B.Ed.-2Year (Gen) Programme

Learning Outcome Based Curriculum Framework (LOCF)

w.e.f. Session 2020-21



KURUKSHETRA UNIVERSITY KURUKSHETRA

(Established by the State Legislature Act-X-II of 1956)

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| 818 | Course 6& 7 | | (vi) | Pedagogy of Social Science | | | |
| 819 | Course 6& 7 | | (vii) | Pedagogy of Commerce | | | |
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| 824 | Course 6& 7 | | (xii) | Pedagogy of Music | | | |
| 825 | Course 6& 7 | | (xiii) | Pedagogy of English | | | |
| 826 | Course 6& 7 | | (xiv) | Pedagogy of Hindi | | | |
| 827 | Course 6& 7 | | (xv) | Pedagogy of Punjabi | | | |
| 828 | Course 6& 7 | | (xvi) | Pedagogy of Sanskrit | | | |
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| 830 | Course 8 | _ | | ledge and Curriculum | | | |
| | Course 9 | _ | | ment for Learning | | | |
| 831 | Course 10 | _ | | ng and Inclusive School | | | |
| 832 | Course 11 | _ | | aal Course (Any one of the following) | | | |
| 833 834 | | | (i) | Environmental Education | | | |
| | | | (ii) | Peace Education | | | |
| | | | (iii) | Health, Physical & Yoga Education | | | |
| | | | (iv) | Guidance and Counselling | | | |
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| 838 839 | | EPC EPC | (i) (ii) | Reading and Reflecting on Text Drama and Art in Education | | | |
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KURUKSHETRA UNIVERSITY, KURUKSHETRA COURSE DISTRIBUTION (YEAR WISE) & SCHEME OF EXAMINATION (w.e.f.2020-21) B.Ed-1st Year

| Paper | Nomenclature | Maximum M | | | rks | Perio | Exam | Credits | Credit |
|----------------|---|-----------|--------|-----------|--------|-------|---------|---------|--------|
| | | Tota | ıl Ez | xternal | Inter | ds | Hour | | hours |
| | | | | | nal/ | per | | | (per |
| | | | | | Practi | week | | | week) |
| | | | | | cum | | | | |
| 801 | Childhood and Growing Up | 100 | 80 |) | 20 | 4 | 3hrs. | 4 | 4 |
| 802 | Contemporary India and Education | 100 | 80 |) | 20 | 4 | 3hrs. | 4 | 4 |
| 803 | Learning and Teaching | 100 | 80 |) | 20 | 4 | 3hrs. | 4 | 4 |
| 804 | Language across curriculum | 50 | 40 |) | 10 | 2 | 1:30hrs | 2 | 2 |
| 805 | Understanding, Disciplines and subjects | 50 | 40 |) | 10 | 2 | 1:30hrs | 2 | 2 |
| 806 | Gender, School and Society | 50 | 40 | | 10 | 2 | 1:30hrs | 2 | 2 |
| 807- | Pedagogy of a School Subjects- I | 100 | 80 |) | 20 | 4 | 3hrs. | 4 | 4 |
| 823 | Pedagogy of a School Subjects- II | 100 | 80 |) | 20 | 4 | 3hrs. | 4 | 4 |
| | Enhancing Professional Cap | | s (EPC | <u>:)</u> | | | | | |
| 831 | (i) EPC-1 Reading and Reflaction on Text | | | 25* | 25* | 4 | 1:30hrs | 2 | 2 |
| 833 | (ii) EPC-3 Critical Understandi of ICT | | 50* | 25* | 25* | 4 | 1:30hrs | 2 | 2 |
| 837- 853 | School Internship Programme & Engagement with the Field (4 weeks) | | | | | | | | |
| Course -14A | The students are required to any one OESS/ MOOCs Co | ourse | | | | | | | |
| OES | (available during the ong | | | | | | | | |
| S/ | session of B.Ed. Programme) to | _ | | | | | | | |
| MOO Cs** | offered by any Departr University. | nent/ | 50** | 50** | | 0 | | | |
| * | | | | | | | | | |
| | Total | | 650 | 520 | 130 | 26 | | 26 | |

^{*}External Exam for this course will be held at the end of 2nd Year.

^{**} Marks not added in the aggregate.

***The students are required to opt one OESS in First Year and one MOOCs Courses (available on SWAYAM Portal) in Second Year (or as per the guidelines or directions issued by the regulatory bodies or university in this regard from time to time)

Note:-

- (a) Students can opt for any only two school subjects.
- (b) They have to opt for one school subject from each group except for Science, Commerce & Shastri/B.A. (Skt Hons)/M.A. (Skt) students.
- (c) Science students on opt for two school subject from Pedagogy of Sciences (Group-I).
- (d) Shastri / B.A. (Skt Hons)/ M.A. (Skt) student can opt for two school subjects i.e. Pedagogy of Hindi & Pedagogy of Skt. from Group-III.
- (e) Commerce students can opt for two school subjects from Pedagogy of Social Sciences (Group-II).

Group –I Pedagogy of Sciences:

- (i) Pedagogy of Science (ii) Pedagogy of Biological Science
- (iii) Pedagogy of Computer Science (iv) Pedagogy of Home Science
- (v) Pedagogy of Physical Science

Group- II Pedagogy of Social Sciences:

- (i) Pedagogy of Social Science (ii) Pedagogy of Commerce
- (iii) Pedagogy of Economics (iv) Pedagogy of History
- (v) Pedagogy of Geography (vi) Pedagogy of Art
- (vii) Pedagogy of Music

Group- III Pedagogy of Languages:

- (i) Pedagogy of English (ii) Pedagogy of Hindi
- (iii) Pedagogy of Punjabi (iv) Pedagogy of Sanskrit

Group- IV Pedagogy of Mathematics:

(i) Pedagogy of Mathematics

B.Ed.- 2nd Year

| Paper | Nomenclature | Maximum Marks Periods per week Hour Credits | | | | | Credit hours (per week) | | | |
|---|---|--|-----------|------------------------|-----|---------|----------------------------------|----|--|--|
| | | Total | Extern al | Internal/ Practicum | | | | | | |
| 824 | Knowledge and Curriculum | 100 | 80 | 20 | 8 | 3hrs. | 4 | 4 | | |
| 825 | Assessment for Learning | 100 | 80 | 20 | 8 | 3hrs. | 4 | 4 | | |
| 826 | Creating an Inclusive School | 50 | 40 | 10 | 4 | 1:30hrs | 2 | 2 | | |
| | Optional Course | | | | | | | | | |
| 827 | (i) Environment Education | 50 | 40 | 10 | 4 | 1:30hrs | 2 | 2 | | |
| 828 | (ii) Peace Education | 50 | 40 | 10 | 4 | 1:30hrs | 2 | 2 | | |
| 829 | (iii) Health & Physical Education | 50 | 40 | 10 | 4 | 1:30hrs | 2 | 2 | | |
| 830 | (iv) Guidance and Counselling | 50 | 40 | 10 | 4 | 1:30hrs | 2 | 2 | | |
| | Enhancing Professional C | | | | T | T | | | | |
| 831 | I. Reading and Reflaction on Text | 50 | 25 | 25 | 4 | 1:30hrs | 2 | 2 | | |
| 832 | II.EPC-2 Drama & Art in Education | 50 | 25 | 25 | 4 | 1:30hrs | 2 | 2 | | |
| 833 834 | III.EPC-3 Critical Understanding of ICT | 50 | 25 | 25 | 4 | 1:30hrs | 2 | 2 | | |
| | IV. Understanding the Self | 50 | 25 | 25 | 4 | 1:30hrs | 2 | 2 | | |
| 837-853 | School Internship Programme & Engagement with the Field (16 weeks) | | | | | | | | | |
| | Pedagogy-I | 175 | 100 | 75 | ••• | ••• | 16 | 16 | | |
| | Pedagogy-II | 175 | 100 | 75 | | | | | | |
| Course- 14B OESS/ MOOCs *** | The students are required to opt any one OESS/MOOCs Course (available during the ongoing session of B.Ed. Programme) being offered by any Department/ University. | 50** | 50** | | 0 | | | | | |
| | Total | 850 | 540 | 310 | | | | | | |

PROGRAMME OUTCOMES (POs)

After successful completion of the program:

- PO1 Learners will be able to comprehend the acquire knowledge during the Program of study.
- PO2 Learners will be able to reflect on the issues relating to the discipline-'education'.
- PO3 Learners will be able to exhibit the professional skills and competencies acquired during the Program of study.
- PO4 Learners will be able to show scientific & research capabilities in their academic, professional and general life pursuits.
- PO5 Learners will be able to apply the knowledge and skills acquired in academic planning, organizing, evaluation, decision making, resource management according to pre-determined objectives/outcomes.
- PO6 Learners will be able to work as member or leader in various teams and multidisciplinary & diverse settings.
- PO7 Learners will be able to discuss and solve the problems relating to the discipline and life.
- PO8 Learners will be able to state and follow the ethical issues relating to the discipline and society.
- PO9 Learners will be able to apply different tolls and techniques of communication and related skills.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

The B.Ed-2yr (Gen), a pre-service teacher education programme at secondary level aims at:

- **PSO-1**. Acquiring conceptual understanding of sociological, psychological and philosophical aspects of an individual's development and its relationship with teaching-learning process.
- **PSO-2**. Visualizing enshrined legislative provisions related to Indian Education system and facilities in an inclusive setting.
- **PSO-3**. Providing integrated learning experiences within the socio-cultural milieu of the learners to respond to the diversities in the class-room.

- **PSO-4**. Nurturing pedagogic, aesthetic and literary skills of an individual for self analysis and behaviour modification.
- **PSO-5**. Providing opportunity for experiential learning to conceptualize disciplinary understanding and empirical knowledge of school curriculum to assess and reflect on teaching-learning practices
- **PSO-6**. Providing exposure to ICT tools for their effective utilization in providing learning experiences as well as management of school activities.
- **PSO-7**. Exploring the role of social agencies, school and society in nurturing holistic well-being and promoting healthy practices.
- **PSO-8**. Sensitizing towards environmental issues and language background of students.
- **PSO-9**. Identifying challenges of gender disparities, exposure to gender neutral pedagogic materials and training to address the gender inequalities.
- **PSO-10**. Providing firsthand experience of all the school activities through engaging student-teachers as interns at secondary and senior-secondary stage.

Course 1 (801)

CHILDHOOD AND GROWING UP

Course Code: 801

Max. Marks:100

Time: 3 Hours (Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes

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

- **801.1** Explain the Meaning, Concept and Characteristics of Growth, maturation and development at various stages.
- **801.2** Describe the problem of Childhood and adolescent age especially with respect to the Indian context.
- 801.3 Develop an understanding of different aspects of a child's Cognitive, Social, Emotional & Moral development.
- **801.4** Become familiar with Theories of Child development and their Educational implications.
- Understand the developing Individual / Learner from different dimensions i.e. Intelligence, Creativity & Personality.
- **801.6** Acquaint with various Mental Processes of Learning i.e. Thinking, Memory & forgetting.
- **801.7** Get familiar with the role of Family, School, Community, Society& different cultural practices in the developmental process of Children.
- Acquaint with contemporary issues (issue of marginalization & Stereotyping, Gender, Social class & poverty) in child development and describe the role of media in constructing & deconstructing perceptions & ways of dealing with above issues.

Course Content

Unit – I

- 1. Dimensions of Development
- Growth & Development: Concept, Principal, Factors, & Stages.
- Characteristics of stages development with special reference to Childhood and Adolescence.
- Adolescence: Understanding their needs and problems in Indian context.

- Parenting styles: Concept and its impact Child development.
- Personality: meaning, nature and assessment.

Unit – II

2. Theories of Child Development

- Theory of Cognitive Development by piglet: Concept, Stages and Implications with special reference to Indian Context.
- Theory of Social & Emotional Development by Erickson: Concept, Stages and Implications with special reference to India Context.
- Kohlberg theory of Moral Development: Concept, Stages and Implications with special reference to India Context.

Unit-III

3. Learner as a Developing Individual

- Intelligence: Meaning, nature and theories of intelligence (two factor theory and Thurston's group factor theory, Measurement of intelligence and application of intelligence tests.
- Creativity: Concept; relationship with intelligence; techniques for fostering creativity.
- Mental Processes of Learning: Thinking Concept Types of Thinking Divergent, Convergent, Critical, Reflective & Lateral Thinking.
- Memory Concept, Types & Strategies to develop Memory; Forgetting Nature, Causes, Factors & Strategies to minimize Forgetting.

Unit- IV

4. Learning in socio Cultural Perspective

- Agencies of Socialization: Family, School, Community and their role in Child Development.
- Social & Cultural Change as factors influencing Child Development.
- Impact of Marginalization and Stereotyping on Child Development with special reference to Gender, Social Class & Poverty.

Role of media in constructing & deconstructing perceptions & ways of dealing with above issues.

Practicum/ Sessionals

Any one of the following:

- i. Case-study of an adolescent: Problems and Needs.
- ii. Seminar/ Presentation on educational implications of One Learning theory of child development.
- iii. Survey report on impact of socio-economic status of a family on child.
- iv. Content Analysis of Media coverage on the following:
 - a. Child labour.
 - b. Gender bias.
 - c. About Disability.
- v. Play/drama on value orientation & character building and preparing a report.
- vi. Protecting the culture and indigenous practices: Compilation of local folk songs, folk tales, riddles and toys.
- vii. Observation of children during their playtime in a rural school and preparing a report.

Suggested Readings:

Aggarwal, J.C. (1995). *Essentials of Educational Psychology*, New Delhi: Vikas Publishing House Private Limited,

Allport, G.W. (1961). Pattern and Growth in Personality: New York.

Chauhan, S.S. (2002). *Advanced Educational Psychology*. New Delhi: Vikas Publishing Gore, M.S. (1984). *Education and Modernization in India*. Jaipur:Rawat Publishers. H.Havighurtst, R. et al. (1995). *Society and Education*. Baston: Allyen ad Bacon H.P.BWheldall, K. (2006). *Developments in Educatonal psychology*. New York: Routledg Kamat, A.R. (1985). *Education and Social Change in India*. Bombay: Samaiya Publishing Co.

Bhatia, K.K. (2008). *Basis of Educational Psychology*. Ludhiana: Kalyani Publishers. Sharma, K.N. (1990). *Systems, Theories and Modern Trends in Psychology*. Agra: Woolfork, A (2004). *Educational Psychology: Reason Education (Singapore*). New Delhi: Indian Branch.

Course: 2(802)

CONTEMPORARY INDIA AND EDUCATION

Course Code: 802

Max. Marks:100

Time: 3 Hours (Theory:80,Internal: 20)

NOTE FOR PAPER SETTER

i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.

- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **802.1** understand the Equality of opportunities in Education, Fundamental rights, duties and Directive Principles of state policies and its impact on Education.
- **802.2** Explain the concept of Diversity, Concerns related to Socially disadvantages segment of the society..
- **802.3** Describe the significant recommendations of Commission before Independence related to Secondary Education.
- 802.4 understand the Work Education and Experiential learning in context of Nai Talin...
- **802.5** Understand the Objectives and Recommendation of the policies after Independence related to Secondary Education.
- **802.6** Explain the major features of New Education Policy 2020.
- **802.7** Develop and understanding of emerging issues related to Contemporary India and its impact on Education.
- **802.8** Evaluate the Govt Policies of Universalisation of School Education ie DPEP, MDM, SSA, RMSA & IEDSS.

Course Contents

Unit – I

1. Indian Constitution and Status of Education:

- Equality of opportunities in education: Article 28, 29, 350 and 351 and their issues.
- Education and Fundamental Rights and Duties: Article 14, 15, 16, 21-A,30 and 51A.
- Directive Principles of state policies

2. Diversity in Society and Implications for Education:

- Social diversities based on Castes, Languages, Religions and Regions,..
- Status of Education of Socially disadvantaged segments namely SC, ST, OBC, Women, PWD'S and minorities.
- Right to Education Act 2009: right of children to free and compulsory education

Unit – II

3. Educational Committees and Commission before independence with special reference to:

- Maculay's minutes: Its features and recommendations
- Adam's Report: features and its re commendations.
- Woods Despatch of 1854: Recommendations Merits and demerits
- Basic Scheme of Education 1937: objective, merits and demerits; Concept & need
 of Nai Talim and philosophy of work education and experiential learning for
 rural reconstruction.

Unit – III

4. Educational Committees and Commission after independence with special reference to:

- Secondary Education Commission (1952-53): objectives and recommendations.
 - Indian Education Commission (1964-66): objectives and recommendations.
 - National policy on Education (1986)): objectives and recommendations
 - Revised National Policy 1992
 - POA(1992): Major features.
 - New Education Policy 2020.

Unit - IV

5. Contemporary Issues in Indian Education

- Universalization of school Education and DPEP, MDM, SSA, RMSA and IEDSS
- Vocationalization of Secondary Education: need and implications.
- Emotional Integration and international understanding in the context of globalization.
- Modernization: Concept, merits and demerits.
- Sustainable development goals(UN) 2015.
- Concept and Importance of Road Safety, Road Safety rule and regulation, Traffic Sign Road Safety measures, legal mandates of Road Safety.

• Practicum/Sessionals

Any one of the following:

- i. Revisiting educational policies framed for the education of different sections of the society SC/ BC/Minorities/ Women.
- ii. Prepare a report on problems of secondary education.

- iii. Review educational policies for vocational education.
- iv. Review of Policies related to universalization of school education.
- v. Case study of a school on Community Engagement, Conduct & Outcome of SMC meetings.
- vi. Panel Discussion on Gandhi's idea on Education and their relevance in present day context.
- vii. Survey on literacy levels and out of school children in any locality.

Suggested Readings:

Bhattacharya & Sriniwas. (1977). *Society and Education*, Calcutta: Academic Publications. Deshpande, S.(2004). *Contemporary India: A sociological view*. New Delhi: penguin.Dubey, S.C. (2001). *Indian Society*, New Delhi: National Book trust.

Government of India (GOI) (2009). Right to education Act. New Delhi: MHRD.

Ghanta, R. & Dash, B. N. (2005). *Foundations of Education*, Hyderadbad: Neelkamal Publications.

Kashyap, S.C. (2009). The constitution of India, New Delhi: National Book latest edition.

Mishra, B.K. & Mohanty, R.K. (2003). *Trends and issues in India Education*, Meerut: Suryapublications.

Ministry of Human Resource Development of India (1986). National policy on education.

NCERT,91964-1966). Educational and national Development: report of the

educationcommission, New Delhi: NCERT.

Rajput, J.S. (1994). *Universalisation of Elementary Education*, New Delhi: Vikas Publishing House.

Right to education Act, (2009). Gazette. Notification of central Government.

Sachdeva, M.S. et.al (2011). *Philosophical, Sociological and Economic bases of Education*, Patiala: Twenty First Century Publications.

Shankar Mukharji. (2007). *Contemporly issues in modern Indian education*, Authors Press. Stormquist, Nelly P.(2002). *Education in a Globalised world*. New York: Rowman & Little field publishers.

Walia, J.S. (1979). *Modern Indian Education and its Problems*, Jalandhar City: Paul Publishers, Gopal Nagar.

Walia, J.S (2014). Philosophical, Sociological and Economic Bases of Education.

Jalandhar: Ahim Paul Publishers.

http://www.gandhi-manibhawan.org/gandhicomsalive/speech8.html

http:/www.mkgandhi.org/speeches/speech Main.html

B.Ed - 2 Year (Gen)/KUK

2020-21

Course 3 (803)

LEARNING & TEACHING

Course Code: 803

Max. Marks:100 (Theory:80,Internal: 20)

Time: 3 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **803.1** Understand the Concept of learning and learning strategies.
- **803.2** Identify the individual differences among the learners.
- **803.3** Explain paradigms of learning.
- **803.4** Describe the educational implications of different theories of learning.
- **803.5** Understand the Concept of teaching and identify the variables in the teaching process.
- **803.6** Explain the applications of social constructivist approach in teaching and learning.
- **803.7** Describe the phases & models of teaching.
- **803.8** Understand and make effective uses of different Teaching Strategies.

Course Contents

Unit-I

1. UNDERSTANDING LEARNING

- Learning: Concept, Nature, types of learning & Factors influencing learning,.
- Learning strategies: Co-operative learning & Collaborative learning, peer-tutoring, group learning.
- Role of Teacher & School in relation to learning strategies.
- Individual Differences: Concept, Types, Causes & Educational implications.

Unit-II

2. LEARNING PARADIGM

- Theories of Learning:
 - Connectionism theory (Trial & Error: Thorndike), concept, laws of learning & Educational Implications.
 - Conditioning theories: Classical conditioning (Pavlov) & Operant Conditioning (Skinner): Concept, characteristics and Educational Implications.
 - Social-constructivist theory (Vygostky & Bandura): Concept, Nature and Educational implications.

Unit-III

3. UNDERSTANDING TEACHING

- Teaching: Concept, characteristic, features and levels of teaching.
- Related concepts of Teaching (Training, conditioning, instruction & indoctrination)
- Variables in the Teaching Process: The Learning task (Instructional Objectives), Learning Behaviour (Entry behaviours & Learner's characteristics) Teacher Behaviour: (Competence, Personality, Teaching Style).
- Social-constructivist approach in teaching (Applications of Bruner, Ausubel & Vygotsky's ideas in teaching).

Unit-IV

4. PHASE & MODELS OF TEACHING

- Phase of Teaching: Pre-active, Interactive and Post-active.
- Models of Teaching: Meaning, Need & Elements, Basic Teaching Model (Glaser), Concept Attainment Model (Bruner).
- Teaching Strategies: Brain-Storming, Simulation, Role-playing, Gaming, Remedial teaching & Enrichment Programme.

Practicum/ Sessional

Any one of the following

- i. Group Projects: Observation report on Teaching-learning transaction process in School teaching practice.
- ii. Seminar/ Presentation on learning theories.
- iii. Application of teaching strategies (Brain-Storming, Simulation, Role-playing, Gaming, Remedial teaching) on any current/ social issue.
- iv. Case-study on Individual differences.
- v. Application of participatory learning and action techniques of resource mapping and social mapping.

Suggested Readings:

Chauhan, S.S. (2014). "Innovations in Teaching Learning Process", Noida: Vikas Publishing House Private Ltd.

Dececco, J.P. (1988) "The Psychology of Learning and Instruction", New Delhi: Prentice Hall.

Gagne, R.M. (1977). "The conditions of learning", New York, Chicago: Holt, Rinchart and Winston.

Joyce, B. & Weil, M. (1992). "Models of Teaching", New Delhi, Prentice Hall.

Kulkarni, S.S. (1986). "Introduction to Educational Technology", New Delhi: oxford & IBH Publishing Company.

Pandey, K.P.(1983). "Dynamics of Teaching Behaviour", Ghaziabad: Amitash Parkashan.

Pandey, K.P. (1980). "A First Course in Instructional Technology", Delhi: Amitash Parkashan.

Skinner, B.F.(1968). "The Technology of teaching", New York: Appleton Century Crofts.

Sharma, R.A. (1991). "Technology of Teaching", Meerut: R. Lall Book Depot.

Sharma, S.K. (2005). "Learning and Teaching: Learning process", Delhi: Gyan Books Private Ltd.

Srivastava, D.S. and Kumari, S. (2005). "Education: Understanding the learner", Delhi: Gyan Books Private Ltd.

Walia, J.S. (2011). "Technology of Teaching", Jalandhar: Ahim Paul Publishers.

Walia, J.S. (2012). "Teaching Learning Process", Jalandhar: Ahim Paul Publishers.

Course 4(A) (804)

LANGUAGE ACROSS THE CURRICULUM

Course Code: 804

Max. Marks:50 (Theory: 40,Internal: 10)

Time: 1.30 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

| 804.1 | Know the concept of language, Multilingualism and language diversity with |
|-------|---|
| | various functions of language. |
| 804.2 | Understand the relationship between language & learning and describe the |
| | elements of communicative approach. |
| 0042 | T 4 1'CC 4 1 1'11 C CC 4' 1 1' |

804.3 Integrate different language skills for effective classroom discourse.804.4 Analyze significance of language proficiency and knowledge acquisition.

Course Contents

UNIT-I

1. UNDERSTANDING LANGUAGE

- (i) Concept: Meaning & Nature of language
- (ii) Linguistic principles: Process of acquisition of language

2. Language & Learning

- (i) Functions of language & its basic assumptions: Communicative, Receptive &Expressive, Language and Society. First Language, Multilingualism. Language Diversity in class room.
- **3. Language Across Curriculum: -** Relationship of language & learning, Role of Subject teacher.

UNIT-II

4. LISTENING & SPEAKING SKILL

- (i) Concept and Importance
- (ii) Techniques and Material for developing Listening and speaking skill oral conversational and compositional skills

5. Reading & Writing skill

- (i) Concept, need & Importance
- (ii) Techniques and Material for developing Reading and Writing, Reading Mechanics, Compositional writing.
- 6. Relationship of language Skills and subject knowledge of Teachers

Practicum/Sessionals

Any one of the following:

- (i) Subject wise group discussion, preparation of report and presentation before the group.
- (ii) Prepare a Diagnostic test to identify reading and writing problems of the school students.
- (iii) Prepare a representative sample of advocacy on rural issues / problems
- (iv) Letter writing, Notice, email messages representation on local issues and local challenges.
- (v) Reflections on Gandhian thoughts: Panel discussion and preparation of report

Suggested Readings:

Agnihotri, R.K. (1995). *Multilingualism as a classroom resource*. In K. Heugh, A. Siegruhn, & P. Pluddemann (Eds.), *Multilingual Education for South Africa* (pp. 3-7), Heinemann Education Groups.

Freedman, S.W. & Dyson, A.H. (2003). *Handbook of Research on Teaching English language Arts*. Lawreuel Erlbaum Associates Inclave, USA: New Jersey.

Government of india. (1986). National Policy on Education. GOI.

Grellet, F. (1981) Developing Reading Skills: A practical guide to Reading Comprehension exercises. Cambridge University Press.

Kumar, Krishna. (2007). The child's language and the Teacher. New Delhi: National Book.

Mangal, U.(2010). Teaching of Hindi, New Delhi: Arya Book Depot.

National Curriculum Framework (2005), New Delhi: NCERT.

Sachdeva, M.S. (2013). *Teaching of English*. Patiala: Twenty First Century Publications.

Safaya, Raghunath. Methods of Teaching of Hindi. Jalandhar :Punjab Book Depot.

Sinha, S. (2009). *Roseublatt's Theory of Reading*. Explaining Literature contemporary education dialogue. 6(2), PP223-237.

Sullivan, M. (2008). Lessons for Guided writing. scholastic. National curriculum framework. (2005).

http://www.usingenglish.com/handouts/

Course 4(B) (805)

UNDERSTANDING DISCIPLINES AND SUBJECTS

Course Code: 805

Max. Marks :50

Time: 1.30 Hours (Theory: 40,Internal: 10)

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- 805.1 Describe the characteristics and nature of discipline
- Elaborate the concept of disciplinary knowledge and emergence of discipline and subject.
- 805.3 Critically analyze the sources of knowledge with respect to text books and journals
- **805.4** Acquaint with the paradigm shift in discipline

Course Content

Unit-I

1. EMERGENCE OF DISCIPLINARY KNOWLEDGE

- Meaning, nature and types of discipline.
- Role of disciplinary knowledge in the school curriculum.
- Emergence of school subjects and disciplines from philosophical, social and political contexts;
- emergence of teaching methods

Unit-II

2. DISCIPLINARY KNOWLEDGE: RELATED ISSUES

- Difference and relationship between curriculum & syllabus;
- A criteria for selection of textbooks, magazine & journals as source of knowledge.
- Role of different agencies and their functions in shaping the syllabus and text books at national & state level.

Paradigm shifts in the nature of disciplines: Social Science, Mathematics, Science, Language

Practimum/ Sessional

Any one of the following:

- Critical analysis of a curriculum/ syllabus of particular school subjects.
- Evaluate a text book of secondary classes with reference to its adequacy and in achieving expected learning outcome.
- Review of text book in the light of connecting knowledge to life outside the school.
- Readings and group discussions on NCF-2005, NCFTE-2010, RTE-2009

Suggested Readings:

Bonrs, J.A. (2001). Cultural diversity and Education. Foundations curriculum and teaching (4th Ed) Boston: Allyn and Bacon.

Deng, Z (2013) school subjects and academic disciplines. In A. Luke, A. Woods, & Wer (Eds.), Curriculum syllabus design and equity: A primer and model. Routledge.

Krishna, A. (2009). What are Academic Disciplines? University of Southampton, NCRM E Prints Respositiry *eprints,ncrm.ac.uk*/783/1/what_are_academic_disciplines.pdf.

NCERT(2006). Position paper national focus group on curriculum, syllabus and textbooks. New Delhi: author. Available from

http://www.ncert.nic.in/new ncert/ncert/rightside/links/pdf/focus group/cst final.pdf

NCERT (2006). Position paper national focus group on teaching of social sciences. New Delhi: Author Retrieved on April 21, 2015 from http://www.ncert.nic.in/new_ncert/rightside/links/pdf/focus_group/social_sciencel.pdf

NCERT(2006). Position paper national focus group on teaching of Indian languages. New Delhi: Author Available from

http://www.ncert.nic.in/new_ncert/rightside/links/pdf/focus_group/Indian_Languages.pdf

NCERT (2006). Position paper national focus group on teaching of mathematics. New Delhi: Author Available from

http://www.ncert.nic.in/new_ncert/rightside/links/pdf/focus_group/math.pdf

NCERT(2006). Position paper national focus group on teaching of science. New deli: Author.

Available from

http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/science.pdf

Course-5 (806) GENDER, SCHOOL AND SOCIETY

Course Code: 806

Max. Marks:50

Time: 1.30 Hours (Theory: 40,Internal: 10)

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

After the transaction of the course, student teachers will be able:

- **806.1** To understand the basic concepts, issues and theories of Gender.
- **806.2** To familiarize with the processes of socialization at School and other social agencies.
- **806.3** To visualize psychological and sociological perspective of equity and equality.
- **806.4** To become aware about gender inequalities in school and society.

Course Content

Unit – I

1. GENDER STUDIES: CONCEPT AND THEORIES

- Concept of gender, Patriarch, Masculinity and Feminism, Issues of masculinity and femininity
- Theories on Gender and Education.
 - (i) Symbolic Interaction Theory
 - (ii) Gender Schema Theory
 - (iii) Cognitive Development Theory
 - (iv) Conflict Theory

2. SOCIAL CONSTRUCTION OF GENDER

- Social construction of gender during late childhood and adolescence
- Gender Identities and socialization practices in Family, School and other formal and informal organization.

Unit – II

3. EQUITY AND EQUALITY

- Concept of Equity and Equality: Psychological and sociological perspective
- Need and Importance of Gender Equality

4. GENDER INEQUALITIES AND STRATEGIES FOR CHANGE

Gender Inequality in School: School curriculum, Text book, & classroom process.

Initiatives of Govt. and Non-Govt. organization in dealing with gender inequalities with respect to society.

Practicum/Sessionals

Any one of the following

- i. Identify at least two students (Boys/Girls) having gender bias attitude and develop strategies for gender sensitization.
- ii. Analysis of selected ideas, trends, and problems in the study of gender across academic disciplines.
- iii. Survey on Gender Equality-Status of women and girls in the family and community.
- iv. Preparing sensitization material and creating awareness on Gender issues with the help of students in a village.
- v. Poster making on Gender Equality and Empowerment.
- vi. Observation of practice of inequality between male and female students in a rural school and report writing.

Suggested readings:

Bordia, A. (2007). Education for gender equity: The Lok Jumbish experience, p 313-329

Chatterji, S. A. (1993). The Indian Women in perspective, New Delhi: Vikas Publishing

Devendra, K. (1994). Changing status of women in India, New Delhi: Vikas Publishing House

Gupta, A. K. (1986). Women and Society, New Delhi: Sterling Publications

Ministry of Education (1959). Report of National Committee of Women's Education. New Delhi: ME

Ruhela, S. (1988). Understanding the Indian Women today; Delhi: Indian Publishers Distributors

Thakur, H. K. (1988). *Women and Development planning* (Case study of Nauhatta Block), New Delhi: Vikas Publishing House

Course-6 & 7 (807)

Group-I: Pedagogy of Sciences

(i) PEDAGOGY OF SCIENCE

Course Code: 807

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes

After completion of this course the students teacher will be able to:

- With a second of Science and get acquainted with Aims and objectives of Teaching Science.
- 807.2 Understand bloom's taxonomy of objectives and table of specifications.
- 807.3 Perform pedagogical analysis of various concepts in teaching Schience.
- **807.4** Develop skills of teaching and lesson planning.
- **807.5** Understand the principles of curriculum constructions and critical analysis of text book.
- **807.6** Manage science laboratories.
- **807.7** Familiarize with various approaches and methods of teaching of Science.
- 807.8 Understand the concept of continuous and comprehensive evaluation.

COURSE CONTENTS

UNIT – I

1. NATURE & SCOPE OF SCIENCE

- Meaning, Nature and Scope with reference to Science & its branches.
- History of science and contribution of Indian Scientists.
- Need & importance Science in secondary school & its values in the present context.
- Correlation of science with other school subjects
- Aims & objectives of Science.
- Bloom's Taxonomy of instructional objectives.
- Science in the service of human welfare Agriculture, Medicine, Industry & Conservation of Environment.

UNIT - II

2. PEDAGOGICAL ANALYSIS & LESSON PLANNING

- Content
 - Matter in our Surroundings
 - Atom & Molecules
 - Motion
 - Force
 - Gravitation
 - Work and Energy
 - Tissues
 - Diversity in Living Organism
 - Life Process
 - Reproduction
 - Micro-organism

• Pedagogical Analysis:

Following points should be followed for pedagogical analysis on topics covered in the syllabus

a)Identification of concept b)Listing behavioural outcomes c)Listing activities and experiments d)Listing evaluation techniques

- Teaching Skills:-
 - -Skill of Introducing the Lesson
 - -Skill of Illustrate with the help of Examples
 - -Skill of Explaining
 - -Skill of Stimulus Variation
 - -Skill of Black-Board Writing
- Concept, Need & Importance of Unit Planning & Lesson Planning

UNIT – III

3. TEACHING LEARNING RESOURCES & PROCEDURES

- Meaning, Principles & Steps of Curriculum construction in Science
- Critical Analysis of Present Secondary School Text-Book with Reference to Haryana State
- Science Laboratory Importance, Planning, Designing, Equipping, Maintenance of Science equipment & Records

- Audio-Visual Aids: Chart, Models, Film Strip, Radio, Projectors.
- E-learning Resources Use of Multimedia & Computers, PPT, Internet, Website, Teleconferences.
- Improvised Apparatus Meaning, Importance & Steps
- Professional Growth of Science Teacher in Service Programme, Orientation Programme, Refresher Courses, Seminars, Symposium, Workshop, Science Fair, Science Exhibition, Projects.

UNIT - IV

4. APPROACHES AND EVALUATION IN TEACHING

- Science Inductive deductive Approach, Critical Inquiry Approach, Maier's Problem Solving Approach.
- Methods of Teaching Science
 - Lecture-cum-Demonstration
 - Project Method
 - Laboratory Method
- Continuous & Comprehensive Evaluation (CCE) in Science
- Construction & Use of Achievement Test in Science
- Construction & Use of Diagnostic Test in Science, Preparation of Diagnostic Chart, Identification of Difficulties & Remedial Teaching.
- Meaning & Advantages of Task Analysis and Question Bank.

Praticum/Sessional

Any one of the following

- i. Development of Five Demonstration Experiments on the Topics Covered in the Syllabus from Science Test-books at the Lower Secondary Level in Haryana State.
- ii. Improvisation of Apparatus/Equipment
- iii. Seminar Presentation on any Topics given in the Syllabus.
- iv. Celebration of science week in a village school and report writing
- v. Conducting a survey on health concerns in a village

Suggested Readings

Adams, G.S. (1964). Measurement & Evaluation in Education, Psychology & Guidance, New York: Halt, Rinehart & Winston.

Aggarwal, J.C. (2005). Essential of Examination System. New Delhi: Vikas Publishing HousePvt. Ltd.

Allen, D.W. and Eve, A.W. (1968). Micro Teaching in Theory to Practices. Vol. 70, pp. 181-185.

Bloom, B.S. et al. (1956). Taxonomy of Educational Objectives: The Cognitive Domain, New York: Longum's Green.

CBSE (2009). Teacher Manual on CCE. New Delhi: CBSE.

Das, R.C. (1985). Science Teaching in Schools, New Delhi.Sterling Publication Private Ltd.,

Harrow, A.J.A. (1972). Taxonomy of Motor Domain, New York: Mckay.

Kherwadkal, Anjali (2003). Teaching of Chemistry by Modern Method, New Delhi Sarup &Sons..

Kilpatrick, W.H. (1987). The Project Method, Columbia. Teachers College Record.

Krathwohl, D.R., Bloom, B.S. and Maria, B.B. (1964). Taxonomy of Educational Objectives,

Hand-book II, Affective Domain, New York: David Mckay.

Mager, R.F. (1962). Preparing Instructional Objectives, California: Fearon.

Miller, David F. and Blaydes (1962). Methods & Materials for Teaching Biological Science, New York McGraw Hill Book Co.,

Sharma, R.C. (1995). Modern Science & Teaching, New Delhi.

Dhanpat Rai & Sons. Siddique and SIddique (1998), Teaching of Science, New Delhi. DoabaHouse,

Vishwanth, Pandey and Kisor Valicha (1984). Science Technology & Development, New Delhi: McMillan India Ltd.

Venkataih, S. (2001). Science Education in 21st Century, New Delhi Anmol Publishers,.

Wadhwa, Shalni (2001). Modern Methods of Teaching Physics. New Delhi:Saroop & Sons.

Course-6 & 7 (808)

Group-I: Pedagogy of Sciences

(ii) PEDAGOGY OF BIOLOGICAL SCIENCE

Course Code: 808

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(Cos)

After completion of this course the students teacher will be able to:

- Understand Nature & Scope of Biological Science
 Understand objectives of Teaching biological Science
 Perform pedagogical analysis of various topics of biological Science.
 Develop a skill of lesson planning based on various approaches.
 Understand the principles of curriculum construction.
 Apply e-resources in teaching biological science.
 Adopt suitable approaches, methods, different resources to teach biological
- **808.8** Understand the concept of continues and comprehensive evaluation.

COURSE CONTENTS

science.

UNIT - I

1. NATURE AND SCOPE OF BIOLOGICAL SCIENCE

- Meaning, Nature and Scope with reference to Biological science and its branches.
- History of Biological science and contribution of Indian Biologist.

- Need and Importance of Biological in secondary schools and its values in the present context.
- Correlation of Biological science with other school subject.
- Aims and Objectives of Teaching Biological science.
- Bloom's Taxonomy of educational objectives.
- Formulation of specific objectives in Behavioural terms.
- Biology in the service of human welfare-Agriculture, Medicine, Industry & Conservation of Environment.

UNIT - II

2 PEDAGOGICAL ANALYSIS & LESSON PLANNING

- Content
 - Tissues
 - Diversity in living organism
 - Diseases
 - Natural Resources
 - Improvement in Food
 - Life Process
 - Reproduction
 - Heredity
 - Control and Co-ordination
 - Micro-organism
 - Photosynthesis
- **Pedagogical Analysis :** Following points should be followed for pedagogical analysis on topics covered in the syllabus
- (a) Identification of concept
- (b) Listing behavioural outcomes
- (c) Listing activities and experiments
- (d) Listing evaluation techniques.

• Teaching Skills

- Skill of introducing the lesson
- Skill of illustrate with the help of examples.
- Skill of explaining
- Skill of stimulus variation
- Skill of using black board
- Concept, Need and Importance of unit planning and lesson planning.

UNIT - III

1. TEACHING LEARNING RESOURCES AND PROCESSES

- Meaning, Principles and steps of curriculum construction in biological science.
- Critical Analysis of Present secondary school text book with reference to Haryana State.
- Biological science Laboratory. Importance, Planning, Designing, equipping, maintenance of biological equipment and records.
- Visual Aids: Chart, Model, Specimen.

- E-learning Resources: Use of Multimedia and Computers in biological science, e-learning, PPT, Internet, Website, Teleconferencing.
- Professional growth of biological science teacher in service programme, orientation programme, refresher courses, seminar, symposium, workshop, projects, science museum, science fair and science exhibition.

UNIT - IV

2. APPROACHES AND EVALUATION IN TEACHING

- Approaches of Teaching biological science.
 - Inductive deductive approach
 - Critical inquiry approach
 - Maier's Problem solving approach
- Methods of Teaching biological science;
 - Lecture cum demonstration method
 - Project Method
 - Laboratory method
- Continuous and Comprehensive Evaluation (CCE) in biological science.
- Construction and use of achievement test in Biological Science.
- Construct and Use of diagnostic Test in Biological science, preparation of diagnostic chart, identification of difficulties and remedial teaching.
- Task Analysis, meaning and advantages
- Question Bank, meaning and advantages

Praticum/Sessional

Any one of the following

- i. Prepare a working model on Biological secondary school standard topics.
- ii. Collect and preserve any five biological specimen and write a report
- iii. Critically analyse secondary school state syllabus science text-book.
- iv. Preparation of Biological science wall magazine in every month
- v. A case study of any senior secondary lab and prepare report
- vi. Visit a farm to study and participate in organic farming operations.
- vii. Waste audit and composting to learn the important aspects of resource conservation activity.
- viii. Water audit and budgeting with water harvesting to learn the important aspects of conservation activity.
- ix. A survey report on garbage disposal practices in a village.
- x. Seminar/presentation on any topic given in the syllabus

Suggested Readings:

Adams G.S., (1964). *Measurement and evaluation in education, psychology and guidance*, New York: Halt, Rinehart and Winston.

Aggarwal, J.C. (2005). Essentials of examination system. New Delhi: Vikas Publishing

house Pvt. Ltd.

Allen, D.W, and Eve, A.W. (1968). *Microteaching in theory to practices* Vd. 70, pp. 181-185.

Ameetha P (2004). *Methods of Teaching Biological Science*. New Delhi :Neelkamal Publications,

Bloom, B.S. et. Al. (1956). *Taxonomy of Educational objectives : the cognitive domain*, NewYork: Lagan's Green.

CBSE (2009). Teacher's manual on CCE. New Delhi: CBSE.

Das, R.C. (1985). Science teaching in schools. New Delhi: Sterling Publication Private Ltd.

Green T.N. (1971). Teaching of Biology in tropical schools, Oxford University Press London.

Harrow, A.J.A. (1972); Taxonomy of Motor Domain, New York: McKay.

Karmer, L.M.J. (1975). Teaching of Life Science, McMillan India Ltd. New Delhi.

Kilpatrick, W.H. (1918); the project method, Columbia: Teachers College Record.

Krathwohl, D.R., Bloom B.S. and Maria B.B. (1964) Taxonomy of Educational objectives,

Handbook II, Affective Domain, New York: David McKay.

Mager, R.F. (1962); Preparing Instructional objectives, California: Fearon.

Miller, David F. and Blaydes (1962); Methods and materials for teaching Biological Science, M.C. Grow Hill Book Co; New York.

Sharma, R.C. (1995). Modern Science & Teaching, Dhanpat Rai and Sons, New Delhi.

Sood J.K. (1987). Teaching of Life Science, Kholi Publisher, Chandigarh.

Vishwanth, Pandeny & Kishore, Valicha (1984). Science Technology and Development, Mc Millan Indian Ltd. New Delhi.

Course-6 & 7 (809)

Group-I: Pedagogy of Sciences

(iii) PEDAGOGY OF COMPUTER SCIENCE

Course Code: 809

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.

- ii. Q.No. 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

CourseOutcomes(COs)

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

| 809.1 | Emphasize the need and importance of computer science and acquaint with the |
|-------|---|
| | aims and objectives of teaching computer science in secondary schools. |
| 809.2 | Understand Bloom taxonomy of objectives and table of specification. |
| 809.3 | Perform Pedagogical Analysis of various concepts in computer science. |
| 809.4 | Develop teaching skills and skill of lesson and unit planning. |
| 809.5 | Understand the principles of curriculum construction and importance of computer |
| | textbook. |
| 809.6 | Acquire the skill of managing a computer laboratory and use of E-resources . |
| 809.7 | Familiarize with the various methods that can be employed for the teaching of |
| | computer science. |
| 809.8 | Develop competencies for effective evaluation in computer science and visualize |
| | various plans to promote digital technology among rural community. |
| | |

COURSE CONTENT

Unit-I

- 1 Nature and Scope of Computer Science
 - Meaning, Nature and Scope of Computer Science.
 - Significance of Computer Science in school curriculum.
 - Correlation of Computer Science at different stages of school.

- Aims and Objectives of Teaching Computer Science at different stages of school.
- Blooms Taxonomy of educational objectives.
- Formulation of specific objectives in behavioural terms.

Unit-II

- 2 **Content, Pedagogical Analysis and Teaching Skills:** Concept, need and importance of Pedagogical Analysis.
 - Content:
 - Computer System
 - Computer Software
 - Networking
 - MS-Windows
 - MS-Office
 - Operating System
 - Pedagogical Analysis:

Following point should be followed for pedagogical analysis:-

- a) Identification of concept.
- b) Enlisting behavioural outcomes.
- c) Enlisting activities and experiments.
- d) Enlisting evaluation techniques.
- Teaching Skills
- Skill of Introducing the lesson
- Skill of Probing Questions
- Skill of Stimulus Variations
- Skill of Explaining
- **Lesson Planning:** Concept, Need and Importance of lesson planning and Unit planning.

Unit-III

- **3 Teaching Learning Resources and Processes**
 - Development and designing of computer science curriculum.
 - Critical analysis of computer textbook.
 - Development of self- instructional material
 - Designing and managing a Computer Laboratory.
 - E-learning Resources: Use of Multimedia e-learning, PPT, Internet.
 - Qualities of a good Computer Science Teacher. And professional growth of Computer Science Teacher

Unit-IV

- 4 Approaches and Evaluation
 - Teaching Methods:
 - Lecture-cum-Demonstration method.
 - Project method.
 - Computer Assisted Instruction method.
 - Laboratory Method.
 - Mobile learning, and Online learning

• Evaluation

- Meaning and importance of evaluation
- Types and techniques
- Achievement Test
- Characteristics of a good test in Computer Science.
- Preparing, reporting and evaluating the results.
- Comprehensive and Continuous Evaluation.

Practicum/ Sessional

Do Any one of the following:

- i. Critical analysis of course content of Computer science of secondary school curriculum.
- ii. Prepare an achievement test of course content of Computer science of secondary school curriculum.
- iii. Internet based project: Form a group on internet and share educational information with atleast one link to audio/video material and prepare the project using ppt.
- iv. Power Point Presentation on Gandhian ideas and thoughts.
- v. Generating awareness regarding Digital India Initiative among rural community.

Suggested Readings

Agarwal J. C. (2006). *Essential of educational technology, Teaching and learning*. New Delhi: Vikas Publishing House Pvt. Ltd.

Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books Depot.

Sharma, R. N. (2008). Principles and Techniques of Education. Delhi: Surject Publications.

Singh, Arjinder. Teaching of Computer Education. Jalandhar: Modern Publisher

Sinha, P.K. &Sinha, P. Computer Fundamentals, BPB

Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation

Course-6 & 7 (810)

Group-I: Pedagogy of Sciences

(iv) PEDAGOGY OF HOME SCIENCE Course Code: 810

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

After completion of this course the students teacher will be able to:

- With the Science and Objectives of Teaching Home Science and Objectives of Teaching Home Science.
- 810.2 Understand bloom's taxonomy of educational objectives.
- 810.3 Develop skills of lesson planning based on various approaches.
- 810.4 Perform pedagogical analysis of various concepts of Home Science.
- 810.5 Understand the principles of curriculum construction.
- Apply e resourcing in teaching Home Science and appreciate the importance of planning and organizing extension activities.
- Adopt suitable approaches, methods, different resources to teach Home Science and examine the health status of school students of rural areas.
- 810.8 Understand the concept of continues and comprehensive evaluation.

COURSE CONTENT

UNIT – I

1 CONCEPT, OBJECTIVES AND IMPORTANCE

- Meaning, Nature and Scope of Home Science
- Need and Importance of Home science in secondary schools in the present context
- Correlation of Home Science with other school subjects
- Aims and objectives of teaching Home Science
- Blooms Taxonomy of educational objectives
- Formulation of specific objectives in Behavioural terms.

UNIT - II

2 CONTENT, PEDAGOGICAL ANALYSIS AND TEACHING SKILLS

Content

- Food, Nutrition and Health
- Child Care
- Fiber and Fabric
- Home Management
- Health and sanitation

• Pedagogical Analysis:

Following points should be followed for pedagogical analysis on topics

- a) Identification of concept
- b) Listing behavioural outcomes
- c) Listing activities and experiments.
- d) Listing evaluation techniques.

Teaching Skills

- Skill of introducing the lesson
- Skill of illustrate with the help of examples.
- Skill of explaining
- Skill of stimulus variation
- Skill of using black board

• Concept, Need and Importance of unit planning and lesson planning.

UNIT - III

3 TEACHING LEARNING RESOURCES AND PROCESSES

- Meaning, Principles and steps of curriculum construction in Home Sciences.
- Development and Characteristics of a good Textbooks. Critical analysis of current Home Science Text Books in secondary schools of Haryana State.
- Planning of space and equipment of Home Science Laboratory
- Classification and importance of Teaching Aids, (Visual Aids :- Chart, Model, Specimen).
- E-learning Resources: Use of Multimedia and Computers in Home Science, e-learning, PPT, Internet.

 Qualities of a good Home Science Teacher. Professional growth of Home Science Teacher

UNIT - IV

- 4 APPROACHES, METHODS AND EVALUATION IN TEACHING
- Methods of Teaching:

Lecture-cum- Demonstration; Project Method; Discussion Method; Practical and Individual Method

- Activity Based Learning:
 - Learning by doing: Experimentation; observation; games, quiz; puzzles; Field visits and excursions
- **Approaches of Teaching Home Science**: Inductive deductive approach; Maier's Problem solving approach
- Continuous and Comprehensive Evaluation (CCE) in Home Science.
- Construction and use of achievement test and diagnostic test in Home Science.
- Task Analysis, meaning and advantages
- Question Bank, meaning and advantages

PRACTICUM/SESSIONALS:

Any one of the following:

- i. A course of ten practical by the Pupil-teacher in the following:
 - Cooking
 - Stitching/Embroidery/knitting
 - Home Management
- ii. Preparation of online test.
- iii. Preparation of objective type test, short answer type test, essay type test
- iv. Organize a quiz competition in Home Science and analyze the response of students
- v. Plan a field visit of Home Science students for studying and reporting the health habits and health concerns of school students of village.
- vi. Prepare one remedial Teaching Programme for a Home Science student
- vii. Writing of project report in extension education.
- viii. Organise a handicrafts fair in a village.

SUGGESTED READING

Chandra, Shah & Joshi. Fundamental of Teaching of Home Science, New Delhi: Sterling Publishers Pvt. Ltd

Dass & Ray. Teaching of Home Science, New Delhi: Sterling Publishers Pvt. Ltd

Devdass, R. P. Method of Teaching of Home Science, New Delhi: NCERT.

Devdass, R. P. *Teaching of Home Science in Secondary School*. A handbook of Suggestion for Teachers, New Delhi: NCERT

Spafford, I. Fundamental in Teaching of Home Science, New York: John Wiley & Sons CBSE (2009); Teacher's manual on CCE. New Delhi: CBSE

Course-6 & 7 (811)

Group-I: Pedagogy of Sciences

(v) PEDAGOGY OF PHYSICAL SCIENCE

Course Code: 811

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **811.1** Understand the Nature & Scope of Physical Science.
- **811.2** Understand Aims and objectives of Teaching Physical Science and describe the role of Physical Science in service of human welfare and its correlation with other school subjects.
- **811.3** Provide empirical knowledge about content analysis and pedagogical analysis.
- 811.4 Acquaint about effective teaching aids and teaching skills for well execution of
- **811.5** Visualize different innovative teaching learning resources and processes for professional growth.
- **811.6** Design and manage a physical science laboratory.
- **811.7** Adapt suitable approaches, methods and different resources to teach physical science.
- **811.8** Become aware about various approaches of teaching Physical Science and comprehensive evaluation.

COURSE CONTENTS

UNIT – I

1 NATURE AND SCOPE OF PHYSICAL SCIENCE

- Meaning, Nature and Scope with reference to Physical Science & its branches.
- History of Physical science and contribution of Indian Scientists in the field of Physics & Chemistry.
- Need & importance Physical Science in secondary school & its values in the present context.
- Correlation of Physical science with other school subjects.

- Aim & objectives of Physical Science.
- Bloom's Taxonomy of instructional objectives.
- Physical Science in the service of human welfare Agriculture, Medicine, Industry & Conservation of Environment.

UNIT - II

2 PEDAGOGICAL ANALYSIS & LESSON PLANNING

- Content
 - Matter in our Surroundings
 - Atom & Molecules
 - Motion
 - Force & Law of Motion
 - Gravitation
 - Work and Energy
 - Sound
 - Acid Bases & Salt
 - Metal & Non-metal
 - Light
 - Electricity
 - **Pedagogical Analysis** Following points should be used for Pedagogical Analysis.

Following points should be followed for pedagogical analysis on topics covered in the syllabus

- a)Identification of concept b)Listing behavioural outcomes c)Listing activities and experiments, d)Listing evaluation techniques
 - Concept, Need & Importance of Unit Planning & Lesson Planning
- Teaching Skills:-
 - Skill of Introducing the Lesson
 - Skill of Illustrate with the help of Examples
 - Skill of Explaining
 - Skill of Stimulus Variation
 - Skill of Black-Board Writing

UNIT - III

3 TEACHING LEARNING RESOURCES AND PROCESSES

- Meaning, Principles & Steps of Curriculum construction in Physical Science
- Critical Analysis of Present Secondary School Text-Book with Reference to Haryana State
 - Physical Science Laboratory Importance, Planning, Designing, Equipping,

Maintenance of Physical Science equipment & Records

- Audio-Visual Aids: Chart, Models, Film Strip, Radio, Projectors.
- E-learning Resources Use of Multimedia & Computers, PPT, Internet, Website,

Teleconferences.

- Improvised Apparatus Meaning, Importance & Steps
- Professional Growth of Physical Science Teacher in Service Programme, Orientation Programme, Refresher Courses, Seminars, Symposium, Workshop, Science Fair, Science Exhibition, Projects.

UNIT - IV

4 APPROACHES AND EVALUATION IN TEACHING

- Physical Science Inductive deductive Approach, Critical Inquiry Approach, Maier's Problem Solving Approach.
- Methods of Teaching Physical Science
 - Lecture-cum-Demonstration
 - Project Method
 - Laboratory Method
- Continuous & Comprehensive Evaluation (CCE) in Physical Science
- Construction & Use of Achievement Test in Physical Science

- Construction & Use of Diagnostic Test in Physical Science, Preparation of Diagnostic Chart, Identification of Difficulties & Remedial Teaching.
- Meaning & Advantages of Task Analysis and Question Bank.

Praticum/Sessional

Any one of the following

- i. Development of Five Demonstration Experiments on the Topics Covered in the Syllabus from Physical Science Test-books at the Lower Secondary Level in Haryana State.
- ii. Improvisation of Apparatus/Equipment
- iii. Seminar Presentation on any Topics given in the Syllabus.

Suggested Readings

Adams, G.S. (1964). *Measurement & Evaluation in Education, Psychology & Guidance*, New York: Halt, Rinehart & Winston.

Aggarwal, J.C. (2005). Essential of Examination System. New Delhi: Vikas Publishing House

Pvt. Ltd.

Allen, D.W. and Eve, A.W. (1968). *Micro Teaching in Theory to Practices*. Vol. 70, pp. 181-185.

Bloom, B.S. et al. (1956). *Taxonomy of Educational Objectives: The Cognitive Domain*. New York: Longum's Green.

CBSE (2009). Teacher Manual on CCE. New Delhi: CBSE.

Das, R.C. (1985). Science Teaching in Schools, New Delhi: Sterling Publication Private Ltd.

Harrow, A.J.A. (1972). Taxonomy of Motor Domain, New York: Mckay.

Kherwadkal, Anjali (2003). Teaching of Chemistry by Modern Method, New Delhi: Sarup & Sons.

Kilpatrick, W.H. (1987). The Project Method, Columbia. Teachers College Record.

Krathwohl, D.R., Bloom, B.S. and Maria, B.B. (1964). *Taxonomy of Educational Objectives*, *Hand-book II, Affective Domain*, New York: David Mckay.

Mager, R.F. (1962). Preparing Instructional Objectives, California: Fearon.

Miller, David F. and Blaydes (1962). *Methods & Materials for Teaching Biological Science*, New York: McGraw Hill Book Co.

Sharma, R.C. (1995). *Modern Science & Teaching*, New Delhi: Dhanpat Rai & Sons.

Siddique and SIddique (1998). Teaching of Science, New Delhi: Doaba House.

Vishwanth, Pandey and Kisor Valicha (1984). *Science Technology & Development*, New Delhi: McMillan India Ltd.

Venkataih, S. (2001). Science Education in 21st Century, New Delhi: Anmol Publishers.

Wadhwa, Shalni (2001). Modern Methods of Teaching Physics. New Delhi: Saroop & Sons.

http://www.scienceworld.wolfram.com/physics.html.

http://www.nobel.se/physics/laureates.html.

Course-6 & 7 (812)

Group-II: Pedagogy of Social-Sciences

(i) PEDAGOGY OF SOCIAL SCIENCE Course Code: 812

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i) Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.
- ii) Q. No. 1 will be compulsory and will carry 16 marks. There will be 4 short-answer type questions of 4 marks each to be selected from the entire syllabus.
- iii) Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long-answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **812.1** Elaborate the concept, nature and scope of social science.
- **812.2** Establish correlation of social science within or with other school subjects and life situations.
- 812.3 Get acquainted with the procedures of skills and pedagogical analysis for social science teaching.
- 812.4 Prepare lesson plans by applying knowledge of planning.
- 812.5 Explain the essentials of curriculum and text books of social science
- Select and develop the support material required for designing learning experiences.
- **812.7** Develop an understating of methods and approaches of teaching social science.
- 812.8 Acquire competencies in preparing tools of evaluation social science learning.

COURSE CONTENTS

UNIT 1

- 1. Nature & Scope of Teaching of Social Science
 - Meaning, Nature and Scope of Social Sciences as a school subject.
 - Aims and Objectives of teaching Social Sciences at School level.
 - Values of Teaching Social Sciences
 - Taxonomy and behavioural Objectives in Social Sciences.
 - Relationship of Social Science with other subjects and within the subject.

• Understanding terminology of Social Sciences: Social structure, social stratification, community, state, region, market

UNIT-2

2. Pedagogical Analysis and lesson planning

- Meaning and importance of pedagogical analysis
- Points followed for pedagogical analysis: (i) Identification of concept (ii) Listing behavioural outcomes (iii) Listing activities & Experiments (iv) Listing evaluation techniques.
- Some content for pedagogical analysis:
 - Constitution of India
 - Physical features of India
 - Indian Freedom Movement
 - Population
 - Democracy in the contemporary world
 - Disaster Management
- Skills of teaching Social Sciences: Skill of Introducing, Skill of Illustration with Examples, Skill of Reinforcement, Skill of Questioning and Skill of Stimulus Variation
- Lesson planning in Social Sciences: Need & Importance, Basic Elements & its Preparation

UNIT 3

3. Teaching learning resources and process

- Meaning, Importance and Principles of designing a good Curriculum of Social Sciences; Critical Appraisal of the Existing Curriculum in Social Sciences, Suggestions for improvement; Approaches of organizing social sciences curriculum- logical, concentric, spiral, chronological.
- Teaching Learning Material: Textbook & Reference Books, Documentaries, News Papers, Maps, Community, Atlas, and E-resources (Blog, World Wide Web, and Social Networking.)
- Social Science Club- Meaning, Importance and Organization(Club activities, Exhibitions, Field Trips, Quiz Competitions)

UNIT 4

4. Approaches and Evaluation in Teaching

- Classroom Processes: Discovery method, Discussion method, Source method, Survey Method, and Story Telling.
- Meaning, Importance and Types of Evaluation in Social Sciences.
- New approaches to Assessment Question bank, Open Book Examination, Grading & Credit System.
- Construction of Achievement Test Concept and Steps.

Praticum/Sessional

Any one of the following:

i.Explore how cartoons, stamps, currency, magazines, globes and so on be used in teaching of social science.

- ii.Make an Observation and prepare a list of places of historical interest/monument nearer to your residence and prepare a report on it.
- iii.Conduct a quiz competition in the class on a day of national importance and prepare a report of the same.
- iv. Prepare an action plan for social science club.
- v.Prepare a list 10 of books/Journals in social sciences with all bibliographic details for purchasing to the classroom library.
- vi.Draw different types of maps of World, India, and locality /Create a comparative timeline of events in India and world of Modern age.
- vii.Prepare a sample of Different Types of Test items on different objectives or Select a concept in Social Science prepare a diagnostic test
- viii.Prepare a sample of Content analysis, instructional objectives, Learning Activity, Learning Experience of a Topic from standard 6th or 10th.

Suggested Readings

Agarwal, J.C. (1993). Teaching of Social Studies- A Practical Approach, Second Revised Edition, Vikas Publishing House.

Batra, P.(ed) (2010) Social Science Learning in Schools: Perspective and Challenges, New Delhi, Sage

Dhamija, N. (1993). *Multimedia Approaches in Teaching Social Studies*, New Delhi: Harman Publishing House

Eklavya (1994) Samajik Adhyayan Shikshan: Ek Prayog, Hoshangabad: Eklavya.

George, A. and Madan, A.(2009) *Teaching Social Science in Schools*, NCERT's New Textbook, New Delhi: Sage

Gupta Rainu (2013) Teaching of Social Science, New Delhi, Doaba Publications.

Gupta Rainu (2012) Samajik Vigyan Shikshan, New Delhi :Doaba Publications.

Khan, S. U. (1998). *History Teaching-Problems: Prospective and Prospect*, New Delhi: Heera Publications

Kochhar, S.K.(1998). *Teaching of Social Studies*, New Delhi: Sterling Publishers Pvt, Ltd New Delhi.

NCERT (2006). Position Paper National Focus Group on Teaching of Social Sciences, New Delhi: NCERT

NCERT Social Science Textbooks for classes VI-X, New Delhi: NCERT.

Course-6 & 7 (813)

Group-II: Pedagogy of Social-Sciences

(ii) PEDAGOGY OF COMMERCE

Course Code: 813

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i) Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii) Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii) Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- 813.1 Understand the nature of Commerce and its relationship with other disciplines.
- 813.2 Comprehend the Bloom Taxonomy of objectives and write the Instructional objectives in behavioral terms.
- Prepare Pedagogical analysis of the content and develop lesson plans for classroom teaching.
- **813.4** Acquire competencies in teaching skills.
- 813.5 Analyses the Curriculum and Textbook of Commerce.
- 813.6 Make effective utilization of Teaching Learning resources.
- 813.7 Get familiar with the methods of teaching and Evaluation.
- **813.8** Equip themselves in Evaluation techniques and construction of Achievement test.

Course content

UNIT-I

- 1. Concept of Commerce and Instructional Objectives
 - Meaning nature and scope of Accountancy and Business studies.
 - Need and Importance of Commerce in school curriculum at higher secondary level
 - Aims, Objectives and Values of teaching Commerce.
 - Blooms Taxonomy of Objectives (statement of objectives in behavioural terms).

• Relationship of Commerce with other Disciplines: Economics, Law, Mathematics, Sociology, Psychology, Statistics.

UNIT-II

2. Pedagogical Analysis and lesson planning

- PedagogicalAnalysis: Identification of concept, Listing behavioural outcomes, Listing activities and experiments, Listing evaluation techniques.
- Content forPedagogicalAnalysis:
 - Final A/Cs
 - Sources of Business finance.
 - Marketing Mix.
 - Social Responsibility of Business
 - Consumer protection
 - E-commerce
- Skills in Teaching
 - Skill of Introducing
 - Skill of Explaining
 - Skill of Probing Questions
 - Skills of Illustrating with examples
 - Skill of Stimulus variation
- Development of lesson plan: Utility, steps in lesson planning, qualities of a good lesson plan

UNIT-III

3. Teaching learning resources and Processes

- Commerce curriculum: Principles followed in development of commerce curriculum.
 Critical appraisal of the existing curriculum in Commerce. Suggestion for improvement
- Analysis of prescribed text- book of commerce (XI &XII)
- Teaching learning resources: Meaning, Importance and use of Teaching learning resources
- Traditional Instructional Material: Charts, Graphs and Specimens
- Mass media: Television, Newspaper, Journals
- E- resources: Blog, World wide Web, Social Networking

UNIT-IV

4. Approaches and Evaluation in teaching

- Methods of teaching:
 - Lecture cum Discussion Method
 - Project Method
 - E-Tutoring
 - Role playing
- Evaluation: Meaning, Importance, Types and Techniques.
- Preparation of Blue print and construction of Achievement Test

Practicum/ Sessionals

Any two of the following:

- i. Participation in discussion (class level) in any recent development in the area of commerce and prepare a report
- ii. Make a report on activities performed by a company regarding its social responsibility
- iii.Review at least two research articles on commerce
- iv. Make a report of E-Commerce operations of a company
- v.Field visit to any one (bank, factory, consumer forum). Prepare a report on functions performed

Suggested Readings

Bruce, J.M and Roger Ottewill (2001). *Effective learning & teaching in business and management*. London: Routledge

Chopra, H.K and Sharma, H. (2007). *Teaching of Commerce*, Kalyani Publishers Ludhiana Dalal, D.C and Dalal V.C (2008). *Teaching of Commerce* (Hindi Version). Patiala: Twenty First Century Publications

Gupta Rainu (2009). Teaching of Commerce New Delhi, Shipra Publications

Kaur, Ravdeep (2012). Teaching of Commerce Gurusar Sadhar: GBD Publications

Kumar, Mahesh (2004). *Modern Teaching of Commerce*. New Delhi: Anmol Publications Pvt. Ltd.

Monga Vinty (2009). *Teaching of Commerce Patiala*: Twenty first century publications Peter Davies, Jacek Brant (2006). *Business, Economics and enterprises*: Teaching School Subjects 11-19. London: Kogan Rage

Rao Seema (2002). *Teaching of Commerce*, New Delhi: Anmol Publicatons Pvt. Ltd. Shankar T. (2007). *Methods of Teaching of Commerce*, New Delhi: Crecent VII

Course-6 & 7 (814)

Group-II: Pedagogy of Social-Sciences

(iii) PEDAGOGY OF ECONOMICS Course Code: 814

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.

- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes (COs)

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

- **814.1** Understand the meaning nature and scope of teaching Economics and its relationship with other disciplines..
- **814.2** Comprehend the Bloom Taxonomy of objectives and write the instructional objectives in behavioral terms.
- **814.3** Prepare pedagogical analysis of the content and develop lesson plans for class room teaching.
- **814.4** Acquire competence in skills for the teaching of Economy.
- **814.5** Analyse the curriculum and textbook of teaching of Economics.
- **814.6** Develop teaching learning material and organize co-curricular actitivites through the Economics club..
- **814.7** Understandthe different methods and approaches of teaching Economics.
- **814.8** Acquire competencies in preparing tools of Evaluation.

COURSE CONTENT

Unit -I

1. NATURE & SCOPE OF TEACHING OF ECONOMICS

- Meaning, Nature and Scope of Economics as a school subject.
- Aims and Objectives of teaching Economics at School level
- Values of Teaching Economics in present scenario.

- Taxonomy and behavioural Objectives in Economics.
- Correlation of Economics with Public Finance, Commerce, Law, Geography, Mathematics, Natural Science and Sociology.
- Understanding terminology of Economics: Micro Economics, Macro Economics, Market, Production, Business Economics and Budgeting.

Unit- II

2. PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- Meaning and Importance of Pedagogical Analysis.
- Content:
 - Poverty as Challenge facing India
 - Indian economy
 - Globalization
 - Inflation Deflation
 - Employment

• Pedagogical Analysis:

Following points should be followed for pedagogical analysis on topics:

- a) Identification of concept
- b) Listing behavioral outcomes
- c) Listing activities and experiments.
- d) Listing evaluation techniques.
- lesson planning in Economics: Need & Importance, Basic Elements & its Preparation
- Skills of teaching Economics: Skill of Explaining. Skill of Illustration with Examples, Skill of Probing Questions and Skill of Stimulus Variation.

Unit-III

3. TEACHING LEARNING RESOURCES AND PROCESS

- Meaning, Importance and Principles of designing a good Curriculum of Economics, Critical Appraisal of the Existing Curriculum in Economics, Suggestions for improvement. Approaches of organizing the curriculum of Economics.
- Meaning & Importance of Co-curricular activities. Economics Club Meaning, Importance and Organization.
- Teaching Learning Material: Textbook & Reference Books, Documentaries, Graphs, Tables, News Papers, Library and E-resources (Blog, World Wide Web, and Social Networking.)

Unit-IV

4. APPROACHES AND EVALUATION IN TEACHING

- Teaching Economics through Discussion method, Project method, Problem-solving, Dramatization, Survey and Field visit.
- Meaning, Importance and Types of Evaluation in Economics.
- Continuous and Comprehensive Evaluation: Meaning, importance & Process. Construction of Achievement Test Concept and Steps.

Praticum/Sessional

Any one of the following:

- i. Explore how cartoons, advertisements, graphs, currency, pictures can be used for teaching Economics.
- ii. Content Analysis and preparation of instructional material related to any unit
- iii. Prepare ten (10) slides related to economics teaching content at senior secondary level.
- iv. Critical appraisal of economics text books at senior secondary level.
- v. Field Visits (Banks, Small-Scale Industries, Consumer Cells)

Course-6 & 7 Pedagogy of Teaching Subjects (815)

Group-II: Pedagogy of Social-Sciences

(iv) COURSE-6 & 7 PEDAGOGY OF HISTORY

Max. Marks:100 (Theory: 80,Internal: 20)

Time: 3 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- i.Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- i.Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **815.1** Explain the concept, nature and scope of teaching history.
- Understand the aims and objectives of History and establish correlation of History with other school subjects and life situations.
- 815.3 Perform Pedagogical analysis of various topics in History at Secondary level.
- 815.4 Get acquainted with the procedures of lesson plan.
- 815.5 Critically evaluate existing curriculum, syllabus and text-books.
- **815.6** Prepare, select and utilize different instructional materials.
- **815.7** Apply appropriate methods and techniques of teaching at different levels.
- 815.8 Acquire competencies in preparing tools of evaluation for teaching of History.

COURSE CONTENT

UNIT – I

1. NATURE, SCOPE, AIMS, AND OBJECTIVES OF HISTORY

- Meaning, Nature, Scope of history. Importance of time & space in history
- Place of history in secondary and senior secondary level school curriculum
- Aims, objectives and values of teaching history
- Bloom's taxonomy to formulate objectives in behavioural terms
- Co-relation of history with other school subjects. Relation of history with present.
- Classification of history according to geographical boundaries, period and circumstances.

UNIT - II

2. PEDAGOGICAL ANALYSIS OF CONTENT AND LESSON PLANNING

- Meaning and importance of pedagogical analysis
- Points followed for pedagogical analysis: (i) Identification of concept (ii) Listing behavioural outcomes (iii) Listing activities & Experiments (iv) Listing evaluation techniques.
- Some content for pedagogical analysis:

- a) Indus valley civilization b) Ashoka The Great c) Mughal dynesty
- d) First war of independence (1857 A.D.), e) Freedom movement and modern India
- Lesson planning: Need and importance, steps involved in lesson planning, features of a good lesson planning.

UNIT – III

3. TEACHING-LEARNING RESOURSES AND HELPING MATERIALS

- Curriculum and instructional material: Need for development and designing curriculum in history.
- Principles of curriculum construction, organization of content in history curriculum according to stages of education.
- Development of history text-book, characteristics of a good text book, need of text-book for teaching history.
- Identifying controversial points of history, analytical teaching of such points.
- Meaning, importance and use of helping material, types of helping material
- Selection of helping material: Maps, time lines, flow charts, battle plans, pictures, film-strips, models, computer & internet, radio, T.V. etc.

UNIT – IV

4. **APPROACHES AND EVALUATION**

- Approaches, methods and techniques of teaching history need and importance, selection of method to teach specific content.
- Various methods of teaching history: source method, discussion method, lecture-cumstory telling method, dramatization, project method, teaching through field trips and excursions.
- Meaning, objectives and importance of evaluation
- Evaluation techniques and devices, characteristics of a good test in history.
- Preparing, reporting and evaluating the results.

Practicum/ Sessionals

Any one of the following

- i.Preparation of time line, flow chart, battle plan, map showing boundaries of any specific dynasty or king or specific period (Individual activity)
- ii. Organize trip to historical place/monuments.
- iii.Prepare skit/drama from history-events / life history of Mahatma Gandhi (Group-activity)

Suggested Readings:

Chaudhary, K.P. (1975). The effective teaching of History in India. New Delhi: NCERT.

Dhamija, N. (1993). Multimedia Approaches in teaching of Social studies. New Delhi: Harman Publishing House.

Khan, S.U. (1998). History teaching problems, prospectives & prospect. New Delhi: Heera.

Gunnin, D. (1978). The teaching of History. London: Goom Helm Ltd.

Course-6 & 7 Pedagogy of Teaching Subjects (816)

Group II: Pedagogy of Social Sciences

(v) COURSE-6 & 7 PEDAGOGY OF GEOGRAPHY

Time: 3 Hours Max. Marks: 100 (Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

After completion of the course the student teacher will be able to:

| 816.1 | Explain the concept, nature and scope of teaching Geography. |
|-------|--|
| 816.2 | Understand the aims and objectives of teaching Geography |
| 816.3 | Perform Pedagogical analysis of various topics in Geography at Secondary level. |
| 816.4 | Get acquainted with the procedures of lesson plan. |
| 816.5 | Critically evaluate existing curriculum, syllabus and text-books. |
| 816.6 | Prepare, select and utilize different instructional materials. |
| 816.7 | Apply appropriate methods and techniques of teaching at different levels. |
| 816.8 | Acquire competencies in preparing tools of evaluation for teaching of Geography. |

COURSE CONTENT

Unit-I

1. NATURE AND SCOPE OF TEACHING GEOGRAPHY

- Meaning, nature & scope of Geography.
- Importance of teaching geography as school subject.
- Aims and objective of Teaching Geography at School Level.
- Bloom's taxonomy of objectives.

Unit-II

2. PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- Meaning and importance of pedagogical analysis
- Points followed for pedagogical analysis: (i) Identification of concept (ii) Listing behavioural outcomes (iii) Listing activities & Experiments (iv) Listing evaluation techniques.

- Some content for pedagogical analysis:
 - Latitudes & longitudes
 - Rotation & Revolution
 - Agents of denudation
 - Physical Division of India
 - Cash crops of India
- Development of lesson plan

Unit-III

3. DEVELOPMENT OF INSTRUCTIONAL MATERIAL

- Development and designing of curriculum
- Development of text books
- Development of self-instructional material
 - Self instructional modules
 - P.L. materials (Linear style) packages
- Development of instructional aids-Maps, atlas, Globes, Charts, Graphs, Models, Film Strips, Film Shades, Utilization of T.V., Video OHP, Computer
- Designing geography laboratory.

Unit-IV

4. APPROACHES & EVALUATION IN TEACHING

- Various methods used Discovery Method, Discussion method, Problem Solving, Concept Mapping, Project, Laboratory, Story Telling, Concept Attainment Model, Inquiry Training Model.
- Meaning, Importance and Types of Evaluation in Geography
- New approaches to Assessment Question bank, Open Book, Examination, Grading & Credit System.
- Construction of Achievement Test Concept and Steps.

Practicum/Sessionals

Any one of the following:

- i.Make an Observation of a place of Geographical interest of your locality and prepare a report on it.
- ii. Conduct a quiz competition on Geographical questions in class.
- iii. Prepare a list of 10 books/Journals in Geography with all bibliographic details for purchasing in the library/prepare a Text Book Material for a Particular Topic.
- iv.Draw different types of maps of World, India and locality.
- v.Prepare a sample of different types of test items on different objectives/Select a concept in Geography prepare a diagnostic test.
- vi.Prepare a sample Content analysis/ Prepare instructional objectives/Learning Activity/Learning Experience of a Topic from standard 6th to 10th.

SUGGESTED READINGS:

Arora, K.l (1976). The Teaching of Geography, Jallandhar: Prakash Brothers.

David B. (1985). New Directions in Geography Education, London: Fehur Press

David, H. (1976). Geography and Geography Teacher, London: Unwin Education Books Graves, N.G. (1982). New Source book for Geography Teaching, Longman: UNESCoHuckle, J. (1983). Geographical Education Reflection and Action, London: Oxford, University Press Mohd, Z.U. (1984). Tadress Jugratia, Taraqqui Urdu Board New Source Book for Teaching of Geography UNESCO.

Morrey, D.C. (1972). Basic Geography, London: Hien manns Education Book Ltd.

Neelam D. (1993). Multimedia, Approaches in Teaching Social Studies, New Delhi: Human Publishing House

Verma, J.P. (1960). Bhugol Adhyhan, Agra: Vinod Pustak Mandir

Verma, O.P. (1984). Geography Teaching, New Delhi: Sterling Publication Ltd.

Walford R. (1981). Signposts for Geography Teaching, London: Longman

Course-6 & 7 (817)

Group-II: Pedagogy of Social-Sciences

(vi) PEDAGOGY OF ART

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- iv. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- v. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- vi. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

| 817.1 | Understand meaning the nature of Art and its relationship with other school |
|-------|---|
| | subjects. |
| 817.2 | Understand aims, objectives & bloom's taxonomy of instructional objectives. |
| 817.3 | Analyse the content pedagogically |
| 817.4 | Develop the lesson plan and skills. |
| 817.5 | Analyse the elements, principles and curriculum of Art. |
| 817.6 | Acquaint with the various teaching learning resources and methods. |
| 817.7 | Select appropriate methods of teaching to teach Art. |
| 817.8 | Equip themselves with practices of evaluation. |
| | |

COURSE CONTENT

Unit-I

NATURE & SCOPE OF TEACHING ART

- Meaning, Nature and Scope of teaching Art.
- Aims and Objectives of Teaching Art
- Importance of Art in Education
- Correlation of Art with other school subjects.
- Bloom's Taxonomy of Instructional objectives in Education

Unit-II PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- Content
 - Composition
 - Poster
 - Design
 - Collage
 - Still Life
 - Landscape
- Pedagogical Analysis: Following points should be followed for pedagogical analysis
 - a) Identification of concept
 - b) Listing behavioral outcomes
 - c) Listing activities & experiments
 - d) Listing evaluation techniques

• Teaching Skills

- Skill of Art Appreciation
- Skill of Observation
- Skill of Imagination
- Skill of Visual Communication
- Skill of handling the colours, brushes
- Skill of Art development in Child at different stages.
- Concept, Need and Importance of Lesson Planning.

Unit-III

TEACHING LEARNING RESOURCES AND PROCESSES

- Elements and Principles of Art.
- Meaning, Principles and steps of curriculum construction in Art.
- Preparation of Teaching aids.
- Application of ICT in teaching Art
- Recreational activities in Art
- Professional qualities of a good teacher in Art
- Organizing Art Exhibition and decorating the classroom.

Unit-IV

APPROACHES AND EVALUATION IN TEACHING

- Methods of teaching art
 - Lecture-cum-demonstration Method
 - Excursion Method
 - Project Method
 - Observation Method

Evaluation

Meaning, Importance of evaluation

- Types of Evaluation
- Evaluation techniques
- Preparation of Blue print and construction of Achievement Test.

Practicum/Sessionals

Any one of the following:

1. Composition : Human figures, Birds, animals

2. Poster
3. Still Life
4. Design
Writing and Designing
Drawing & Painting
Alpna/ Rangoli

5. Collage6. Landscape

Suggested Readings

Gupta, Arvind (2003). *Kabad se Jugad: Little Science*. Bhopal: Eklavya. Khanna, S. and NBT (1992). *Joy of Making Indian Toys, Popular Science*. NewDelhi: NBT. Prasad, Devi (1998). Art as the Basis of Education, New Delhi: NBT,. Sahi, Jane and Sahi, R(2009). *Learning Through Art*, Eklavya,

Course-6 & 7 (818)

Group-II: Pedagogy of Social-Sciences

(vii) PEDAGOGY OFMUSIC

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- vii. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- viii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- ix. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

After completion of the course the student teacher will be able to:

- **818.1** Understand the history, importance and co -relation of Music with other school subjects.
- **818.2** Comprehend the knowledge of swaras and sruti and Bloom's taxonomy of instructional objectives.
- **818.3** Prepare pedagogical analysis of the content and develop lesson plan for classroom teaching.
- **818.4** Acquire competence in skills for the teaching of Music.
- **818.5** Develop teaching aids to teach Music.
- **818.6** Familiarize the qualities of Music and Music teacher.
- **818.7** Understand the different methods of teaching Music.
- **818.8** Acquiring competency in preparing tools of evaluation.

COURSE CONTENT

Unit-I

1. NATURE & SCOPE OF MUSIC

- A brief history of Indian Music.
- Need and importance of Music in secondary schools.
- Aims & Objectives of teaching Music in schools
- Co-relation of Music with other school subjects.
- Knowledge of Swaras and Sruti

• Blooms taxonomy of Instructional objectives

Unit-II

2. PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- Content
 - Swar
 - Saptak
 - Sruti
 - Rhythm
 - Taal

• Pedagogical Analysis: Following points should be followed for pedagogical analysis:

- a) Identification of concept
- b) Listing behavioral outcomes
- c) Listing activities & experiments
- d) Listing evaluation techniques

• Teaching Skills

- Skill of Introducing the lesson
- Skill of explaining
- Skill of stimulus Variation
- Skill of Questioning
- Need & Importance of Lesson Plan in Music.

Unit-III

3. TEACHING LEARNING RESOURCES AND PROCESSES

- Information about voice culture and Caryn's
- Possibilities of Notation for Indian Music.
- Motion and Rhythm in Music
- Importance of various Teaching Aids in Music.
- Qualities of Music Teachers: Gayak, Vadak and Vadykar.
- Importance of classical Music and suggestions for the popularization of classical Music.

Unit-IV

4. APPROACHES AND EVALUATION IN TEACHING

- Methods of teaching Music
 - Play way method
 - Heuristic method
 - Lecture-cum-Demonstration
 - Geet Method
 - Project Method
- Evaluation
 - Meaning, importance and types of evaluation in Music
 - Types of Evaluation techniques in Music
 - Preparation of Blue print and construction of Achievement test.

Practicum/Sessionals

Any Two of the following:

- Every Candidate should be able to sing a fast Khyal or play a rezakhoni Gat with Tanas and Alaps or Jhala and Toras in each of the following Ragas: Bhupali, Bhairvi, Brindavani Sarag, Asawari, Bhimplashi, Malkauns, Kaffi.
- Every candidate should be able to sing or play a slow Khal (Vilambit Bara Khyal) or Masti Khayal Gat in Asawari and Malkauns Rag.

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• The following Tals are required to be practiced in. Tha's and Dvigun Laya on Table: Teen Tal, Dadra, Juptal, Dharva, Ektal

•

- Tuning of the instrument for the instrument player and tuning of the Janpura for vocal music students.
- Candidate shall be able to read, write music notation either of Bhatkhande or Vishnu Digamber Pulskar.

SUGGESTED READINGS

Awasthis. Teaching of Music(Hindi), Extension Services, Jallandhar: Govt. Training College

Bhatnagar, S Teaching of Music

Goswami, O. Indian Music

Khande B. Short Historical Survey

Khanna, J.: Teaching of Music

Masan, P.L. Teaching of Music, (Hindi).

Patwardhan, rag Vigvan

Ranaday. Indian Music (Its Physical and Aesthetics)\

Sambamoorthy, P. Teaching of Music

Course-6 & 7 (819)

Group-III: Pedagogy of Languages

(i) PEDAGOGY OF ENGLISH

Course Code: 819

Max. Marks :100 (Theory: 80,Internal: 20)

Time: 3 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes

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

- Familiarize with the concept, nature and scope of English language.
- 819.2 Comprehend aims and objectives.
- 819.3 Conduct pedagogical analysis of the content in English language and develop linguistic skills among their pupils.
- **819.4** Provide familiarization with Micro teaching skills for teaching/learning English.
- 819.5 Make effective use of instructional resources in pedagogy of English.
- 819.6 Become acquainted with different teaching learning resources of English.
- 819.7 Develop insight into different methods and approaches in teaching English.
- **819.8** Equip themselves in preparing tools of evaluation in English learning.

Course Content

Unit-1

- 1. Nature, Scope and Concept of Language
 - Importance of teaching English at National and International Scenario.
 - Social history of English language Teaching in India

- Aims and objectives of teaching English
- Taxonomy and behavioral objectives in English.

Unit-II

2. Development of Linguistic Skills, Pedagogical analysis and lesson planning

- Strategies for developing language skills: Listening and Speaking.
- Developing Reading Skills & reading comprehension: Intensive and Extensive Reading, silent and loud reading.
- Developing Writing Skills: Characteristics and Techniques for improvement.
- Meaning and importance of pedagogical analysis.
- Points followed for pedagogical analysis: (i) Identification of concept (ii) Listing behavioral outcomes (iii) Listing activities and experiments (iv) Listing evaluation techniques.
- Pedagogical analysis of Prose, Poetry, Grammar, Composition: Objectives and Lesson Planning.
- Skill of teaching English: Skill of introducing, Illustration with examples, Reinforcement, Questioning & Stimulus Variation.

Unit-III

3. Teaching Learning Resources & Processes

- Qualities of a good teacher of English.
- Text books : Characteristic of a good text book.
- Teaching grammar Deductive and Inductive Approach.
- Co-curricular activities in English classroom : Language games, quiz, debates, group discussions.
- Importance of Instructional material and their effective use: 1. Charts, 2. Pictures, 3. Chalk board 4. Models, 5. Real Objects, 6. Use of ICT including internet.

UNIV-IV

4. Development of Professional Efficiency & Evaluation Techniques

- Methods and Approaches of Teaching: Direct, Bilingual, Interactive Communicative Approach, Co-operative learning approach.
- Difference between measurement and evaluation
- Meaning and significance of Comprehensive and continuous evaluation in English.
- Development of good test items in English (Objective- type, essay type and short answer type).

Praticum/Sessional

Any one of the following:

- i. Preparation of Diagnostic Test, Achievement Test and reading comprehension test.
- ii. Preparation of Instructional Material:
 - a. Preparing PPT's
 - b. Preparation of Charts and Models
- iii. Prepare a Remedial programme for a child having English Spelling errors.
- iv. Collect Indian folkales and folklores and translate in English.
- v. Organise a workshop on improving communication skills of students in a rural school.

Suggested Readings

Bansal, R.K. and Harrison, J.B. (1972): Spoken English for Indian, Madras: Orient Longman Ltd.

Baruag, T.C. (1985): The English Teacher's Handbook, New Delhi Starling publishing Pvt.Ltd.

Brumfit, C.J. (1984): Communicative Methodology in Language Teaching. Cambridge: C.U.P.

Chadha, S.C. (2004). Arts and Science of Teaching English (2nded.). Meerut: SuryaPublication.

Freeman D.L. (2000). Techniques and Principles in Language Teaching, Oxford: CUP.

Gimson A.C. (1980). An Introduction to the Pronunciation of English London: Edward Arnold.

Hornby, A.S. (1968): A Guide to Patterns and Usage in English, Oxford: OUP

Kochar, Shasi, Rama Chandran Jyothy (2001). Teaching of English. New Delhi.

Lado, Robert (1971). *Language Teaching*, New Delhi: Tata McGraw Hill Publishing House Co. Ltd.

Mendonca, Lawrence, (2002). Applied English Grammar and Composition. New Delh: NavPublications.

NCERT (2005) Position Paper National Focus Group on Teaching of English, New Delhi, NCERT.

Paliwal, A.K., (1988): English Language Teaching, Jaipur: Surbhi Publication

Rai, Geeta (2009). Teaching of English, Meerut: Vinay Rakheja

Sawhney, K.K. & Sharma, K.R. (2004). *Teaching of English*, Jammu: Educational Publishers.

Sharma, Praveen (2008). Teaching of English Language, Delhi :Shipra Publications.

Sharma, R.A. (2004). Fundamentals of Teaching English, Meerut: R.Lall Book Depot.

Wilkins, D.A. (1983), *Linguistics in English Teaching*, London: Edward Arnold ELBS Edition.

Course-6 & 7

Group-III: Pedagogy of Languages

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Course-6 & 7 (821)

Group-III: Pedagogy of Languages

(iii) PEDAGOGY OF PUNJABI

Course Code: 821

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type question will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **821.1** Understand the nature of Punjabi and its relationship with other languages (Hindi, English, Sanskrit).
- **821.2** Comprehend the Bloom Taxonomy of objectives and write the Instructional objectives in behavioral terms.
- **821.3** Prepare Pedagogical analysis of the content and develop lesson plans for classroom teaching/instructional purposes.
- **821.4** Acquire competencies in language skills.
- **821.5** Analyses the Curriculum and Textbook of Punjabi.
- **821.6** Make effective utilization of Teaching Learning resources.
- **821.7** Describe different methods of teaching of Punjabi.
- **821.8** Explain the concept of evaluation and use of techniques of evaluation.

Course content

Unit -1

- 1. NATURE & SCOPE OF TEACHING OF PUNJABI
 - Language & its development
 - Meaning
 - importance
 - Nature

- Formulation of Instructional objectives in teaching of Punjabi
- Meaning of Instructional objectives
- Taxonomy of Instructional objectives
- writing objectives in behavioral terms
 - Correlation
- Inter correlation of Punjabi language with other languages(Hindi, English, Sanskrit)
- Intra correlation of Punjabi language(Prose, Poetry, Grammar, Composition)

Unit- 2 PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- **Pedagogical Analysis** Following points should be followed for pedagogical analysis on topics
 - a)Identification of concept
 - b)Listing behavioural outcomes
 - c) Listing activities and experiments.
 - d) Listing evaluation techniques
- Content

Any two topics from Prose, Poetry and Grammer

- Teaching skills
- Skill of Questioning
- Skill of Explaining
- Skill of Iluustrating with examples
- Skill of chalk board writing
 - Concept, Need & Importance of Unit Planning & Lesson Planning

Unit-3

3. TEACHING LEARNING RESOURCES AND PROCESS

- Instructional Material
 - Concept
 - components
 - Importance / use
- Development of Language skills
 - Listening
 - speaking
 - Reading
 - Writing
- Use of Language laboratory and latest techniques
- Curriculum of Punjabi Language
- Text Books of Punjabi Language

Unit-IV

4. APPROACHES AND EVALUATION ON TEACHING

- Methodology:
- Modern methods of teaching language with specific references to
 - (i) Project method
 - (ii) Play way method
 - (iii) Discussion method
 - (iv) Observation method
- Remedial Teaching
 - Meaning and significance of remedial teaching
 - Common errors in Punjabi language and their removal
- Evaluation
 - Concept of test measurement and evaluation
 - Place of Evaluation in the process of teaching learning

Practicum/Sessionals

Select anyone of the following:

- i. Preparation of a Diagnostic /Achievement Test.
- ii. Organize a quiz competition in Punjabi and analyze the responses of students.
- iii. ICT Based presentation on any topic of your choice.
- iv. Seminar presentation on any topic given in the syllabus.

Suggested Readings

Singh, G.B. (1981). *Gurumukhi Lipi Da Janam Te Vikas*, Chandigarh: Punjab University Publication Bureau

Singh, G.(1971). Gurumukhi Lipi Bare, Ludhinana: Lahore Book Shop

Singh, H.(1966), *Punjabi Bare*, Patiala: Punjabi University

Sekhon, S.S. & Singh, P.P.(1961). Punjabi Boli Da Itihaas, Punhabi Bhasha Vibhag

Course-6 & 7

Group-III: Pedagogy of Languages

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iz'u i= fuekZrk gsrq funsZ'k&

IEiw.kZ ikB~;Øe Is ukS iz'u fn, tka,xsA tks IHkh Iksyg vadksa ds gkasxsA izFke iz'u vfuok;Z gksxk tks pkj&pkj vadksa ds pkj y?kq iz'uksa ds :i esa IEiw.kZ ikB~;Øe Is fy;k tk,xkA

mís';%

- ek/;fed Lrj ij fo|kFkhZ laLd`r&f'k{k.k mís';ksa o laLd`r dk vU; Hkk"kkvksa ds lkFk varZlaca/k ds ckjs esa ifjfpr gks ldsaxsA
- 822-2- laLd`r f'k{k.k ds fy, vuqns'kkRed lkexzh dks rS;kj djuk vkSj mls izHkko'kkyh <ax ls dkS'ky dk iz;ksx dj ldsaxsA
- 822-3 Hkk"kk ds vk/kkjHkwr dkS'ky dk vH;kl dj ldsaxsA
- 822-4- ikB~;p;kZ ds mifo"k;ksa dk f'k{kk 'kkL=h; fo'ys"k.k o ikB ;kstuk rS;kj dj ldsaxsA
- 822-5- laLd`r Hkk"kk dh ikB~;lgxkeh fØ;kvksa ¼'yksdksPPkkj.k] Hkk"k.k] vfHku;hdj.k½ rFkk laLd`r f'k{k.kkFkZ lwpuk rduhdh ds vk/kqfud lk/kuksa dk iz;ksx dj ldsaxsA

- 822-6- ikB~;Øe fuekZ.k ikB~;iqLrd dh fo'ks"krkvksa dks ifjHkkf"kr dj ldsaxsA
- 822-7- laLd`r f'k{k.k dh fofHkUu fof/k;ksa dk oxhZdj.k dj ldsaxsA
- 822-8- ewY;kadu izfØ;k ds fofHkUu ?kVdksa dk izfriknu dj ldsaxsA

bdkbZ&1

- laLd`r Hkk"kk ,oa lkfgR; dk egRo o bldk vU; fo"k;ksa ls vUrZlaca/kA
- laLd`r Hkk"kk dk vU; Hkk"kkvksa ls laaca/kA
- vk/kqfud ikB~;Øe esa laLd`r dk LFkkuA
- f=Hkk"kk lw= ,oa vU; 'kkldh; izfrosnuksa dk laLd`r f'k{k.k ij izHkkoA
- laLd`r Hkk"kk dk fo'o Hkk"kkvksa ds lkFk lglEcU/k rFkk v/;;u dh izklafxdrkA
- laLd`r f'k{k.k ds y{;] mís'; vkSj budk foHkktuA
- Cywe }kjk fu/kkZfjr mn~ns'; dk O;ogkfjd iz;ksxA

bdkbZ&2

- pkjksa ewy Hkk"kkbZ dkS'kyksa dk laLd`r ds lanHkZ esa Kku ,oa vH;kl
- laLd`r Hkk"kk f'k{k.k dh ijEijkxr vkSj vk/kqfud fof/k;ksa dk ifjp;
- ikB'kkyk ¼lw=½ fof/k
- Hk.Mkjdj ¼O;kdj.k vuqokn½ fof/k
- ikB~;iqLrd fof/k
- izR;{k ,oa ekSf[kd fof/k
- lw{e ,oa foLr`r ikB ;kstuk
- x| ,oa i| ds fdlh nks mifo"k;ksa dk f'k{kk 'kkL=h; fo'ys"k.k ¼d{kk 6 ls 10 rd ds ikB~;p;kZ ls½

bdkbZ&3

- laLd`r f'k{k.kkFkZ lwpuk rduhdh ds vk/kqfud lk/kuksa dk Kku ,oa iz;ksx dk vH;kl
- laLd`r Hkk"kk dh ikB~;lgxkeh fØ;kvksa&'yksdksPpkj.k]
 Hkk"k.k] vfHku;hdj.k] jpuk ds vk;sktu dk f'k{k.k
- laLd`r esa ekSf[kd dk;Z esa 'kq)rk dk egRo] mPpkj.k v'kqf);ksa ds dkj.k] izdkj rFkk mipkj
- laLd`r ys[ku esa v{kj foU;kl rFkk ys[kuxr =qfV;ksa ds dkj.k] izdkj rFkk mipkj
- laLd`r ikB~;iqLrd fuekZ.k ,oa leh{kk}

bdkbZ&4

- laLd`r Hkk"kk dh fofHkUu fo/kkvksa dk f'k{k.k
- laLd`r O;kdj.k f'k{k.k mís';] egRo] izfØ;k ,oa ikB ;kstuk
- laLd`r i| f'k{k.k mís';] egRo] izfØ;k ,oa ikB ;kstuk
- laLd`r x| f'k{k.k mís';] egRo] izfØ;k ,oa ikB ;kstuk
- laLd`r jpuk f'k{k.k mís';] egRo] izfØ;k ,oa ikB ;kstuk
- laLd`r vuqokn f'k{k.k mís';] egRo] izfØ;k ,oa ikB ;kstuk
- laLd`r f'k{k.k esa vH;kl dk;Z fu;kstu rFkk la'kks/ku izfØ;k
- laLd`r Hkk"kk f'k{k.k ds ewY;kdau dh izkphu ,oa vokZphu fof/k;ksa dk f'k{k.k

izk;ksfxd dk;Z%&

- Nk=k/;kid laLd`r ewY;kadu gsrq ek/;fed Lrj ds ikB~;Øe esa ls oLrqfu"B y?kwÙkjkRed rFkk fucU/kkRed iz'ui=ksa dk fuekZ.k laLd`r ek/;e esa djsaxsA
- ek/;fed Lrj dh laLd`r ikB~;iqLrd dh leh{kk djsxsA
- ,d ikB~; iqLrd ds izR;sd ikB ls nl&nl 'kCnksa dk in ifjp; ikoj lokbaV ds iz;ksx }kjk rS;kj djsaxs A

 d{kk ds le o fo"ke vuqØekad okys Nk= Øe'k% xhrk ds izFke vkSj vfUre v/;k; dk 'kkL=h; fo'ys"k.k] O;k[;k vkSj la{ksihdj.k vius 'kCnksa esa djsaxsA

IaUnHkZ xazFk lwph%

vkIVs] Mh-th- ,oe Mksxjs ¼1980½- *Vhfpax vkWQ laLd`r bu ISds.Mjh Ldwy*] cMkSnk% vkpk;Z cqd fMiksA *dkys*] ,e-vkj- gk;j laLd`r xzkej

xouZeSUV vkWQ bf.M;k% fjiksVZ vkWQ laLd`r deh'kuA ik.Ms] vkj-,l- ¼2000½- laLd`r f'k{k.k} vkxjk% fouksn iqLrd efUnj

ik.Ms;] jke'kDy laLd`r f'k{k.k} vkxjk% fouksn iqLrd efUnjA

feÙky] IUrks"k*laLd`r f'k{k.k*] esjB% vkj yky cqd fMiks feJ] izHkk'kadj laLd`r&f'k{k.k A

cksfdy ,oe~ ikjlfud , *U;w ,ijksp Vw laLd`r*] iwuk% yksd laxzg izsSIA

IQk;k] j?kqukFk *laLd`r&f'k{k.k*} p.Mhx<% gfj;k.kk lkfgR; vdkneh

flag] ,I-Mh- ,oe~ 'kekZ ¼1999½- *laLd`r f'k{k.k}* vkxjk% jk/kk izdk'ku eaMhA

'kkL=h ,oe~ 'kkL=h *laLd`r f'k{k.k*] t;iqj% jktLFkku izdk'kuA

gqQjsdj*n izksCYe vkWQ Vhfpax vkWQ laLd`r*

Course-6 & 7 (823)

Group-IV: Pedagogy of Mathematics

PEDAGOGY OF MATHEMATICS

Course Code: 823

Time: 3 Hours Max. Marks: 100

(Theory: 80, Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setters will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q. No. 1 will be compulsory and will carry 16 marks. There will be four short-answer type questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long-answer type questions will carry 16 marks each.
- iv. All questions will carry equal marks.

Course Outcomes(COs)

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

- **823.1** Understand the meaning, nature & scope of mathematics and its relationship with other school subjects.
- **823.2** Comprehend the bloom taxonomy and write instructional objectives in behavioral terms.
- **823.3** Get acquainted with the procedures of skills, pedagogical analysis and lesson plan.
- **823.4** Prepare lesson plans by applying knowledge of planning.
- 823.5 Acquire skills of analyzing curriculum and text books in mathematics.
- **823.6** Enable students to organize Co-curricular activities and develop teaching learning material through the mathematics club.
- 823.7 Select appropriate methods of teaching to teach mathematics
- **823.8** Acquire competency in preparing tools for evaluation.

COURSE CONTENT

Unit-I

1. NATURE & SCOPE OF TEACHING OF MATHEMATICS

- Meaning, nature and scope of mathematics
- History of Mathematics and Contribution of Indian mathematician with special reference to Bhaskaracharya, Aryabhatta and Ramanujam

- Relationship of Mathematics with other school subjects
- Aims and objectives of Mathematics teaching
- Behavioural objectives: meaning and importance of behavioural objectives, writing instructional objectives for teaching of mathematics (Bloom's Taxonomy of Instructional Objectives).

Unit-II

2. PEDAGOGICAL ANALYSIS AND LESSON PLANNING

- Meaning and importance of Pedagogical Analysis
- Points followed for Pedagogical Analysis:a) Identification of conceptb)listing behavioral outcome c) listing activity & experimentsd) listing evaluation techniques
- Contents for Pedagogical Analysis:
 - Arithmetic (Fractions, Ratio and Proportion,)
 - Algebra (Polynomials, Linear equations, Quadratic equations)
 - Geometry (Congruent and Similar triangles),
 - Trigonometry (t-ratios, Heights and Distances)
 - Menstruation (Areas, Surface areas and volumes of solid figures)
- Skills of teaching mathematics: Skill of Introduction, Skill of Questioning, Skill of Reinforcement, Skill of Illustration with examples and Skill of Stimulus variation
- Lesson planning:Need and importance, steps involved in lesson planning, features of a good lesson plan.

Unit-III

1. TEACHING LEARNING RESOURCES AND PROCESSES

- Meaning, Importance and Principles of designing a good curriculum of Mathematics
- Textbooks: Meaning and importance of textbooks in mathematics, qualities of a good textbook inMathematics
- Applications of ICT in teaching of mathematics
- Meaning and importance and preparation of audio-visual aids in teaching mathematics
- Problems in teaching and learning of mathematics
- Importance and organization of Mathematics Club
- Recreational activities of Mathematics Club
 - Ouiz
 - Games
 - Puzzles
 - Mathematics exhibition

Unit-IV

2. APPROACHES AND EVALUATION IN TEACHING OF MATHEMATICS

- Methods of teaching Mathematics
- Lecture cum demonstration method
- Analytic-Synthetic
- Laboratory
- Inductive-Deductive
- Problem Solving

- Project Method
- Techniques of teaching Mathematics
 - Oral work
 - Written work
 - Drill work,
 - Home Assignment
- Evaluation: Meaning, importance and types of evaluation.
- Preparation of diagnostic and achievement test.

Praticum/Sessional

Any one of the following

- i. Critical study of mathematics text book of secondary school.
- ii. Prepare any one self-made teaching aid for teaching of Mathematics in secondary school
- iii. Prepare an achievement test of mathematics
- iv. Prepare a diagnostic tests of mathematics
- v. Prepare slides using MS Power point on any one topic of mathematics

Suggested Readings:

Aggarwal, J. C. (2008). Teaching of mathematics. UP: Vikas Publishing House Pvt Ltd.

Bagyanathan, D. (2007). Teaching of mathematics. Chennai: Tamil Nadu Text Book Society.

Bhatia, K. K. (2001). Foundations of teaching learning process. Ludhiana: Tandon

CFAI. (2004). Methodology of teaching mathematics. Hyderabad: ICFAI University Press.

Ediger, M., & Bhaskara Rao, D. B. (2004). *Teaching mathematics successfully*. New Delhi: Discovery Publishing House.

Ediger, M., & Rao, D.B. (2000). *Teaching mathematics successfully*. New Delhi: Discovery Publishing House.

Goel, Amit. (2006). Learn and teach mathematics. Delhi: Authors Press.

ICFAI. (2004). Methodology of teaching mathematics. Hyderabad: ICFAI University Press.

James Anice (2005); *Teaching of Mathematics*, Neelkamal Publication.

Joyce., & Well., (2004). Models of teaching. U.K: Prentice hall of India.

Kapoor, S. K. (2006). The teaching of vedic mathematics. New Delhi: Lotus Press.

Course 8

KNOWLEDGE AND CURRICULUM

Course Code- 824

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **824.1** Understand the concept, sources, types and terms such as: Information, reasoning belief, truth and analysis.
- **824.2** Analyze the thoughts of Great Educational thinkers.
- **824.3** Understand the Basic Concept of Society.
- **824.4** Describe the role of Economic, Cultural and Historical dimension of Education.
- 824.5 Understand the concept and dimension and curriculum at different levels.
- 824.6 Describe the determinants and basic consideration of curriculum development.
- **824.7** Examine the concerns and issues related to curriculum.
- **824.8** Critically analyses the concept, need and process of National Curriculum Framework.

Course Contents

Unit-I

- 1. Knowledge Basis of Education
 - Concept, sources, types& Facets of Knowledge
 - Distinction between information & knowledge, belief & truth and reasoning & analysis.

• Education and knowledge as visualized by different thinkers: Gandhi, Tagore, J. Krishnamurty Friedrich Frobel.

Unit-II

2. Social Basis of Education

- Basic concepts of Society: Socialization, Equity and Equality, Modernity with reference to industrialization, democracy.
- The role of culture, economy and historical forces in shaping the aims of education.
- Individual opportunity, social justice and dignity in context of democratic education.
- A study of Secularism, Nationalism and Universalism and their interrelationship with education.

Unit-III

3. Curriculum Development

- Concept of Curriculum and Syllabus: Dimensions of Curriculum and their relationship with aims of education.
- Curriculum at different levels- National, State and School.
- Determinants of curriculum: Philosophical, Psychological, Sociological, Political, Culture and Economic.
- Basic considerations in Curriculum Development.

Unit-IV

4. Curriculum Practices

- Teachers' experiences and concerns: Laboratory work, Library, Field Survey, Group Discussion.
- Nature of learner and learning process and subject matter.
- Knowledge and ideology in relation to curriculum and text books.

National curriculum framework: Concept need and process of development.

Practicum/ Sessionals

Any two of the following:

- i. Socio-economic educational survey of near by village/ urban settings.
- ii. Role of education in empowerment of weaker sections of society.
- iii. To analyze and prepare a report on the present curriculum of Haryana School Education Board/ CBSE in the light of various determinants of curriculum development.
- iv. Filed survey on impact of present system of education on:
 - a) Socialization of child
 - b) Modernization with reference to industrialization and individual autonomy.
- v. To survey and prepare a project report on how far the present system of education is able to inculcate secularism, nationalism, and universalism.

vi. Blue Print of practice models of Gandhi ji /Tagore for rural reconstruction.

Suggested Readings

Butchvarov, P. (1970), *The Concept of Knowledge*, Evanston, Illinois: North Western University Press

Chomsky, N (1986). Knowledge of Language, New York: Prager.

Cole Luella (1950). A History of Education: Socrates to Montessori, NewYork: Holt, Rinehart & Winston.

Datta, D.M. (1972). Six ways of Knowing. Calcultta.: Calcultta University Press,

Dewey, J.(1997.)My Pedagogic Creed', in D.J. Flinders and S.J. Thorton(eds.) The Curriculum Studies Reader, New York: Routledge.

Dewey, J (1997) Experience and Education, Touchstone, New York

Dewey, J (1956). *The Child and the Curriculum and School and Society*, University of Chicago Press, U.S.A. Chicago, Illinois.

Krishna M. J. (1947) On Education, New Delhi: Orient Longman.

Kumar K. (1996). Learning From Conflict, New Delhi: Orient Longman.

Lakshmi, T.K.S. & Yadav M.S.(1992). Education: Its Evolving Characteristics, in New

Frontiers in Education, Vol. XXII, No.4, Oct-Dec.

Margaret, K.T.(1999.) *The open Classroom*, Orient Longman: New Delhi: Hirst. Paul, Knowledge and curriculum.

Peters, R.S.(1967) The Concept of Education, UK: Routledge.

Power, E, J., M (1962). Currents in the History of Education, New York. : McGraw Hill Book Co. Inc.

Prema C. (2001). Teaching & Learning: The Culture of pedagogy, NewDelhi: Sage Publication.

Course -9 (825) ASSESSMENT FOR LEARNING Course Code-825

Max. Marks:100

Time: 3 Hours (Theory: 80,Internal: 20)

NOTE FOR PAPER SETTER

- i. Paper setter will set nine questions in all, out of which students will be required to attempt five questions.
- ii. Q.No 1 will be compulsory and will carry 16 marks. There will be four short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the four units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

| 825.1 | Understand the nature of assessment and evaluation purposes and objectives of |
|-------|---|
| | assessment. |

- **825.2** Understand the importance of current evaluation practices.
- 825.3 Get acquainted with Bloom's taxonomy objectives and table of specifications.
- **825.4** Understand achievement tests, diagnostic test and kinds of task and their importance in assessment.
- 825.5 Understand assessment process tools and construction of process oriented tools.
- 825.6 Acquire the knowledge of group dynamics and portfolio assessment.
- 825.7 Understand analysis, manage and implement assessment data.
- **825.8** Understand the role of feedback to stakeholders and reporting students performance.

Course Contents

Unit I

1. INTRODUCTION TO ASSESSMENT & EVALUATION

- Concept of Assessment & Evaluation and their inter relationships.
- Purposes and objectives of assessment for placement, providing feedbacks, grading promotion, certification, diagnostic of learning difficulties.
- Critical review of current evaluation practices:
 - a) Formative and summative evaluation
 - b) Prognostic and diagnostic
 - c) Norm referenced test and Criterion referenced test
 - d) Quantitative and Qualitative

Unit II

2. ASSESSMENT OF LEARNING

- Concept of Cognitive, Affective, Psychomotor domain of learning (Revised taxonomy of objectives (2001)
- Constructing table of specifications & writing different forms of questions (VSA, SA, ET & objective type, situation based)
- Construction of achievement test- steps, procedure and uses
- Construction of diagnostic test Steps, uses & limitation
- Kinds of task: projects, assignments, performances

Unit III

3. ASSESSMENT PROCESS & TOOLS

- Need for CCE its importance and problems faced by teachers
- Meaning & Construction of process-oriented tools observation schedule; check-list; rating scale; anecdotal record;
- Assessment of group processes Nature of group dynamics; Socio-metric techniques; steps for formation of groups, criteria for assessing tasks; Criteria for assessment of social skills in collaborative or cooperative learning situations.
- Portfolio assessment meaning, scope & uses; developing & assessing portfolio; development of Rubrics.

Unit IV

4. CONSTRUCTION INTERPRETATION AND REPORTING OF STUDENT'S PERFORMANCE

- Interpreting student's performance :
 - a) Descriptive statistics (measures of central tendency & measures of variability, percentages)
 - b) Graphical representation (Histogram, Frequency Curves)
 - c) NPC percentile.
 - d) Grading Meaning, types, and its uses
- Role of feedback to stake holders (Students, Parents, Teachers) and to improve teaching learning process; Identifying the strengths & weakness of learners.

Reporting student's performance – Progress reports, cumulative records, profiles and their uses, Portfolios.

Practicum/ Sessionals

Any one of the following:

- i. Construction of unit test, using table of specifications and administering it to target group and
 - interpreting the result.
- ii. Construction of any one of the process oriented tools and administering it to group of students & interpreting it.

- iii. Analysis of question papers (teacher made)
- iv. Writing self appraisal/ create portfolio.
- v. Planning and organizing student's portfolio.
- vi. Writing a report on the evaluation and learner practice of school education.
- vii. Examine and reflect upon the problems and issues involved in assessment practice of school evaluation.
- viii. Activities and Assessment criteria for Work education and Experiential learning, Community service.

Suggested Readings

Bransford, J., Brown, A.L., & Cocking, R.R. (Eds.). (2000). How people learn: Brain, mind, experience, and school. Washington, DC: National Academy Press.

Burke, K. (2005). How to assess authentic learning (4th Ed.). Thousand Oaks, CA: Corwin.

Burke, K., Fogarty, R., & Belgrad, S (2002). The portfolio connection: Student work linked to standards (2nd Ed.) Thousand Oaks, CA: Corwin.

Carr, J.F., & Harris, D.E. (2001). Succeeding with standards: Linking curriculum, assessment, and action planning. Alexandria, VA: Association for Supervision and Curriculum Development.

Danielson, C. (2002). Enhancing student achievement: A framework for school improvement. Alexandria, VA: Association for Supervision and Curriculum Development.

Gentile, J.R. & Lalley, J.P. (2003). Standards and mastery learning: Aligning teaching and assessment so all children can learn. Thousand Oaks, CA: Corwin.

Guskey, T.R., & Bailey, J.M. (2001). Developing grading and reporting systems for student learning. Thousand Oaks, CA. Corwin.

Linn, Robert and Norman E Gronland (2000); Measurement and Assessment in teaching, 8th edition, by Prentice Hall, Inc, Pearson Education, Printed in USA.

Natrajan V.and Kulshreshta SP(1983). Assessing non-Scholastic Aspects-Learners Behaviour, New Delhi: Association of Indian Universities.

NCERT(1985). Curriculum and Evaluation, New Delhi:NCERT

Newman, F.M. (1996). Authentic achievement: Restructuring schools for intellectual quality. San Francisco, CA: Jossey-Bass.

Nitko, A.J. (2001). Educational assessment of students (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Norris N.(1990) Understanding Educational Evaluation, Kogan Page Ltd.

Rao, Manjula (1998): Training material on continuous and comprehensive evaluation (monograph) Mysore: Regional Institute of Education (NCERT).

Rao, Manjula (2004): Evaluation in schools – a training package (monograph), Mysore: Regional Institute of Education (NCERT).

Singh H.S.(1974) Modern Educational Testing. New Delhi: Sterling Publication.

Ved Prakash, et.al. (2000): Grading in schools, NCERT, Published at the publication Division by the secretary, NCERT, New Delhi: Sri Aurobindo Marg.

Course 10 (826)

CREATING AN INCLUSIVE SCHOOL Course Code-826

Max. Marks :50 (Theory: 40,Internal: 10)

Time: 1.30 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

After the transaction of the course, student teachers will be able:

- **826.1** To define the concept of Disability, Inclusion, Psychosocial construct of disability and identity.
- To analyze the policy and programme inititatives in the area of inclusion and barrier to learning.
- 826.3 To adopt appropriate teaching learning strategies and guidance and counselling strategies for inclusive practices.
- 826.4 To know and maintain the individualized education plan.

Course Contents

Unit I

1. Inclusive education:

- Meaning, nature, need and philosophy of inclusive education.
 - a) Models of inclusion,
 - b) Barriers to learning and participation.
 - c) Implementation and strategies for inclusion in society and school.
- Constitutional provisions-Govt. policies and practices:
 - a) National Policy of Persons with Disabilities Act 2006.
 - b) Sarva Shiksha Abhiyan in terms of Inclusive Education.
- Psycho-social and educational characteristics, functional limitations, role of family and community participation with reference to-Loco motor Impairment, Hearing Impairment, Visual Impairment, Learning Impairment and Mental retardation

Unit-II

2. Inclusive practices in classrooms

- School readiness and support services for inclusive education.
- Teacher competencies, role of class teachers and resource teachers in inclusive education.
- Guidance and counselling in inclusive education.
- Teaching learning strategies in inclusive education: co- operative learning, peer tutoring, social learning, multisensory learning.
- Individual Educational Programme (IEP) and use of emerging technologies.

Practicum/ Sessionals

Any one of the following:

- i. Preparation of status report on school education of children with diverse needs.
- ii. Evaluation of text books from the perspective of differently abled children.
- iii. Field visit to school/institutions promoting inclusive practices and discussion with teachers and observation and analysis of teaching learning practices.
- iv. Analysis of policy document (national, international) related to diversity.
- v. Planning and conducting multi level teaching in the local school.
- vi. Critical review of policy and practice and panel discussion by a group of students.
- vii. Make a list of existing resources in the local area and discuss their use and limitations based on survey of five inclusive schools.
- viii. Study of forms of inequities in the society, education, health, civic participation, social justice and gender.
- ix. Case study of a Child with Disability in a village

Suggested Readings

Alur Mithu and Michael Bach, (2009), The Journey For Inclusive Education In The

Indian Sub-Continent. UK:Routledge

Dettmer, p., Dyck, N. and Thurston, L.P. (1999). Consultation collaboration and teamwork for students with special needs, Needham Heyats, M. a Allyn & Bacon

Epstein, C. (1984) *Special Children in Regular Classrooms*. Virginia: Reston Publishing Company, Inc

Frostig, M, and, P. Maslow (1973) *Learning Problems in the Classroom: Prevention and Remediation*. New York: Grune & Stratton.

Jorgensea, C.M.ed(1998). R restructuring High Schools for all Students: Taking inclusion to the next level, Baltimore: Paul H. brookes.

Hallahan, D & Kauffman, J.M. (1991). Exceptional Children: Introduction to special Education, Englewood, NJ: Prentice Hall.

COURSE 11 (Option-i) (827)

ENVIRONMENT EDUCATION

Course Code-827

Max. Marks :50

Time: 1.30 Hours (Theory: 40,Internal: 10)

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short -answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- 827.1 Understand the concept, need, scope and objectives of Environment Education.
- 827.2 Sensitize the Global Environmental problems and explain the different policies & Environmental legislation in India.
- **827.3** Explain the teaching learning strategies and Evaluation techniques in Environment education.
- **827.4** Familiarize with Curriculum development, Environmental disasters and Role of Media in Environment education.

Course Content

Unit-I

1. Concept of Environmental Education:

- Meaning, need and scope of environmental education.
- Evolution and development of environmental education.
- Stock Holm conference, Tbilisi conference and Earth Summit.
- Objectives of environmental education.

2. Environmental problems and policies:

- Acid rain, Ozone depletion, effect of urbanization, industrialization and deforestation.
- Global warming and Kyoto Conference.
- Pollution and its types.
- Policies related with environmental problems.
- Sustainable development
- Environmental legislation in India.

- Concept of healthy environment
- Eco club: Meaning, Characteristics & Importance.

Unit-II

3. Curriculum development and environmental education:

- Teaching learning strategies and evaluation techniques in environmental education.
- Planning of environmental education in school, colleges and Universities.
- Role of Mediain environmental education.
- Curriculum development in Environment education.

4. Managing environmental disasters:

- Meaning, types, causes and effects of different disasters.
- Managing environmental disaster at community and individual level
- Rescue from disaster: Principles governing rescue, rescue process
- Relief for disaster: preparatory phase of relief, planning immediate relief, execution of relief.

Practicum/Sessionals

Any one of the following:

- i. Prepare a scrap file along with suggestion of pupil-teacher related to environmental articles and news.
- ii. Project report on local environmental problem.
- iii. Conducting discussion (class level)on disaster management and prepare a report on it.
- iv. Participating and promoting Vanamahotsav with school community participation a feast for creating awareness of trees and planting of saplings.
- v. On field learning: Raising a nursery/ Kitchen garden.
- vi. Organise activities of an eco club in a rural school

Suggested Readings:

Ali Khan, S. & Sterling, (1998). *Sustainable development education*: Teacher education specification, London, Education for sustainable development Panel.

Allaby, M. (1996). Basics of Environmental Science. New York: Routledge.

Aptekar.Lewis (1914). Environmental Disasters in Global perspective. New York: G.K.Hall;

Toronto: Maxwell macmillan.

Burton , Ian , Robert W. Kares and Gilbert F. white (.1993). The environmental as Hazard.

New York: the Guildford press.

Dani, H.M.(1996). *Environmental Education* .Chandigarh: Punjab University Publication Bureau.

Huckle, J. & Sterling, S. (eds) (1996). Education for sustainability, London: Earthscan.

Kaur, T.N. (1999), Environmental Concerns & Strategies, New Delhi: Ashish Publication House.

Laeeq Futehally (1994) Our Environment. India: National Book Trust

Lambert, P.R.(2000). Education for sustainable development: a new role for subject association, education in science ,208.pp.8-9

Pankaj Shrivastava & D.P. Singh (2002). Environment Education, Anmol publication Pvt.

Ltd.

Pelling, Mark (ed.)(2003). *Natural Disasters & development in a globalizing world* . London: New York; Routledge.

Trivedi, P.R.(2000). *Encyclopedia of environmental Pollution Planning & Conservation*; New Delhi: A.P.H.Co.

Verma V.A. (1972). Textbook of Plant Ecology, Delhi: Euolcary Publication.

Warburton D.(ed.)(1998). Community & Sustainable Development, London, Earthscan.

Yogendra N.Srivastava (2012). *Environmental Pollution* . New Delhi: PPH Publishing Corporation.

Course-11 (option-ii) (828) PEACE EDUCATION Course Code-828

Max. Marks:50

Time: 1.30 Hours (Theory: 40, Internal: 10)

NOTE FOR PAPER SETTER

- iv. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- v. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- vi. Two long answer type question will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **829.1** Understand the concept, need of peace education as a universal value.
- Explain aim and objectives and role of social agencies in promoting peace education.
- 829.3 Understanding the philosophical thoughts and challenges to peace education.
- **829.4** Imbibe the knowledge, attitude and skills needed to achieve and sustain a global culture of peace.

Course Contents

Unit -1

1. Introduction of Peace Education

- Meaning, Concept and need of Peace Education.
- As a universal value
- Aims and Objectives of Peace Education.
- Role of Social Agencies: Family, Religion, Mass Media, Community, School, NGO's, Government Agencies in promoting peace education.
- Current Status of Peace Education at Global Scenario.

Unit-2

2. Peace In The Indian Context

- Role of Religion in propagation of Peace. Mother-Theresa, Vivekananda, Gandhian Philosophy in promoting Peace Education. Role of Great personalities in promoting Peace.
- Challenges to Peace- Stress, Conflict, Crimes, Terrorism, Violence and Modernization.
- Strategies and Methods of teaching Peace Education- Meditation, Yoga, Dramatization,
 - Debate and etc.
- Democracy and Peace, Secularism and Peace, Culture and Peace.

Practicum/Sessionals

Any one of the following:

- i. Prepare a Role Play of Great Personalities who worked/contributed towards Peace.
- ii. Organize an activity in schools to promote Peace.
- iii. Write a report on Gandhi and Peace.
- iv. Write about the contribution of any two Noble prize winners for Peace.
- v. Prepare an album of Indian Philosophers and write their thoughts on peace.

References

Adams.D (Ed) (1997). UNESCO and a culture of Peace: Promoting a Global Movement. Paris UNESCO.

Taj.H. (2005). National Concerns and Education, Neelkamal Publications.pvt.Ltd

Taj.H (2005). Current challenges in Education, Neelkamal Publications.pvt.Ltd

Bhargava.M. & Taj.H (2006). Glimpses of Higher Education. Agra-2: Rakhi Prakashan,

http://www.un.org/cyberschoolbus/peace/content.html.

HEALTH, PHYSICAL AND YOGA EDUCATION Course Code-829

Max. Marks :50

Time: 1.30 Hours (Theory: 40,Internal: 10)

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- **828.1** Explain the concept of Health, Physical and Yoga Education along with their roles for a healthy Individual.
- **828.2** Explain the importance of Diet, food and nutrition.
- **828.3** Acquaint themselves with ways and means to deal with different types of dieases, pollution and Global Warming.
- **828.4** The importance of physical fitness and causes of postural deformities.

Course Contents

Unit-I

1. **HEALTH , YOGA AND PHYSICAL EDUCATION**:

- Concept of Health and factors affecting Health
- Concept and types of Yoga.
- Physical Education and its objectives.
- Role of School and society in developing a healthy individual through the programmes of Health, Yoga and Physical Education.

2. FOOD AND NUTRITION:

- Diet, Food, nutrition
- Balanced diet, its functions and components.
- Types of food according to Yogis and Yogic Diet
- Malnutrition –causes and prevention

Unit-II

3. SAFETY AND SECURITY

- Communicable diseases- modes, Prevention and control.
- First Aid in case of Wounds, Hammerages, Fracture, Dislocations, Sprain, Strain and Bites
- Health Hazards
- Pollution: Types, causes and prevention
- Water conservation, management and recycling
- Global warming
- Personal and Environmental Hygiene

4. POSTURE AND PHYSICAL FITNESS:

- Postural deformities and their Management through Yogic and other exercises
- Physical Fitness –Elements, importance.

Practicum/Sessionals

Any one of the following:

- 1. A) Prepare a Medical report of a school student.
 - B) Report of common first aid emergencies in school.
- 2. Performing & Reporting any five advance yoga asana.
- 3. Prepare a report on health awareness programme in school community.
- 4. Survey report on health status of students in a rural school
- 5. celebration of Yoga day/Yoga week.
- 6. Awareness programme to promote hygiene, sanitation in a nearby village.

References:

Anderson, C.R. Your guide to health.

Bucher, C.A. (1964) Foundations of Physical Education, New York: Mosby and company.

Catharine Ross Benjamin Caralleso, Robert, J. Cousino (2009). *Modern Nutrition in health and diseases*.

Holmes, A.C. Health in developing countries.

Kang Gurpreet singh & Deol NishanSingh.(2013). *An Introduction to Health and Physical Education*, 21st century publications, India.

Piper, B. (1999). Diet and Nutrition: A guide for students and practitioners.

COURSE 11 (Option-iv) (830)

GUIDANCE AND COUNSELLING Course Code-830

Max. Marks :50 (Theory: 40,Internal: 10)

Time: 1.30 Hours

NOTE FOR PAPER SETTER

- i. Paper setter will set five questions in all, out of which students will be required to attempt three questions.
- ii. Q.No 1 will be compulsory and will carry 8 marks. There will be two short answer type Questions of 4 marks each to be selected from the entire syllabus.
- iii. Two long answer type questions will be set from each of the two units, out of which the student will be required to attempt one question from each unit. Long- answer type questions will carry 16 marks each.

Course Outcomes(COs)

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

- Explain the concept and different types of guidance..
- Explain the concept of Counselling and its types.
- 830.3 Understand the testing and non-testing devices for the study of an Individual.
- **830.4** Familiarize with the different types of guidance services organized in the School.

Course Content

UNIT-I

1. INTRODUCTION TO GUIDANCE

- Meaning, Nature and Scope
- Principles of Guidance
- Types of Guidance: Educational, Vocational and Personal Guidance (Meaning, Need and Importance, Objectives)

2. COUNSELING

- Concept of Counselling, Need & Importance of Counselling
- Types of Counselling : Directive, Non-Directive and Eclectic
- Meaning and Characteristics
- Process of Counselling

UNIT-II

3. STUDYING AN INDIVIDUAL

- Need and importance of Studying an individual
- Testing and Non-testing devices for the study of an individual
- Testing: Interest Inventories and aptitude tests
- Non-Testing : Interview, Questionnaire Cumulative record card, Anecdotal record, Rating scale

4. GUIDANCE SERVICES AND THEIR ORGANIZATION IN THE SCHOOLS:

- Types of Guidance services
- Role of School personnel in organizing guidance services
- Role of Teacher as a counselor.

Practicum/Sessionals

Any one of the following

- i. Make a study of a guidance centre. Prepare a report.
- ii. Prepare a cumulative record card of a student studying at secondary level.
- iii. Prepare a report on the guidance services organized by school personnel.
- iv. Learning and participating in the world of work: Study of local occupations, technologies & skills and work force.
- v. Prepare a report on the guidance & counselling needs of Students with Disabilities in a rural school.

Suggested Readings:

Bhatia K.K (2002). *Principles of Guidance and counseling*, Ludhiana: Kalyani Publishers. Gibren, R.h and Mitchell, M.H (2003). *Introduction to counseling and guidance*, New Delhi: Pearson Education.

Pandey, K.P (2000). *Educational and Vocational Guidance in India*, Varanasi: Vishwa VidyalayaPrakashan.

Robinson (2005). *Principles and Procedures in Students counseling*, New York: Harper & Row. Sharma, R.A (2008). *Fundamental of Guidance and counseling*, Meerut: R Lall Book Depot. Sidhu, H.S (2005). *Guidance and Counselling*, Patiala: Twenty First Century.

Strong, R. (2005). Counselling Techniques in colleges and secondary school. New York: Harper.

Course EPC-1 (831)

Reading and Reflecting on Text.

Max. Marks:50 (External: 25,Internal: 25)

Time: 3 Hours

Learning Outcomes

Course Outcomes(COs)

After the transaction of the course, student-teacher will be able to:

- 831.1 Able to explain different types of text.
- 831.2 Read and respond to a variety of texts in different ways: personal, creative & critical
- 831.3 Get involved in the readings interactively-individually and in small groups and enhance capacities as active readers and writers.
- 831.4 Comprehend and think reflectively on spoken or written texts.

COURSE CONTENT

Unit 1

1. Text and Reading

Types of Texts:

General: Literary or non-literary; Narrative, expository, technical & persuasive.

Education: Descriptive, conceptual, historical, policy documents, narrative texts, expository texts, ethnographies.

2. Text and Reflection

- Text structure, language, genre, context, socio-cultural diversity.
- Reflection in Reading: Pre-reading, Post-reading.
- Previews the text and make predictions, makes connections to personal experience or other texts, asks clarifying questions, identify difficult sentences or passages, restates in own words, reacts to the text by using language laboratory.

Unit 2

3. Communicative Reader-Interactive reading(Individual and groups)

Concept and relevance of communicative reader.

4. Expressive Reflections

- a) Concept of reflective writing
 - b) Critical appreciation of the text: Note taking, critically reviewing the text.

Suggested Activities:

- i. Ways of reading: pre-reading and post reading
- ii. Read a book, a journal Article, or a chapter and write personal responses and summarize.
- iii. Prepare presentations on literary TEXT Autobiography / ethnographic text.
- iv. Beyond the textbook: reading comprehension and question –answers.
- v. Preparing a Vocabulary Book (50 words), with Meanings and Usage.
- vi. Writing a book review and critically analyze the Content and Language of the text.
- vii. Make a list of reading books of diverse texts and classify them under headings.
- viii. Conduct interactive group reading session (small groups).
- ix. Narrating/describing a related account from one's life experience (in front of a smaller group).
- x. Discussion of characters and situations –sharing interpretations and points of view (in a smaller group).
- xi. Read a book and identify the text structure, language, genre, context, socio-cultural diversity.
- xii. Reading to extract overall meaning, information, subject knowledge (guided reading in pairs and simple note making).
- xiii. Explain the gist of the text/topic to others (in the larger subject group)
- xiv. Discussion of the theme, sharing responses and points of view (small group discussion).
- xv. Conduct debates/discussions, role-playing, dialogues on educational policies and documents on them by using language laboratory.
- xvi. Study and reflect on Biography of Gandhi ji..
- xvii. Studying and reporting health concerns/ drainage system of school/ village.
- xviii. Writing expenditure account for an activity/function and house hold family budget plan.

EPC-2 (832) Drama and Art in Education

Max. Marks :50 (External: 25,Internal: 25)

Course Outcomes(COs)

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

- 832.1 Develop imagination and sense of appreciation and aesthetic of art.
- 832.2 Have basic knowledge about colour schemes and prepare effective teaching aids.
- 832.3 Use drama processes to examine their skills.
- **832.4** Generate new knowledge, understanding and perceptions regarding household skills.

Course Content

Time: 3 Hours

Drawing and Painting

- Representational Drawing and painting from nature plants, foliage, flowers, birds and animals etc. (medium – pencil, pen & ink, crayon, water-colour- any two medium)
- Perspective Drawing.
- Still-life study (medium pencil, pen & ink, crayon, water colour, oil-colour, acrylic colour any two medium).
- Composition Painting (Crayon, Water-colour, Oil-colour any two medium).
- Arrangement printing with leaf, finger, cork, stamps, cardboard, jute and bandage texture—any two medium.
- Monotype surface-printing, Thread-print, Stencil-print, spray-print, Simple block making and print – Potato-cut-print, vegetable print with lady finger, Simple block making and print – Potato-cut-print, vegetable print with lady finger, – any two medium.

Creative Art /Drama

- Creative pictorial or geometrical design Water colour / Pastel colour.
- Surface design Floor decoration (Alpana, Rangoli), Wall decoration.
- Poster-Design (Monochrome / multi-colour).
- Simple lettering for communication, calligraphy.
- developing narratives in visuals, composition of an imagined situation
- telling a story through comic strips, creating a collage using images, bits cutout from old magazines, news paper etc.
- Collecting and arranging rare photographs, photo print on various theme.

- Understanding the Drama as a medium of instructions and its role in effective teaching. It should be based on the lesson from particular subjects of teaching: One Act Play, Skit, Mono Acting, Voice Play, Storey Board etc. should be implemented as one of the effective teaching aid.
- The prospective teacher will prepare minimum TWO lessons through drama. The contents will be from or based on the lesson to teach in the class.
- Reflective report on curriculum of Art, Craft, Drama, Music and Theatre in schools.
- Tailoring, Stitching, Knitting and folk arts- Preparing samples.

Course EPC 3 (833)

Critical Understanding of ICT

Max. Marks :50

Time: 3 Hours (External: 25,Internal: 25)

Course Outcomes(COs)

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

- Interact with ICT and use effectively ICT tools and relevant software applications for specific purpose in teaching learning process.
- 833.2 Acquire knowledge of computers, its accessories and software.
- **833.3** Demonstrate the use of MS Windows and develop skill in using MS-Word, Power points and Spread sheets.
- Acquire skill in accessing World Wide Web and Internet and global accessing of information and Organizing science and technology based activities for the community.

COURSE CONTENTS

1. ORIENTATION TO ICT

- **ICT:** Meaning, Importance and Tools of ICT
- **Computer Fundamentals:** Basic anatomy, types and applications, Input-Output devices, Storage devices.
- MS-Windows: Basic components of Windows, Control Panel, Program Manager, File Manager, Accessories, Paint Brush, notepad.
- MS Word: Concept of word processing, Entering Text, Selecting and Inserting text, editing text, Making paragraph, Getting help, moving and copying, searching and replacing, formatting character and paragraph, handling multiple documents, Manipulation of tables and foot notes, table of contents and index, sorting, formatting sections and documents.
- MS Excel: Basics of Spreadsheet, creating and saving a worksheet, Manipulation of cells, Columns and Rows, editing and formatting a worksheet, embedding charts, use of simple statistical functions, sort and filter.
- **MS Power point:** Basics of power point, creating a presentation, the slide manager, preparation of different types of slides, slide design, transition and animation and presentation of slides, printing the slides and handouts.
- **Multimedia:** Components of Multimedia, Textual Information, Animation, Digital Audio, Digital Video, MS-Publisher, Photo Draw.

2. DIGITAL SHARING AND EXCHANGE OF INFORMATION

• **Internet:** the world-wide web, websites and web browsers, Internet connectivity, browsing software, URL addresses, Search engines, Exploring websites and downloading materials from websites, E- mail – Sending, receiving and storing mail,

handle attachments, Chatting, social networks, participate in discussion forum and blogging.

3. ICT TOOLS AND ITS INTEGRATION IN EDUCATION

- Over-head Projector
- LCD Projector
- T.V.
- Camera
- Visualizer
- Interactive Boards
- CD/DVD Player

Hands On Training:

- i. Administrative use Letter correspondence and E-Mail
- ii. Construction of a Portfolio and Question paper of teaching subjects
- iii. Creating learning materials handouts
- iv. Data processing, storing and retrieving simple financial transactions of the school such as school budget and accounting.
- v. Tabulation of Bio data of staff and students of the school in which the student teacher is attached for practice teaching.
- vi. Students progress record Tabulation and graphical representation of results of an academic test.
- vii. Multimedia presentation on a topic relevant to the Optional Subjects
- viii. Prepare transparencies on a topic relevant to the Optional Subjects.
- ix. Organizing science and technology based activities/services for the community and/or the locality.

A softcopy of above activities should be presented at the time of external examination. Suggested Readings

- 1. Copestake, S. (2004). Excel 2002. New Delhi: Drem Tech Press.
- 2. Hahn, H. (1998). The internet- complete reference. New Delhi: Tata McGrow Hill Publication.
- 3. Intel Education & NCTE. (2007). Hand book for teacher educators. Bangalore: NCTE.
- 4. Leon, A. M. (2001). Computer for every one. New Delhi: Vikas Publishing house.
- 5. Petzold, C. (1998). Programming windows. USA: Microsoft Press.
- 6. Sundararajan, K. (1998). Internet. Chennai: Kannadhasan Publications.
- 7. Stone, E. (1996). How to use Microsoft Access. California: Emergyville.
- 8. Simon, C. (1995). The way microsoft windows 95 works. USA: Microsoft Press.
- 9. Srinivasan, T. M. (2002). Use of Computers and Multimedia in education. Jaipur: Aavisakar Publication.

EPC-4 (834) Understanding the self

Max. Marks :50

Time: 3 Hours (External: 25,Internal: 25)

Course Outcomes(COs)

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

| 834.1 | discover and knowing oneself and its significance. |
|-------|--|
| 834.2 | reflect upon the effects of gender biasness, stereotyping and prejudice. |
| 834.3 | To evolve as a progressive, flexible and a reflective practioner as a teacher. |
| 834.4 | equip student teachers with skills for empathetic listening and self expression. |

Course Content

General Orientation

- Concept of self and self identity
- Exploring oneself: Self identity; Potential of self; fear; aspiration
- Factors affecting self identity: Social, Cultural, Gender, Religion & Language.
- Role of teacher as a facilitator in self exploration of pupil teacher.

Suggested Activities:-

- (i) Self expression through varied forms: Poetry, Aesthetic Representation (painting, Poster Making, sketch & Cartoon making)
- (ii) Critically evaluate oneself as a 'Prospective teacher' (Self Appraisal Report)
- (iii) Write a self reflective accounts of significant experiences concerning gender, stereotypes and prejudices.
- (iv) Role play and Paired activity for empathetic listening.
- (v) Critically reflects on one's teaching-learning practices.
- (vi) Yoga sessions
- (vii) Conducting workshop on following issues:
 - a) Self Awareness
 - b) Self Identity
 - c) Sharing life turning incidents
 - d) Meditation workshop
 - e) Gender biasness
 - f) Stereotyping and prejudice
 - g) Marginalization
 - h) Role of media in dealing with above issues.
- (viii) Case study of Happiness, Pleasure and Non-violence in school/ classrooms.

Suggested Readings:

Brooksfield, S.d.(1995). Becoming a critically reflective teacher. San Francisco. CA:John Wiley & Sons.

Duval. T.S., & Silvia, P.J(2001). Self awareness and causal attribution: A dual systems theory. Boston: Kluwer Academic.

Phillips, A.g., & Silvia. P.J. (2002). Self-awareness, self evaluation and creativity.

COURSE-13 (837-853)

School Internship Programme (SIP) & Engagement with the Field (EWF)

Duration

B.Ed. - Ist Year: SIP- 1 Week

EWF- 3 Weeks

B.Ed.- IInd Year: SIP- 14 Weeks

EWF- 2 Weeks

Course Outcomes(COs)

| 837.1-853.1 837.2-853.2 837.3-853.3 837.4-853.4 | To undertake the field activities pertaining to the theories and practicals subjects. To develop an understanding about various components of school Administration To recognise feelings, diagnose needs and fears, and improve one's abilities To learn and practice new skills and techniques for effective outputs in job market for teachers. |
|--|--|
| 837.5-853.5 | To acquaint the students with specific problems of school management and get exposed to Professional etiquettes to make a lasting impression. |
| 837.6-853.6 | To write a reflective journal on observation of regular class room teaching with respect to pedagogical practices and class room management techniques used by the teachers. |
| 837.7-853.7 | To reflect upon the roles and responsibilities of different school staff and Critical study of the infrastructural facilities. |
| 837.8-853.8 | To bring about personality development with regard to the different behavioral dimensions that has far reaching significance for teachers. |

'Student-Teachers' Tasks:

A) Engagement with the Field (EWF)

This includes sustain engagement with Self, Child, Community and School at different levels through establishing close connection between curricular areas. This would include task and assignments running through all curricular areas i.e. Perspectives in education, Curriculum & Pedagogical studies and EPC. Evaluation of these tasks and Assignments will be considered with respective Course I to XII (part of Internal Assessment).

B) School Intership Programme (SIP)

During SIP a 'student-teacher' shall observe & undertake various activities aimed at understanding the 'Internship School' and the 'Community' around.

B.Ed. - Ist Year

Observation of school functioning in terms of:

- i) Teaching- Learning process and related tasks & Classroom teaching undertaken by school-teacher.
- ii) Developing teacher sensibilities and skills under the mentorship of school Head/ school teacher/ faculty.
- iii) Understanding need & process of CCE (Comprehensive & Continious Evaluation), Maintenance of various records, Development of learning material.
- iv) Documentation of the above activities in the form of a brief comprehensive report.

B.Ed. - IInd Year

- 1. Observe and record 10 lessons of regular classroom teaching of **teachers** for each pedagogic subject This write up will be preceded by general information of PT and with particular focus on
 - i. Teaching method
 - ii. Use of teaching aids
 - iii. Pupil teacher interaction in the class
 - iv. Class room management
 - v. Homework (checking and feedback)
- 2. Critically analyse syllabus and textbook of respective pedagogic subject for one class.

This write up will be preceded by general information of PT with particular focus on

- i. Physical Aspect
- ii. Nature of Content
- iii. Organisation of Content
- iv. Presentation of Content
- v. Style
- vi. Illustration
- vii. Exercise & Project
- viii. Bibliography
- 3. Observe and record 10 lessons of regular classroom teaching of Peers for each pedagogic subject. This write up will be preceded by general information of PT with particular focus on:
 - i. Teaching method
 - ii. Use of teaching aids
 - iii. Pupil teacher interaction in the class
 - iv. Class room management
 - v. Homework (checking and feedback)
- 4. Prepare a brief report of the internship school.
 - i. General Information of PT
 - ii. Physical infrastructure
 - iii. Pupil Teacher Ratio (PTR)
 - iv. Curriculum Transactions
 - v. Pupil Teacher Interaction(curricular as well as co-curricular)
- 5. Plan and write five lesson each of both the pedagogic subjects as follows:
 - i. General information
 - ii. Instructional Aids
 - iii. Writing Objectives in Behavioral terms
 - iv. Assumed Previous Knowledge
 - v. Previous Knowledge Testing Questions
 - vi. Announcement of the topic
 - vii. Presentation
 - viii. Recapitulation
 - ix. Home-Assignment
- 6. Teach 2-4 period per day in respective pedagogic subject

- 7. Teach classes as and when directed by the mentor teacher /head of the lab school.
- 8. Prepare and use teaching aids like model/chart/ flash card etc for making the teaching effective and interesting. At least 2 teaching aids in each subject shall be evaluated for the purpose of internal assessment.
- 9. Prepare a question paper of full syllabus of any one chart for any one subject along with its blue print:
- 10. Preparation of a diagnostic tests and organisation of remedial teaching
- 11. Undertake action research project on at least one problem area of schooling.
- 12. Identify, plan and execute any one activity closely related to the local environment.
- 13. Maintain a reflective diary to record day to day happenings and reflections thereon. While selecting the units of the syllabus, the student-teachers shall follow the annual instructional plan drawn by the host school.

INSTITUTE OF TEACHER TRAINING & RESEARCH

KURUKSHETRA UNIVERSITY, KURUKSHETRA B.Ed. Two Year (Gen) Syllabus- CBCS

Mapping Scale, Mappinig Matrices, Attainment of COs, POs and PSOs

A: Mapping scale:-

Table 1: Scale of mapping between COs and POs/PSOs

| Scale | |
|-------|---|
| 1 | Low correlation between the contents of course and the particular Program |
| | outcome/Program specific outcome |
| 2 | Medium corealation between the contents of course and the particular |
| | Program outcome/Program specific outcome |
| 3 | High corealation between the contents of course and the particular |
| | Program outcome/Program specific outcome |

B: Mapping matrices:

CO-PO Mapping matrices

Table 2. CO-PO Matrix for the Course-I Code :801

| Cos | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|------|-----|------|------|------|------|------|
| 801.1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 801.2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 801.3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 |
| 801.4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 0 |
| 801.5 | 3 | 1 | 3 | 2 | 2 | 2 | 2 | 1 | 2 |
| 801.6 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 2 |
| 801.7 | 3 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 |
| 801.8 | 3 | 1 | 2 | 2 | 0 | 1 | 1 | 2 | 2 |
| Average | 3 | 1.63 | 1.88 | 1.5 | 0.88 | 1.38 | 1.38 | 1.38 | 1.13 |

Table 2. CO-PO Matrix for the Course-II Code :802

| Cos | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|------|------|-----|------|------|------|------|------|------|
| 802.1 | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 2 | 2 |
| 802.2 | 3 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 2 |
| 802.3 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1 |
| 802.4 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 2 |
| 802.5 | 3 | 3 | 2 | 1 | 1 | 2 | 2 | 2 | 1 |
| 802.6 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 2 |
| 802.7 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 |
| 802.8 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 |
| Average | 2.88 | 2.63 | 2 | 1.75 | 2.25 | 2.38 | 2.63 | 2.38 | 1.75 |

Table 2. CO-PO Matrix for the Course-III Code :803

| Cos | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|-----|-----|-----|-----|------|------|------|
| 803.1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |
| 803.2 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| 803.3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| 803.4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| 803.5 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 |
| 803.6 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 |
| 803.7 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 2 |
| 803.8 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 1 | 1 |
| Average | 3 | 2.38 | 3 | 3 | 3 | 3 | 2.63 | 1.38 | 1.75 |

Table 2. CO-PO Matrix for the Course-IV-A Code :804

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|------|-----|-----|-----|-----|------|-----|------|-----|
| 804.1 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 |
| 804.2 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 1 | 3 |
| 804.3 | 3 | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 3 |
| 804.4 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 |
| Average | 2.75 | 2.5 | 3 | 2 | 3 | 2.75 | 2 | 1.75 | 3 |

Table 2. CO-PO Matrix for the Course-IV-B Code :805

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 805.1 | 2 | 3 | 1 | 1 | 1 | 3 | 2 | 1 | 1 |
| 805.2 | 1 | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 1 |
| 805.3 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 2 | 1 |

| 805.4 | 1 | 2 | 1 | 3 | 2 | 1 | 1 | 3 | 1 |
|---------|-----|------|-----|------|-----|------|-----|---|---|
| Average | 1.5 | 2.25 | 1.5 | 1.75 | 1.5 | 1.75 | 1.5 | 2 | 1 |

Table 2. CO-PO Matrix for the Course-V Code :806

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 806.1 | 3 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 1 |
| 806.2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 1 |
| 806.3 | 3 | 2 | 1 | 1 | 3 | 2 | 2 | 2 | 1 |
| 806.4 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 |
| Average | 3 | 2.5 | 1.5 | 1.5 | 3 | 2.5 | 2 | 2 | 1.25 |

Table 2. CO-PO Matrix for the Course-VI & VII Code: 807-823

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|-------------|-----|------|------|------|-----|-----|------|------|------|
| 807.1-823.1 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 |
| 807.2-823.2 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 1 | 3 |
| 807.3-823.3 | 3 | 2 | 3 | 3 | 3 | 1 | 1 | 1 | 2 |
| 807.4-823.4 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | 1 | 3 |
| 807.5-823.5 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 3 |
| 807.6-823.6 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 1 | 3 |
| 807.7-823.7 | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 2 |
| 807.8-823.8 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 1 | 2 |
| Average | 3 | 2.13 | 2.75 | 2.62 | 3 | 1.5 | 2.13 | 1.25 | 2.38 |

Table 2. CO-PO Matrix for the Course-VIII Code: 824

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|------|-----|------|------|------|-----|-----|------|------|
| 824.1 | 3 | 3 | 1 | 3 | 2 | 2 | 3 | 2 | 1 |
| 824.2 | 3 | 3 | 1 | 1 | 3 | 2 | 2 | 2 | 1 |
| 824.3 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 2 |
| 824.4 | 3 | 2 | 2 | 2 | 3 | 2 | 3 | 3 | 2 |
| 824.5 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 |
| 824.6 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 3 |
| 824.7 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 1 |
| 824.8 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 1 | 3 |
| Average | 2.88 | 2.5 | 2.13 | 2.38 | 2.75 | 2 | 2.5 | 2.13 | 1.75 |

Table 2. CO-PO Matrix for the Course-IX Code :825

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|-----|-----|-----|------|-----|-----|------|------|
| 825.1 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 0 | 0 |
| 825.2 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| 825.3 | 3 | 3 | 2 | 2 | 1 | 0 | 2 | 0 | 0 |
| 825.4 | 3 | 3 | 2 | 2 | 1 | 3 | 0 | 1 | 1 |
| 825.5 | 3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| 825.6 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 825.7 | 3 | 3 | 2 | 2 | 1 | 2 | 0 | 1 | 1 |
| 825.8 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Average | 3 | 3 | 2 | 2 | 1.38 | 2 | 1.5 | 1.33 | 1.33 |

Table 2. CO-PO Matrix for the Course-X Code :826

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|-----|-----|-----|------|------|------|-----|
| 826.1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 826.2 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| 826.3 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 |
| 826.4 | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 1 | 1 |
| Average | 1.5 | 1.75 | 1.5 | 2 | 2.5 | 2.25 | 2.25 | 1.75 | 1.5 |

Table 2. CO-PO Matrix for the Course-XI (i) Code :827

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|-----|-----|-----|------|------|-----|------|
| 827.1 | 3 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 1 |
| 827.2 | 3 | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 1 |
| 827.3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 3 |
| 827.4 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 |
| Average | 3 | 2.25 | 2.5 | 2 | 3 | 1.50 | 2.25 | 2 | 1.75 |

Table 2. CO-PO Matrix for the Course-XI (ii) Code :828

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|-----|------|------|-----|------|------|------|------|
| 828.1 | 3 | 3 | 1 | 2 | 3 | 1 | 2 | 2 | 1 |
| 828.2 | 3 | 3 | 2 | 1 | 3 | 1 | 3 | 3 | 1 |
| 828.3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 1 |
| 828.4 | 3 | 3 | 3 | 2 | 3 | 1 | 3 | 2 | 3 |
| Average | 3 | 3 | 2.25 | 1.75 | 3 | 1.25 | 2.50 | 2.25 | 1.50 |

Table 2. CO-PO Matrix for the Course-XI (iii) Code :829

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|------|------|-----|-----|------|------|------|
| 829.1 | 3 | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 2 |
| 829.2 | 3 | 2 | 3 | 1 | 3 | 2 | 3 | 1 | 1 |
| 829.3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 1 |
| 829.4 | 3 | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 1 |
| Average | 3 | 2.50 | 2.75 | 1.25 | 3 | 2 | 2.25 | 1.25 | 1.25 |

Table 2. CO-PO Matrix for the Course-XI (iv) Code :830

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|-----|-----|-----|-----|-----|------|-----|------|
| 830.1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 |
| 830.2 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 1 |
| 830.3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 |
| 830.4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 |
| Average | 3 | 3 | 3 | 3 | 3 | 3 | 2.75 | 2 | 1.50 |

Table 2. CO-PO Matrix for the Course 12(i)- Code :831

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|-----|-----|-----|-----|------|-----|------|-----|
| 831.1 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 3 |
| 831.2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 |
| 831.3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| 831.4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| Average | 3 | 3 | 3 | 3 | 2.5 | 2.25 | 2.5 | 2.25 | 3 |

Table 2. CO-PO Matrix for the Course 12(ii)- Code :832

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|------|------|-----|------|-----|-----|------|
| 832.1 | 2 | 2 | 3 | 1 | 1 | 3 | 1 | 3 | 2 |
| 832.2 | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 2 | 3 |
| 832.3 | 2 | 1 | 3 | 2 | 2 | 1 | 1 | 2 | 2 |
| 832.4 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 3 | 2 |
| Average | 1.5 | 1.75 | 2.50 | 1.75 | 1.5 | 1.75 | 1 | 2.5 | 2.25 |

Table 2. CO-PO Matrix for the Course 12(iii)- Code :833

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|------|------|------|------|------|------|-----|
| 833.1 | 3 | 2 | 3 | 1 | 3 | 1 | 1 | 1 | 3 |
| 833.2 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 3 |
| 833.3 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 |
| 833.4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Average | 3 | 2.25 | 2.50 | 1.50 | 2.25 | 1.25 | 1.25 | 1.25 | 2.5 |

Table 2. CO-PO Matrix for the Course 12(iv)- Code :834

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|---------|-----|------|------|------|------|-----|------|-----|------|
| 834.1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 2 |
| 834.2 | 0 | 0 | 1 | 1 | 0 | 1 | 2 | 3 | 0 |
| 834.3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 |
| 834.4 | 0 | 0 | 3 | 3 | 1 | 0 | 2 | 3 | 1 |
| Average | 0.5 | 0.75 | 2.25 | 2.25 | 0.75 | 1 | 1.75 | 2 | 1.25 |

Table 2. CO-PO Matrix for the Course 13 Code:837-853

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|--------------|------|------|------|------|------|------|------|------|------|
| 837.1- 853.1 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 1 |
| 837.2- 853.2 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 2 | 3 |
| 837.3- 853-3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 3 |
| 837.4-853-4 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 2 |
| 837.5-853.5 | 3 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 3 |
| 837.6-853.6 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 837.7-853.7 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 |
| 837.8-853.8 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | 3 |
| Average | 3.00 | 2.50 | 2.63 | 2.38 | 2.63 | 2.50 | 2.63 | 2.13 | 2.50 |

CO-PSO MATRIX

Table 3. CO-PSO Matrix for the Course-1) Code :801

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 801.1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 801.2 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 801.3 | 2 | 0 | 2 | 2 | 1 | 0 | 1 | 2 | 1 | 2 |
| 801.4 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 2 | 0 | 1 |
| 801.5 | 2 | 0 | 1 | 1 | 2 | 0 | 1 | `1 | 0 | 2 |
| 801.6 | 2 | 0 | 1 | 2 | 2 | 0 | 0 | 1 | 0 | 1 |
| 801.7 | 2 | 1 | 3 | 0 | 2 | 0 | 3 | 2 | 2 | 2 |
| 801.8 | 2 | 2 | 2 | 1 | 2 | 0 | 3 | 1 | 3 | 1 |
| Average | 1.87 | 0.37 | 1.37 | 0.87 | 1.25 | 0 | 1.25 | 1.12 | 1 | 1.37 |

Table 3. CO-PSO Matrix for the Course-2) Code :802

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 802.1 | 2 | 3 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| 802.2 | 2 | 3 | 3 | 2 | 1 | 1 | 3 | 1 | 3 | 2 |
| 802.3 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 |
| 802.4 | 2 | 2 | 3 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| 802.5 | 1 | 2 | 1 | 1 | 2 | 1 | 2 | `1 | 1 | 1 |
| 802.6 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 |
| 802.7 | 2 | 2 | 2 | 1 | 2 | 1 | 3 | 1 | 2 | 2 |
| 802.8 | 3 | 3 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| Average | 2 | 2.5 | 2.12 | 1.5 | 1.87 | 1.12 | 2.37 | 1.12 | 1.87 | 1.62 |

Table 3. CO-PSO Matrix for the Course-3 Code:803

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 803.1 | 3 | 0 | 3 | 3 | 1 | 0 | 2 | 2 | 1 | 1 |
| 803.2 | 3 | 1 | 3 | 3 | 1 | 0 | 3 | 3 | 1 | 1 |
| 803.3 | 3 | 0 | 3 | 3 | 1 | 0 | 3 | 2 | 1 | 0 |
| 803.4 | 3 | 0 | 3 | 3 | 1 | 0 | 3 | 3 | 1 | 0 |
| 803.5 | 3 | 2 | 3 | 3 | 1 | 0 | 3 | 3 | 1 | 1 |
| 803.6 | 3 | 0 | 3 | 3 | 1 | 0 | 2 | 2 | 1 | 1 |
| 803.7 | 3 | 0 | 3 | 3 | 1 | 0 | 1 | 2 | 1 | 1 |
| 803.8 | 3 | 1 | 2 | 2 | 2 | 0 | 2 | 2 | 1 | 1 |
| Average | 3 | 0.5 | 2.87 | 2.87 | 1.12 | 0 | 2.37 | 2.37 | 1 | 0.75 |

Table 3. CO-PSO Matrix for the Course-4(A) Code :804

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 804.1 | 1 | 1 | 2 | 2 | 3 | 1 | 3 | 3 | 2 | 2 |
| 804.2 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 2 |
| 804.3 | 2 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 2 | 2 |
| 804.4 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 3 |
| Average | 1.75 | 1.75 | 2.75 | 2.5 | 3 | 1 | 2.5 | 3 | 2 | 2.25 |

Table 3. CO-PSO Matrix for the Course-4(B) Code :805

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | | | | | | | | | |
| 805.1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 2 |
| 805.2 | 1 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 2 | 1 |
| 805.3 | 1 | 3 | 2 | 1 | 3 | 1 | 3 | 1 | 2 | 2 |
| 805.4 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 |
| Average | 1.25 | 2.5 | 1.75 | 1.75 | 2.75 | 1.25 | 2.75 | 1.25 | 1.75 | 1.5 |

Table 3. CO-PSO Matrix for the Course-5 Code: 806

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 806.1 | 1 | 1 | 3 | 2 | 3 | 1 | 3 | 1 | 3 | 2 |
| 806.2 | 2 | 1 | 3 | 3 | 3 | 1 | 3 | 1 | 3 | 2 |
| 806.3 | 2 | 3 | 3 | 2 | 3 | 1 | 3 | 1 | 3 | 2 |
| 806.4 | 2 | 1 | 3 | 2 | 3 | 1 | 3 | 1 | 3 | 2 |
| Average | 1.75 | 1.5 | 3 | 2.25 | 3 | 1 | 3 | 1 | 3 | 2 |

Table 3. CO-PSO Matrix for the Course-6&7 Code :807 to 823

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|-------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 807.1-823.1 | 1 | 1 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 2 |
| 807.2-823.2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| 807.3-823.3 | 1 | 1 | 3 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| 807.4-823.4 | 1 | 1 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 3 |
| 807.5-823.5 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| 807.6-823.6 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| 807.7-823.7 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| 807.8-823.8 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 2 |
| Average | 1 | 1 | 1.87 | 2.12 | 2.12 | 1.12 | 2 | 1 | 1 | 2.12 |

Table 3. CO-PSO Matrix for the Course-8 Code:824

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 824.1 | 2 | 1 | 1 | 1 | 3 | 1 | 2 | 1 | 1 | 2 |
| 824.2 | 2 | 1 | 2 | 2 | 3 | 1 | 2 | 1 | 1 | 2 |
| 824.3 | 2 | 1 | 3 | 1 | 2 | 1 | 3 | 1 | 2 | 2 |
| 824.4 | 2 | 1 | 3 | 2 | 3 | 1 | 3 | 1 | 2 | 2 |
| 824.5 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 1 | 2 | 2 |
| 824.6 | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 2 | 2 |
| 824.7 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 |
| 824.8 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 1 | 2 | 2 |
| Average | 2 | 1.37 | 2.12 | 2 | 2.75 | 1.25 | 2.37 | 1 | 1.75 | 2 |

Table 3. CO-PSO Matrix for the Course-9 Code :825

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 825.1 | 0 | 1 | 0 | 1 | 2 | 0 | 2 | 0 | 0 | 2 |
| 825.2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 3 |
| 825.3 | 2 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 3 |
| 825.4 | 2 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| 825.5 | 1 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 3 |
| 825.6 | 2 | 2 | 2 | 2 | 2 | 0 | 2 | 0 | 0 | 3 |
| 825.7 | 2 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 |
| 825.8 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 0 | 0 | 3 |
| Average | 1.62 | 1 | 0.87 | 1.5 | 1.75 | 0.37 | 0.87 | 0 | 0 | 2.75 |

Table 3. CO-PSO Matrix for the Course-10 Code :826

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 826.1 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 |
| 826.2 | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 |
| 826.3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 2 |
| 826.4 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 3 |
| Average | 2.25 | 2 | 2.25 | 1.75 | 1.5 | 1.75 | 2 | 1.75 | 1.5 | 2.5 |

Table 3. CO-PSO Matrix for the Course-11(i) EE Code :827

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 827.1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 2 |
| 827.2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 1 | 1 |
| 827.3 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 1 |
| 827.4 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 3 | 1 | 2 |
| Average | 1 | 1.25 | 1.25 | 1.75 | 1.75 | 1 | 2 | 3 | 1 | 1.5 |

Table 3. CO-PSO Matrix for the Course-11(ii) Code: 828

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 828.1 | 2 | 1 | 2 | 2 | 3 | 1 | 2 | 2 | 2 | 2 |
| 828.2 | 2 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 2 |
| 828.3 | 3 | 1 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 2 |
| 828.4 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 3 | 3 | 2 |
| Average | 2.25 | 1 | 2.25 | 2.25 | 2.5 | 1.25 | 2.25 | 2.5 | 2.25 | 2 |

Table 3. CO-PSO Matrix for the Course-11(iii) Code: 829

| Cos | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 829.1 | 2 | 1 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 2 |
| 829.2 | 1 | 1 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 1 |
| 829.3 | 1 | 1 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 1 |
| 829.4 | 1 | 2 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 1 |
| Average | 1.25 | 1.25 | 1.25 | 2 | 2 | 1 | 3 | 1 | 1 | 1.25 |

Table 3. CO-PSO Matrix for the Course-11(iv) Code :830

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 830.1 | 3 | 3 | 3 | 3 | 1 | 0 | 3 | 2 | 3 | 1 |
| 830.1 | 3 | 2 | 3 | 2 | 1 | 0 | 3 | 1 | 2 | 1 |
| 830.1 | 3 | 2 | 3 | 3 | 1 | 0 | 3 | 1 | 1 | 1 |
| 830.1 | 3 | 2 | 3 | 2 | 1 | 0 | 3 | 1 | 2 | 1 |
| Average | 3 | 2.25 | 3 | 2.5 | 1 | 0 | 3 | 1.25 | 2 | 1 |

Table 3. CO-PSO Matrix for the Course-12 (i) Code: 831

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 831.1 | 1 | 1 | 1 | 3 | 3 | 1 | 2 | 1 | 1 | 2 |
| 831.2 | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 1 | 2 |
| 831.3 | 1 | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 1 | 2 |
| 831.4 | 1 | 1 | 2 | 3 | 3 | 1 | 2 | 1 | 1 | 3 |
| Average | 1 | 1 | 1.25 | 3 | 2.5 | 1 | 1.75 | 1 | 1 | 2.25 |

Table 3. CO-PSO Matrix for the Course-12 (ii) Code: 832

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 832.1 | 1 | 1 | 1 | 3 | 2 | 1 | 2 | 3 | 1 | 2 |
| 832.2 | 1 | 1 | 2 | 3 | 3 | 1 | 1 | 2 | 2 | 3 |
| 832.3 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 3 | 2 | 2 |
| 832.4 | 2 | 1 | 2 | 3 | 2 | 1 | 1 | 2 | 2 | 3 |
| Average | 1.25 | 1 | 1.75 | 2.75 | 2.25 | 1 | 1.5 | 2.5 | 1.75 | 2.5 |

Table 3. CO-PSO Matrix for the Course-12 (iii) Code: 833

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 833.1 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 1 |
| 833.2 | 1 | 1 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 2 |
| 833.3 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 |
| 833.4 | 1 | 1 | 1 | 1 | 2 | 3 | 2 | 1 | 1 | 2 |
| Average | 1 | 1 | 1 | 1.5 | 2 | 3 | 2 | 1 | 1 | 1.75 |

Table 3. CO-PSO Matrix for the Course-12 (iv) Code: 834

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 834.1 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 |
| 834.2 | 3 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 3 | 0 |
| 834.3 | 3 | 1 | 0 | 2 | 3 | 2 | 2 | 2 | 2 | 3 |
| 834.4 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| Average | 3 | 0.75 | 0.5 | 2 | 0.75 | 0.5 | 1 | 0.5 | 1.5 | 1.5 |

Table 3. CO-PSO Matrix for the Course-13 Code: 837 to 853

| COs | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 837.1- 853.1 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 |
| 837.2- 853.2 | 2 | 1 | 2 | 1 | 3 | 2 | 3 | 2 | 2 | 2 |
| 837.3- 853-3 | 1 | 0 | 3 | 2 | 3 | 0 | 3 | 3 | 3 | 2 |
| 837.4-853-4 | 2 | 0 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 3 |
| 837.5-853.5 | 2 | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 |
| 837.6-853.6 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 |
| 837.7-853.7 | 0 | 0 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 2 |
| 837.8-853.8 | 1 | 0 | 2 | 2 | 3 | 0 | 2 | 3 | 3 | 3 |
| Average | 1.63 | 0.63 | 2.25 | 2.00 | 2.75 | 1.75 | 2.75 | 2.63 | 2.63 | 2.25 |

Table 4: CO-PO – PSO MAPPING MATRIX for B.Ed. II Year (Gen)

| Course Code | PO-1 | PO-2 | PO-3 | PO-4 | PO-5 | PO-6 | PO-7 | PO-8 | PO-9 | PSO-1 | PSO-2 | PSO-3 | PSO-4 | PSO-5 | PSO-6 | PSO-7 | PSO-8 | PSO-9 | PSO-10 |
|------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| CO-801 | 3 | 1.63 | 1.88 | 1.5 | 0.88 | 1.38 | 1.38 | 1.38 | 1.13 | 1.87 | 0.37 | 1.37 | 0.87 | 1.25 | 0 | 1.25 | 1.12 | 1 | 1.37 |
| CO-802 | 2.88 | 2.63 | 2 | 1.75 | 2.25 | 2.38 | 2.63 | 2.38 | 1.75 | 2 | 2.5 | 2.12 | 1.5 | 1.87 | 1.12 | 2.37 | 1.12 | 1.87 | 1.62 |
| CO-803 | 3 | 2.38 | 3 | 3 | 3 | 3 | 2.63 | 1.38 | 1.75 | 3 | 0.5 | 2.87 | 2.87 | 1.12 | 0 | 2.37 | 2.37 | 1 | 0.75 |
| CO-804 | 2.75 | 2.5 | 3 | 2 | 3 | 2.75 | 2 | 1.75 | 3 | 1.75 | 1.75 | 2.75 | 2.5 | 3 | 1 | 2.5 | 3 | 2 | 2.25 |
| CO-805 | 1.5 | 2.25 | 1.5 | 1.75 | 1.5 | 1.75 | 1.5 | 2 | 1 | 1.25 | 2.5 | 1.75 | 1.75 | 2.75 | 1.25 | 2.75 | 1.25 | 1.75 | 1.5 |
| CO-806 | 3 | 2.5 | 1.5 | 1.5 | 3 | 2.5 | 2 | 2 | 1.25 | 1.75 | 1.5 | 3 | 2.25 | 3 | 1 | 3 | 1 | 3 | 2 |
| CO-(807- 823) | 3 | 2.13 | 2.75 | 2.62 | 3 | 1.5 | 2.13 | 1.25 | 2.38 | 1 | 1 | 1.87 | 2.12 | 2.12 | 1.12 | 2 | 1 | 1 | 2.12 |
| CO-824 | 2.88 | 2.5 | 2.13 | 2.38 | 2.75 | 2 | 2.5 | 2.13 | 1.75 | 2 | 1.37 | 2.12 | 2 | 2.75 | 1.25 | 2.37 | 1 | 1.75 | 2 |
| CO-825 | 3 | 3 | 2 | 2 | 1.38 | 2 | 1.5 | 1.33 | 1.33 | 1.62 | 1 | 0.87 | 1.5 | 1.75 | 0.37 | 0.87 | 0 | 0 | 2.75 |
| CO-826 | 1.5 | 1.75 | 1.5 | 2 | 2.5 | 2.25 | 2.25 | 1.75 | 1.5 | 2.25 | 2 | 2.25 | 1.75 | 1.5 | 1.75 | 2 | 1.75 | 1.5 | 2.5 |
| CO-827 | 3 | 2.25 | 2.5 | 2 | 3 | 1.50 | 2.25 | 2 | 1.75 | 1 | 1.25 | 1.25 | 1.75 | 1.75 | 1 | 2 | 3 | 1 | 1.5 |
| CO-828 | 3 | 3 | 2.25 | 1.75 | 3 | 1.25 | 2.50 | 2.25 | 1.50 | 2.25 | 1 | 2.25 | 2.25 | 2.5 | 1.25 | 2.25 | 2.5 | 2.25 | 2 |
| CO-829 | 3 | 3 | 3 | 3 | 3 | 3 | 2.75 | 2 | 1.50 | 1.25 | 1.25 | 1.25 | 2 | 2 | 1 | 3 | 1 | 1 | 1.25 |

| CO-830 | 3 | 3 | 3 | 3 | 3 | 3 | 2.75 | 2 | 1.50 | 3 | 2.25 | 3 | 2.5 | 1 | 0 | 3 | 1.25 | 2 | 1 |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| CO-831 | 3 | 3 | 3 | 3 | 2.5 | 2.25 | 2.5 | 2.25 | 3 | 1 | 1 | 1.25 | 3 | 2.5 | 1 | 1.75 | 1 | 1 | 2.25 |
| CO-832 | 1.5 | 1.75 | 2.50 | 1.75 | 1.5 | 1.75 | 1 | 2.5 | 2.25 | 1.25 | 1 | 1.75 | 2.75 | 2.25 | 1 | 1.5 | 2.5 | 1.75 | 2.5 |
| CO-833 | 3 | 2.25 | 2.50 | 1.50 | 2.25 | 1.25 | 1.25 | 1.25 | 2.5 | 1 | 1 | 1 | 1.5 | 2 | 3 | 2 | 1 | 1 | 1.75 |
| CO-834 | 0.5 | 0.75 | 2.25 | 2.25 | 0.75 | 1 | 1.75 | 2 | 1.25 | 3 | 0.75 | 0.5 | 2 | 0.75 | 0.5 | 1 | 0.5 | 1.5 | 1.5 |
| CO-837- 853 | 3.00 | 2.50 | 2.63 | 2.38 | 2.63 | 2.50 | 2.63 | 2.13 | 2.50 | 1.63 | 0.63 | 2.25 | 2.00 | 2.75 | 1.75 | 2.75 | 2.63 | 2.63 | 2.25 |

C. Attainment of COs:

Table 5: CO Attainment levels for Internal Assessment

| Attainment Level | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|
| 1 | 60 % of students score more than 60% of marks in internal | | | | | | | | |
| (Low level of attainment) | assessment and end semester examination | | | | | | | | |
| 2 | 70 % of students score more than 60% of marks in internal | | | | | | | | |
| (Medium level of attainment) | assessment and end semester examination | | | | | | | | |
| 3 | 80 % of students score more than 60% of marks in internal | | | | | | | | |
| (High level of attainment) | assessment and end semester examination | | | | | | | | |

Table 6: CO Attainment levels for End Session Examination (ESE)

| Attainment Level | | | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|--|--|
| 1 | 60 % of students score more than 60% of marks in internal | | | | | | | | |
| (Low level of attainment) | assessment and end semester examination | | | | | | | | |
| 2 | 70 % of students score more than 60% of marks in internal | | | | | | | | |
| (Medium level of attainment) | assessment and end semester examination | | | | | | | | |
| 3 | 80 % of students score more than 60% of marks in internal | | | | | | | | |
| (High level of attainment) | assessment and end semester examination | | | | | | | | |

Overall CO Attainment level:

Overall COs attainment level=50% of CO attainment level in Internal Assessment+50% of CO attainment level in End Session Examination

D. Attainment of POs:

The overall attainment level of POs is based on the values obtained by using direct and indirect methods in the ratio 80:20. PO attainment values obtained using direct method are computed as detailed in Table 7 below.

Table 7: PO Attainment Values using Direct Method

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|--------------|---------|---------|---------|---------|---------|---------|-----|-----|-----|
| CO-801 | | | | | | | | | |
| CO-802 | | | | | | | | | |
| CO-803 | | | | | | | | | |
| CO-804 | | | | | | | | | |
| CO-805 | | | | | | | | | |
| CO-806 | | | | | | | | | |
| CO-(807-823) | | | | | | | | | |
| CO-824 | | | | | | | | | |
| CO-825 | | | | | | | | | |
| CO-826 | | | | | | | | | |
| CO-827 | | | | | | | | | |
| CO-828 | | | | | | | | | |
| CO-829 | | | | | | | | | |
| CO-830 | | | | | | | | | |
| CO-831 | | | | | | | | | |
| CO-832 | | | | | | | | | |
| CO-833 | | | | | | | | | |
| CO-834 | | | | | | | | | |
| Direct PO | Average | Average | Average | Average | Average | Average | | | |
| Attainment | of | of | of | of | of | of | | | |
| | above | above | above | above | above | above | | | |
| | values | values | values | values | values | values | | | |

The PO attainment values to be filled in the above table can be obtained as follows:

<u>For Course 801-PO1 Cell: PO1 attainment value = (Mapping factor of 801-PO1 from Table 4 x Overall CO attainment value for the course 801/3.</u>

Same method can be used to obtain attainment values for the other POs.

In order to obtain the PO attainment using the indirect method, a student exit survey based on questionnaire of POs may be conducted at the end of last semester of the program, as per the following format:

Table 8: Questionnaire for indirect measurement of PO attainment

(For outgoing students)

At the end of my degree program I am able to do:

| | Please t | ick any one | ! | | | |
|--|--|-------------|---|--|--|--|
| Acquire knowledge & skills about human development, contemporary Indian education, and pedagogy of various school subjects and assessment for learning. | 3 | 2 | 1 | | | |
| Develop an understanding of education as an agenda for the nation and its policies, visions and efforts in evolving a national system of education. | 3 | 2 | 1 | | | |
| Re-engage with the nuances of the discipline and its prevalent conceptualizations and practices. | 3 | 2 | 1 | | | |
| Develop understanding about teaching, pedagogy, school management and community involvement in general education and Inclusive settings. | 3 | 2 | 1 | | | |
| Inculcate a sense of responsibility towards the society and respect for human life and dignity. | 3 | 2 | 1 | | | |
| Promote co-operative teaching where two or more teachers offer a course and jointly interact with the same class particularly to facilitate multi-disciplinary analysis of problems. | 3 | 2 | 1 | | | |
| Indirect PO attainment | Average of the response from the outgoing students for each PO | | | | | |
| Scale: 3: Strongly Agree; 2: Agree; 1: Average | | | | | | |

The overall PO attainment values are obtained by adding attainment values estimated using direct and indirect methods in the proportion of 80:20 as follows:

Overall attainment value for PO1=0.8xaverage attainment value for PO1 using direct method (from table 7) + 0.2xaverage response of outgoing students for PO1.

Table 9: Overall PO attainment values

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Direct PO | | | | | | | | | |
| attainment | | | | | | | | | |
| Indirect PO | | | | | | | | | |
| attainment | | | | | | | | | |
| Overall PO | | | | | | | | | |
| attainment | | | | | | | | | |
| Target | 2 | 2 | 2 | 2 | 1.5 | 2 | 2 | 2 | 2 |

The overall PSO attainment level based on CO-PSO mapping values and overall CO attainment values can be obtained in a similar manner.