

Semester-II

B-201-A: Pedagogy of Mathematics

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To create understanding of language and symbolism of mathematics as a discipline.
2. To develop pedagogic understanding of Mathematics in the context of school and learner.
3. To promote understanding and application of different methods of teaching mathematics in the classroom.
4. To select and organize content, plan instruction and ensure effective delivery in maths teaching.
5. To organize pedagogic study of Mathematics at school level.
6. To facilitate philosophical & epistemological insights of Mathematics teaching in pupil teacher.
7. To enrich knowledge and teaching competency.

Learning outcomes: The learners will acquire:

1. Understandings mathematics as a discipline.
2. The ability to critically explore methods and techniques of mathematics teaching.
3. The ability to create pedagogic understanding of mathematical concepts in the classroom.
4. Epistemological insights into Mathematics as a discipline.
5. Ability to conduct action research in Mathematics teaching.

Course Content:

Unit-1:

- Nature, scope and importance of Mathematics, Brief history of Mathematics.
- Contribution of Mathematicians: Indian: Aryabhata, Brahmagupta, Bhaskara-I, Bhaskara-II (Bhaskaracharya), Ramaujun; Others: Pythagoras, Euclid, Gauss, Leonhard Euler, Alan Turing.
- Need and significance of teaching Mathematics, Aims and objectives of teaching Mathematics
- Concept formation (Theories and implications), Writing objectives in behavioural terms, Factors influencing learning of Mathematics

Unit-2:

- Place of Mathematics in school curriculum.
- Selection, sequencing and organization of curricular content.
- Correlation of Mathematics with other school subjects
- Critical appraisal of Mathematics curriculum and textbook at upper Primary, Secondary and Senior Secondary Levels

Unit-3:

- Methods of teaching Mathematics: Inductive, Deductive, Analytical, Synthetic, Heuristic, Project, Laboratory, Lecture and Question-answer.
- Techniques of teaching Mathematics: oral, written, drill, assignment, self study, supervised study, programmed learning, group work and review.
- Audio-visual aids, software and hardware and ICT for teaching Mathematics
- Unit plan and lesson planning in Mathematics, Teaching points of various content areas in Mathematics like Arithmetic, Algebra, Geometry and Trigonometry etc.

Unit-4:

- Evaluation in Mathematics: purpose and procedure.
- Teaching mathematics to Gifted and backward children, their identification and provision for mathematics education; remedial teaching: its meaning, principles of diagnosis and remediation.
- Activities inside and outside school for popularization of Mathematics.

- Qualities and competencies of an effective Mathematics Teacher.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Book Review of school subject .
- Construction & standardization of Achievement test.
- Analysis and evaluation of syllabus for different stages of education.
- Construction of a diagnostic Test.
- Preparation of list of equipments essential for teaching mathematics at school level.
- Preparation of teaching aids.
- Essentials of mathematics Library and Mathematics laboratory
- Preparation of Lesson Plan.

Books Recommended:

Chadha, B.N. : Teaching of Mathematics

Dharamabir and Agrawal: The Teaching of Mathematics in India.

Rawat, M.S. and Agrawal : M.B.L. : Ganit Shikshan

Schultz, A.: The Teaching of Mathematics in Secondary School.

Arora, S.K. (1988). *How to teach Mathematics*, Shanta Publisher, Bhiwani.

Chauhan, C.P.S, (1985). *Achievement in Algebra and structure of Intellect*, Vishwavidyalaya Prakashan, Varanasi.

Kumar, S, and Ratnalikar, D.N. (2003). *Teaching of Mathematics*, Anmol Publishers, Pvt. Ltd., New Delhi.

Russel, J., (2004), *Teaching of Mathematics*, Campus Book International, New Delhi.

Sidhu, K.S. (1982), *Teaching of Mathematics*, Sterling Publisher Pvt. Ltd. New Delhi.

Richard Courant & Herbert Robbins: *What is Mathematics*, Fai Lawn Oxford University Press, 1941.

Cosrines: *The Mathematical Sciences – A Collection of Essay*, M.I.T. Press, 1969

The Psychology of Mathematical abilities in school children, V.A. Krutstski, Chicago University Press, 1976

How Children Learn Maths: Teaching Implications of Piaget’s Research, Recharad Copelard, New York, Macmillan, 1975.

How to Solve It, G. Polyn Garchen City, Double Day & Co., 1958

The Principle of Objective Testing in Mathematics, Fraser Cillam, 1971

Teaching of Mathematics by I.W.A. Young.

Teaching of Mathematics in the New Education by N.K. Kuppuswami Aiyangar

B-201-B: Pedagogy of Physical Sciences

Maximum Marks:100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To develop pedagogic understanding of pupil-teacher with respect to sciences in the context of school and learner.
2. To equip student-teacher to promote understanding of sciences among learners.
3. To organize pedagogic study of science subjects at school level in a collective way.
4. To facilitate philosophical & epistemological insights of science teaching among pupil-teachers.
5. To enrich knowledge and teaching competency of pupil-teacher.
6. To equip pupil-teacher with necessary skills for acting as a mediator between school and society.

Learning outcomes: The pupil-teacher will:

1. Have attained pedagogic understanding of physical sciences.
2. Acquire the necessary skills, attitudes, values and competency of a science teacher.
3. Develop insights into strategies for physical science teaching.
4. Acquire skills of evaluating cognitive, affective and psychomotor outcomes.
5. Acquire skills for scientific leadership in school and society.
6. Acquire skill for Action-Research in Physical-sciences.

Course Content:

Unit-1:

- Meaning of Science & Its nature, need & importance, objectives of teaching science, Values of Science.
- History of Science teaching in India, Contribution of Indian & Foreign scientists: Aryabhata, H.J. Bhabha, J.C. Bose, C.V. Raman, A.P.J. Abdul Kalam, Einstein, Newton, Stephen Hawkins,
- Aims and objectives of teaching science at Upper primary & Secondary level.
- Bloom's taxonomy, Revised taxonomy of Educational objectives, RCEM approach, Writing objectives in behavioral terms.

Unit-2:

- Major methods, strategies & techniques of science teaching ; Classification of teaching methods: Autocratic & Democratic methods.
- Non formal approaches in science teaching: science club, science fairs and excursions, science museum, science journal.
- Teaching aids (Audio, visual aids and improvised apparatus in physical sciences).
- Science teacher: Personal & professional qualities of a good science teacher.
- Lesson planning in physical sciences

Unit-3:

- Curriculum in science teaching, Critical appraisal of science curriculum
- Approaches and Principles of curriculum construction.
- Modifying curriculum according to: Learner, local needs and children with diverse needs.
- Text books and reference books in science teaching.

Unit-4:

- Evaluation in science teaching. Meaning of measurement and evaluation, Measuring cognitive, affective and psychomotor outcomes.
- Techniques of evaluation, Objective and Subjective techniques, Formative & Summative evaluation. Norm referenced and criterion-referenced tests. Achievement & diagnostic tests.
- CCE, CGPA grading system

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Book Review of school subject
- Preparation of two assignments or Ppt. presentations on contribution of Indian & foreign scientists and latest discoveries in science
- Preparation of individual projects on audio –visual aids.
- Preparing two teaching aids,(one chart and one stationary or working model), Preparing science kit and improvised apparatus in science for upper primary and secondary level students.
- Writing reports on the prevailing curriculum in the text books.
- Visit to community to search scientific application in local community which could be included in curriculum & presenting the report.
- Preparation of micro Lesson Plan , Lesson plans.
- Practical exercises on Programmed instruction & CAI.
- Construction & standardization of Achievement test.

Books Recommended:

Teaching of Physical Science	S.P.Kulshrestha and Gaya Singh
Bhawtik Vigyan Shikshan	Dr.A.B.Bhatnagar
Bhawtik Vigyan Shikshan	J.K. Sood
Teaching of Science	M.S.Yadav

B-201-C: Pedagogy of Biological Science

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To develop understanding about the nature of Biology, its aims, values & objectives of teaching Biological science.
2. To develop conceptual understandings related to pedagogy of Biological sciences in the context of school and learner.
3. To develop ability to organize pedagogic study of Biological sciences at school level in collaborative way.
4. To enrich knowledge and teaching competencies for conducting theory and practical lessons.
5. To acquaint with necessary skills for acting as co-constructor of knowledge in the process of science-teaching.

Learning outcomes: To pupil-teacher will:

1. Understand the nature, characteristics and values related to biological sciences.
2. Understand development of Biology as a subject in National and International context.
3. Acquire knowledge, skills and teaching competencies for conducting theory and practical lessons.
4. Acquire skills of constructive teaching.
5. Acquire ability to conduct Action-Research in Biological science teaching and learning.
6. Acquire competencies to organize curricular and co-curricular activities in Biological sciences.

Course Content:

Unit-1: Development of Biological Science and Purpose of Its Teaching

- Biology as a discipline: Nature, scope and importance.
- Development of Biology in Indian and International context: Landmark discoveries.
- Need and significance of teaching Biology, Aims and objectives of teaching biological science at various levels
- Bloom's taxonomy, Revised taxonomy of Educational objectives, RCEM approach
- Writing objectives in behavioural terms.
- Qualities and competencies of an effective Biology teacher.

Unit-2: Curriculum Development

- Place of Biology in school curriculum.
- Correlation of Biology with other school subjects.
- Organization of Biology curriculum: Principles, selection and sequencing of content.
- Critical analysis of biology curriculum and textbook at upper primary, secondary and senior secondary level.

Unit-3: Methods and Strategies of Biological Science Teaching

- Methods of teaching Biological science: Autocratic- Lecture, Explanation, Demonstration and Question-Answer. Democratic- Observation, Inductive, Deductive, Enquiry, Experimentation, Problem-solving, Heuristic, Project, Laboratory, Field visit.
- Techniques of teaching Biology: Assignment, Self study, Group discussion, Role playing, Supervised study, Programmed learning.
- Audio-visual aids, Improvised apparatus and ICT for Biological science teaching.
- Unit plan and lesson planning based on using 6e's (Engage, Explore, Explain, Elaborate, Evaluate, Extend).

Unit-4: Evaluation & Assessment

- Evaluation in Biology: need, importance and types-Formative, Summative and Continuous and comprehensive.
- Techniques of evaluation.
- Achievement and Diagnostic tests.
- Organization of school activities related to Biology and their relevance.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Content analysis and evaluation of biology textbooks.
- Development of lesson plan based on 6e's (Engage ,Explore, Explain ,Elaborate, Evaluate, Extend) and with the help of ICT.
- Preparation of teaching aids and improvised apparatus.
- Collection of various audio and video clippings with reference to content.
- Assignment/ tests.
- Group discussion.
- Preparation of Achievement and Diagnostic test.
- Organizing activities such as eco clubs, science fair and exhibition at school level.

Books Recommended:

Vaidya N., Science Teaching for the 21st Century, Deep and Deep Publishers, 1999.

Sashi Kiran Pandey, Teaching of Science, R.Lall Book Depot, Merrut.2011.

Mangal, S.K., Teaching of Science, New Delhi, Arya Book Depot, 1992.

Agarwal, D.D., Modern Methods of Teaching Biology, New Delhi, Sorup and Sons, 2002.

B-201-D: Pedagogy of English

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

- To create understanding about the role of English language in Indian classrooms.
- To develop insights into theories of language development.
- To enable students to understand and apply various methods of teaching English in classroom.
- To create critical understanding about various approaches of teaching English.
- To develop teaching Lesson Plans as per the guidelines.
- To develop familiarity with various textual items like prose, poetry and short stories.
- To develop understanding about the process of evaluation in English.

Learning outcomes: The learner will:

- Develop an understanding of Indian classrooms with reference to use of English as a language.
- Critically evaluate various theoretical underpinnings in pedagogic context.
- Apply the methods and approaches for teaching English language.
- Develop lesson plans in accordance to prescribed method.

Course Content:

Unit-1: Understanding Language

- Language : Meaning, definition and characteristics
- Origin of English language
- Features of English language,
- Phoneme and morpheme: Meaning
- Factors influencing development of English language, Place of English in India
- Language development Theories : B.F. Skinner, N. Chomsky and B. Bernstein

Unit-2: Methods and Approaches to Teaching English

- Principles of teaching English
- Aim and objectives of teaching English
- Bloom's Taxonomy
- Writing objectives in behavioural terms
- Methods of teaching English: Translation cum Grammar method, Direct method and Bilingual method.
- Approaches: Structural Approach, Situational Approach, Linguistic Communication Approach and Constructivist Approach.

Unit-3: Lesson Planning and Teaching Skills

- Skills of Teaching.
- Language Skills : Listening, Reading, Speaking and Writing,
- Teaching different Texts: Prose, Poetry, Grammar, Translation and Composition.
- Lesson Planning
- Competencies of an English teacher.

Unit-4: Evaluation and Assessment

- Audio-visual aids in Teaching of English.
- Evaluation in English: Meaning, Continuous and Comprehensive Evaluation
- Preparation of Achievement test (blueprint).
- Action Research: Meaning and Steps
- Co-curricular activities: Meaning and significance
- Remedial Teaching in English.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Discussion on Position Paper on Teaching of English, NCERT
- Listening to models of good English speech and recorded materials.
- Preparation of lesson plans for teaching various types of lessons in English.
- Content Analysis of the English course Text books in Schools.
- Developing model question paper in English/ blueprint as per Blooms taxonomy.
- Organising Co-curricular activities: Calligraphy Competition, drama and skits.
- Workshop for developing teaching aids.
- Visit to Language Laboratory.

Books Recommended:

Menon, T.K.N. and Patel, M.S. : The teaching of English as a Foreign Language

Bhandari and others: Teaching of English – Longmans.

O’Conner, J.D.: Better English – Pronunciation.

Agnihotri, R. K. & Sharma, A. L. : English Language Teaching in India- Issues & Innovations.

Allen, H. B. & Campbell, R. P. : Teaching of English as a Second Language.

Chaudhary, N. R. : Teaching English in Indian Schools.

Hornby, A. S.: Teaching of Structural Words.

Mukalel, J. C. : Approaches to English language Teaching.

A.R. Bisht: Teaching of English.

GeetaRai: Teaching of English.

B-201-E: fgluh f''k{k.k i kB; dE

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

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- "kq l kfgR; ds l 'tu ds xqkka dk fodkl djukA
- Hkk'kk; h d'kyrk dk fodkl djukA
- fgluh dh fofHku fo/kkvka l svoxr djukA
- Hkk'kk f''k{k.k dh fof/k; ka l svoxr djukA
- fgluh i kBu] y[ku] mPpkj.k v[; or'uh dh "kq rk l svoxr djukA
- fgluh f''k{k.k dh uohu fofHku l gk; d l kefxz ka l svoxr djukA
- fgluh ea eW; ka du dh n{krk l svoxr djukA
- fgluh ea i kB; l gxkeh fdz kvka l svoxr djukA

Learning outcomes:

- Hkk'kk dh "kq rk ij vf/kdkjA
- vkRekHkO; fDr ea i wZ n{krkA
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Course Content:

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<p>4- i k B ; & i t r d a , o a i k B ; k s t u k</p>	<p>fglñh Hkk'kk f" k { k . k e a i k B ; I g x k e h f d z k v k a l s v f h k i k ;] i z k j] e g R o , o a v k o " ; d r k A</p> <p>i k B ; i t r d a d k v F k j v k o " ; d r k] i z k j] v k l r f j d , o a c k ° ; x q k v k j v k y k p u k A</p> <p>I q e f " k { k . k , o a o k L r f o d d { k k f " k { k . k e a v l r j] i k B ; k s t u k d k v F k j i f j H k k ' k k i z k j] e g R o] I k i k u A</p>	<p>i ' u e p d k v k ; k s t u A</p> <p>i k F k f e d , o a e k / ; f e d L r j d h i t r d a e a d f e ; k j , o a l q k j d s I q k o A</p>
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<p>6- e W ; k a d u , o a f d z ; k R e d " k k s k</p>	<p>fglñh e a f d z ; k R e d " k k s k v f h k i k ;] i f j H k k ' k k] m i ; k s x r k A</p>	<p>{ k s = H k e . k , o a " k k s k d k ; A</p> <p>Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.</p> <p>Content analysis of school subject</p>

Books Recommended:

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B-201-F: Pedagogy of Sanskrit

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To explain the nature, need and principles of teaching Sanskrit language.
2. To impart knowledge about various branches of Sanskrit literature.
3. To demonstrate use of various audio-visual aids in Sanskrit teaching.
4. To explain objectives and steps of teaching prose, poetry, composition and grammar of Sanskrit.
5. To organize co-curricular activities related to Sanskrit language teaching (Shlok recitation, lecture, dramatization and other competitions).

Learning outcomes: Through undergoing this course the learner will:

1. Cultivate an understanding of pedagogic challenges posed by Sanskrit as a subject.
2. Assimilate pedagogic needs of Sanskrit through understanding the significance and foundation of teaching Sanskrit language.
3. Develop an understanding of methods of teaching Sanskrit by learning about branches of the discipline and its established practices.
4. Understand significance of instructional materials in teaching Sanskrit language.
5. Demonstrate practical skills by exercising shloka recitation, lecture, dramatization, etc.

Course Content:

Unit-1:

- The position of Sanskrit in India, Its historical background, cultural, literary and linguistic value and relationship with modern Indian languages.
- Aims of teaching Sanskrit at different stages. Comparison with the aims of teaching Hindi and English.

Unit-2:

- The importance of phonetics of Sanskrit and correct pronunciation.
- The importance of audio-visual aids and their use in teaching of Sanskrit.
- Qualities of a good Sanskrit teacher.

Unit-3:

- The methods of teaching Sanskrit: grammatical method, translation method, analytical method and explanatory method, direct method and Herbartian plan. Advantages and limitations of these methods.
- Methods of teaching of different forms at different stages: Prose, poetry, grammar and composition, translation. Aims, methods and plan of teaching.
- Techniques of evaluation. New types of tests in Sanskrit teaching.

Unit-4:

- Action research in Sanskrit teaching, its meaning, development and utility.
- Importance and use of good handwriting in Sanskrit teaching.
- Lesson-planning.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Content analysis of school subject
- Audio-video presentations
- Group tasks
- Shloka recitation
- Quizzes
- Preparing objective type questions.
- Preparing lesson Plans

Books Recommended:

Sanskrit Shipshan : Dr. Ramshakal Pandey, Vinod Pustak Mandir, Agra.

Sanskrit Adhyapan Paddhati : Smt Kunda Bhosale, Balaji Bungalow, Gangapur Road, Nasik.

Modern Methods of Teaching Sanskrit: Bela Rani Sharma, New Delhi.

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B-201-G: Pedagogy of Social Studies

Maximum Marks: 100

Mode of Examination/Assessment: Internal

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To develop understanding of foundations of teaching Social Studies.
2. To provide opportunities to the learner to review curriculum of Social Studies at secondary and higher secondary level.
3. To acquaint the learner with different strategies for teaching Social Studies at secondary and higher secondary level.
4. To inculcate skills of preparing teaching aid for teaching social studies.
5. To provide skills of analyzing Social Studies text books.
6. To develop competence in preparing evaluation tools in Social Studies.
7. To develop skill of achievement test construction in Social Studies at secondary and higher secondary level.
8. To acquaint the learner with process of Action Research in Social Studies.
9. To equip the learner with skill of preparing lesson plans in Social Studies for instructional purposes.

Learning outcomes:

1. The learner will understand the basic nature and foundations of teaching of Social studies.
2. The learner will become equipped with different strategies and methods for teaching Social studies at secondary level.
3. The learner will acquire skills of evaluating cognitive, affective and psychomotor outcomes in Social studies.
4. The learner will acquire ability to undertake Action-Research in Social Studies.
5. The learner will become equipped with competencies to organize curricular and co-curricular activities in social studies.

Course Content:

Unit-1:

- Social Studies: Meaning, Nature, Importance and Scope of Social Studies. Need and Justification of Social Studies Teaching as a separate subject in School Curriculum.
- Objectives of Social Studies Teaching: Aims and objectives of Social Studies Teaching, General Objectives of Social Studies Teaching, Scope and Values of social studies teaching.
- Curriculum and Co-curricular Activities in Social Studies: Curriculum of Social Studies, Approaches of Organization of Social Studies Curriculum. Need of Co-curricular Activities in Social Studies.

Unit-2:

- Teaching Aids in Social Studies: Need of Teaching aids, Principles for Use of Teaching Aids, Advantages and Problems in Using Teaching Aids, Different Types of Audio- Visual Aids. Preparation of Teaching Aids.
- Textbooks of Social Study: Importance, Characteristics of Good Textbooks.
- Laboratory and Library of Social Studies: Need, Organization and Management of Equipment and Books.

Unit-3:

- Measurement and Evaluation in Social Studies: Meaning, Aims and Importance of Measurement and Evaluation, Formative and Summative Evaluation, Methods of Measurement and evaluation.
- Examination and Tests: Essay type and objective type tests.

Unit-4:

- Lesson Planning: Value, Importance and Types of Lesson Planning, Steps of lesson planning.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Content analysis of SST Books
- Exploration on how different things (movies, magazine, cartoons, and newspapers etc.) can help in teaching social studies.
- Organize an educational tour to any historical place, industry, dam etc. and prepare a brief project report based on historical, economical, political and geographical background of the place.
- Prepare a map of any locality.
- Write a review/ report of SST textbook of secondary level.
- Develop a question paper based on blue print, administer it in class and prepare result.
- Survey any secondary school and organize an action research on any classroom or management based problem.

Books Recommended:

Guru Saran Das Tyagi : Samajik Adhyayan Shikshan.

Dr. Gajendra Singh Tomar : Samajik Vigyan Shikshan.

S.K. Kochar : Teaching of Social Studies.

J.C. Agarwal : Teaching of Social Studies

B-201-H: Pedagogy of Commerce

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. Development of Understanding with respect to meaning, aims & objectives of commerce teaching.
2. Development of understanding about various approaches of teaching commerce.
3. Providing knowledge about different methods, techniques & devices of teaching and use of various teaching aids.
4. Development of ability to prepare Lesson Plan properly & understand evaluation & assessment techniques in commerce teaching.
5. Develop the skills of Diagnostic & Remedial teaching.

Learning outcomes: After undergoing the course the learner will be able:

- To understand nature, need and importance of teaching commerce.
- To know and use skills and competencies of teaching commerce at secondary level.
- To understand different methods and techniques of evaluating cognitive, affective and psychomotor outcomes of Commerce teaching.
- To understand the global issues and trends in the field of Commerce teaching.
- To undertake Action-Research in the field of Commerce teaching.
- To use different competencies to organize curricular and co-curricular activities in Commerce teaching.

Course Content:

Unit-1:

- Meaning, Nature and scope of commerce teaching.
- Aims & objectives of teaching commerce at higher secondary stage.
- Importance of commerce as a discipline and place of commerce in school curriculum.
- Correlation of commerce with other subject.
- Professional traits of a commerce teacher.

Unit-2:

- Approaches of commerce teaching & their implementation in commerce teaching.
- Critical study of existing textbook of commerce & suggestion for improvement.
- Laboratory of commerce teaching & co-curricular activities for commerce teaching.
- Commerce Room: its need, organization & equipments.

Unit-3:

- Teaching Methods in commerce teaching: Project, Discussion, Problem-solving, Analytical & Synthetics, Socialized Recitation, Seminar etc.
- Techniques & Devices in commerce teaching, principles & methods of classroom teaching.
- Equipment for effective instruction and classroom Arrangement: Audio-Video Aids, Media.
- Different types of tests (Essay type, Short Answer type, Objective type); their construction & administration.

Unit-4:

- Innovations in commerce teaching: Micro teaching, Team teaching, Simulated teaching, Programmed Instruction.
- Lesson Planning for commerce teaching, Its need & importance in commerce teaching.
- Evaluation & assessment in commerce teaching.
- Preparation of a model Question-paper along with its blue-print from textbook of commerce.

Unit-5:

- Different aspects in commerce teaching: Teaching of book keeping, teaching of commercial practice, teaching of type-writing & short-hand.

- Exploitation of Local resources in teaching of commerce (visit to offices & factories).
- Diagnostic & Remedial teaching of commerce students at secondary school.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Revision of the content of the subject chosen by the student with a view to revise and improve subject knowledge.
- Content analysis of Books
- Assignments, Presentations on ppt. Library visit, Unit test.
- Preparing teaching Aids, Project on real classroom observations, construction of different types of question paper.
- Simulated teaching practice, preparing Lesson Plan, School visit, practice teaching in real classroom.
- Type – writing & short-hand, visit to offices & Factories, unit test etc.

B-202: School Administration and Management

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To provide understanding related to concepts of organization, administration and management.
2. To generate understanding about the process of school management.
3. To provide knowledge about factors related to management of school.
4. To acquaint the learner with administrative structure and various schemes related to education.

Learning outcomes: The learner will be able:

1. To understand the concept of school organization, administration & management.
2. To understand the latest trends in school organization, administration & management.
3. To identify and analyse the educational structure in India
4. To identify various innovations in classroom management.

Course Content:

Unit-1: Educational Administration and Management

- Concept, Nature, Scope, Need and Characteristics of Educational Administration and Management.
- Principles of Educational Management.
- Management Process: Planning, Organization, Directing & Controlling.
- Functions of Administration and Management.

Unit-2: Management of School

- Principal as a leader of an organization, Administrative qualities.
- Role and Responsibilities of Principal and Teacher(s) in School Management.
- Time-table: Meaning, significance and principles of Time-table construction.
- Managing school resources: human, infrastructural and financial.
- Approaches to school management.

Unit-3: Factors Related To School Management

- Indiscipline: Types, Causes and suggestions for eradication.
- Control: Meaning, Types and Techniques, important factors of control in management.
- Co-ordination: Meaning, Scope and Factors related to co-ordination.
- Supervision and Inspection: Meaning, Function and Process, Decision making and crisis in management.

Unit-4: Administrative Structure and Schemes

- Structure & function at different levels: Centre, State, District
- Functions of Apex bodies: CIBE, NCERT, KVS, NVS, SCERT, DIET, SRC and School Boards.
- Decentralization of Education with reference to the role & functions of PRI's.
- SSA, RMSA, MDM, RTE, SAMAGRA SHIKSHA ABHIYAN

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Observation of different management functions in schools.
- Survey/ Case study of Apex bodies at State/District level etc.
- Unit test/Assignments.
- Observation of role & functions of school principal.
- Study of the implementation-status of various schemes in schools

Books Recommended:

Agarwal, J.C.: Educational Administration, Management & Supervision, Aryov Book, Depot.

Bhatt, B.D. & Sharma, S.R: Education Administration: Kanishka Publ. house.
Campbell, E.: Introduction to Educational Administration.
Arya, Mohan Lal; Shaikshik Prashashan evamPrabandhan; R.Lall Book Depot.
Tayles, G.: The Teacher as Manager, NCERT.

B-203: Educational Technology and ICT

Maximum Marks: 100

Mode of Examination/Assessment: Internal and External

Internal Marks-30

External Marks-70

Course Objectives: The present course is aimed to attain following objectives:

1. To familiarize student-teachers with fundamentals of Educational Technology.
2. To make student-teachers aware of use of ICT in Education.
3. To develop skills to use multimedia among student-teachers.
4. To enable student-teachers in using ICT for solving educational problems.

Learning outcomes: The student-teacher will:

1. Become aware of use of educational technology, ICT, Mass- media and multimedia.
2. Become abreast with new technological trends in education.
3. Get familiarized with fundamentals of ICT and multimedia.
4. Be able to make best possible use of ICT and Multimedia in solving problems of teaching and learning.

Course Content:

Unit-1: Introduction to Education Technology

- Concept, Meaning and Specific Objectives of Educational Technology.
- Nature and Characteristics of Educational Technology.
- Scope of Educational Technology.
- Types of Educational Technology: Hardware, Software and Instructional Design.

Unit-2: Mass-Media as Resource for Teaching-Learning

- Classification of Mass media and their use in Education: Traditional, Print, Electronic Broadcasting and Digital Media.
- Advantages & Limitations of Mass Media with reference to Education.
- Role of teacher in using mass media in Teaching – Learning process.
- Open Education Resources.

Unit-3: Transforming Teaching-Learning Through ICT

- Concept, Meaning and Functions of ICT.
- Characteristics, Advantages and Disadvantages of ICT.
- ICT as facilitator. Computer as an educational learning resource: Computer Assisted Instruction and Computer Assisted Management.
- Internet as an information resource.

Unit-4: Advanced Educational Technology and Online Teaching

- Hardware as a companion in teaching learning process: Over Head Projector (OHP), Liquid Crystal Display (LCD) and Closed Circuit Television (CCTV).
- Online Learning: Networking, e-mail, Teleconferencing, Gaming.
- Role of CIET.
- Online Teaching: Concept, Organization & Management of Online Teaching.
- Tools and Apps for conducting online classes.

Practicum: Some of the following or similar activities, to be selected by subject-teacher(s), will be organized:

- Development of Computer aided materials, slides, power-points etc.
- Use of internet, e-mail.
- Critical review of an educational programme.
- Online teaching process.
- Unit test.

Books Recommended:

Davis, I.K.: The Management of learning.

Smith & Moore: Programmed Learning.

Sharma, R.A. :Shiksha Takniki.

Mangal, S.K. : Fundamentals of Educational Technology, Prakash Brothers.

Dececoo, J.P. : Educational Technology Readings in Programmed Instruction.

मंगल.एस.के.,मंगल,उमा :शिक्षा तकनीकी

सिंह,मयाशंकर: शिक्षण तकनीक एवं शिक्षा के नूतनआयाम

अग्रवाल,जे.सी :शैक्षिकतकनीकी एवं प्रबंध

EPC-204: Technology Enabled Learning

Maximum Marks: 25

Mode of Examination/Assessment: Internal

Internal Marks-25

External Marks-00

Course Objectives: The present course is aimed to attain following objectives:

1. Development of knowledge and ability to wield ICT tools and devices.
2. To provide opportunity for hands on learning and exploring applications of ICT in education.
3. To provide skills in organizing and creating digital resources.
4. To enable learners for safe and secure use of ICT.

Learning outcomes: The student teacher will be able to:

- Effectively use ICT tools, software applications and digital resources.
- Integrate ICT into teaching-learning and evaluation process.
- Use ICT for effective educational management.

Course Content: This is practical course to be conducted by designated teacher(s). The practical will involve following:

- Create learning resource(s) with ICT (handling text, data and media).
- Explore spreadsheets.
- Operate Liquid Crystal Display (LCD) projector
- Develop portfolio, report card and time-table.
- Develop Google forms.
- Organize online classrooms/ meetings
- Access Open education resource(s)
- Any other activity considered relevant, in consultation with HOD.

Note: Pupil teacher will maintain a written record of all practical activities. This practical record, along with performance in Practical(s) will be assessed by designated teacher(s).

EPC-205: Simulated, Micro and Supervised Teaching

Maximum Marks: 25

Mode of Examination/Assessment: Internal

Internal Marks-25

External Marks-00

Course Objectives: The present course is aimed to attain following objectives:

1. To provide an opportunity to learn the art of teaching through simulated technique.
2. To provide opportunities for practicing teaching skills in real classrooms.
3. To provide learning opportunities through participation in school activities.
4. To provide opportunities to develop skills of preparing suitable lesson plans.
5. To learn to develop and maintain teaching-learning resources.

Learning outcomes: The student-teacher will be able to:

- Learn teaching skills and practice these in real classroom situations.
- Take part in organization of different school activities.
- Perform and deliver duties as specified from time to time.
- Develop effective teaching learning materials.

Course Content: This is a practical course, divided into two parts:

Part-A: Simulated Teaching: Following activities shall be done by student teacher(s) in the institution under the supervision of subject- teacher.

- Development of twenty lesson plans; ten per opted school- subject.
- Simulated teaching in two school subjects for the duration decided by HOD
- Peer observation and providing feedback during simulated teaching.
- Development of teaching learning materials (charts and models).

Part-B: Supervised Teaching: Following activities shall be done by student teacher(s) in designated school under the supervision of mentor teacher(s) of the department:

- Classroom teaching in opted two school subjects: minimum twenty classes; ten per subject with lesson plan.
- Writing Peer Observation Reports.
- Participation in organizing different activities in school.
- Performance and deliverance of duties as directed by the mentors.
- Development of teaching aids.
- Any other relevant activities, decided by mentor-teacher(s)/HOD.

Note: The student-teacher shall maintain a record of all above activities, which along with his/her performance shall be evaluated by mentor-teacher(s) designated by HOD.