevant topics

- Indoor and outdoor games, sports and physical exercises in the college.
- Projects related to language, literature, science and social studies in the college.
- Literary activities such as debates, discussions, publications of magazines and journals of the college.
- Participation in NSS and NCC etc.
- Aesthetic activities and appreciation of culture.
- Organization and participation in volunteer groups during specific calamities such as floods, earthquakes etc.
- Organization and participation in excursions, study tours etc. of the college.

Method of assessment.

- On the basis of student participation and involvement in various co-curricular activities of the college and the department of education of the college.
- Students must participate in a minimum of two activities
- Students must prepare a file on the basis of their participation in co-curricular activities of the college and its department of education.

15. Specialization

Guidance and Counselling
Measurement and Evaluation in Education

16. Co-curricular Activities

Sports, Cultural activities, Social and Community Service, Aesthetic activities are an integral part of the programme.

17. Course Credit = Total Credit = 50

Academic Credit = 48
Non Academic Credit = 2

		SEMESTER I	TOTAL – 20 CREDITS (Academic)
Paper	Subject Code	Subtitle	Credit
I	DE1C 4101	Foundation & Development of Education in Independent India	4
II & III		Pedagogical Analysis of Contents and Methodology of teaching the school	8
each		subjects.	4 + 4 (4 for method subject)
	BNGM 4101	Bengali	
	ENGM 4101	English	
	GEOM 4101	Geography	
	HINM 4101	Hindi	
	HISM 4101	History	

LFSM 4101 Life Science
 MTMM 4101 Mathematics
 PHSM 4101 Physical Science
 PLSM 4101 Political Science

IV PBED 4151 Teaching Practical (for each of the two method paper) 8
 4+4
 (4 for each method subject)

SEMESTER II

TOTAL – 28 CREDITS
 (Academic)

Paper	Subject code	Subtitle	Credit
V	PLIC 4201	Psychology of learning & Instruction	4
VI	EMGC 4201	Educational Management	4
VII	GUCC 4201 MEEC 4201	Compulsory Elective Paper Guidance & Counselling / Measurement & Evaluation in Education	4
VIII		Demonstration of Laboratory practical and / or simulated lesson	4 2+2 (2 for each Method paper)
	LFSP 4251	Life Science Practical	
	PHSP 4251	Physical Science Practical	
	GEOP 4251	Geography Practical	
	MTMS 4251	Maths Simulated Lesson	
	ENGS 4251	English Simulated Lesson	
	BNGS 4251	Bengali Simulated lesson	
	HISS 4251	History Simulated lesson	
	PLSS 4251	Pol.Sc Simulated lesson	
	HINS 4251	Hindi Simulated lesson	
IX	LFSN 4251 PHSN 4251 GEON 4251 MTMN 4251	Sessional Activities related to Pedagogical study & teaching • Peda-Analysis - 2	6 1+1 (1 for each Method Paper)

ENGN 4251	• Achievement Test - 1	→	1/2 + 1/2 (1/2 for each Method Paper)
BNGN 4251			
HISN 4251	• Lesson Plan - 2	→	1 + 1 (for each Method Paper)
HINN 4251			
PLSN 4251	• Teaching Aids – 1	→	1/2 + 1/2 (1/2 for each Method Paper)

X	CAPC 4251	Sessional activities relation to community outreach action research, psychopractical, co-curricular activities	6
---	-----------	--	---

NON ACADEMIC CREDIT (SEMESTER I + II) = 2