Course Structure for Four Year Integrated B.A. / B.Sc. B.Ed. Programme

Four year integrated B.A./ B.S. B.Ed. Course will be started in the Department of Education, Ravenshaw University with an initial intake of 100 (i.e. 50 in science stream and 50 in Arts stream) consist of eight semesters with effect from academic session 2016-2017.The course structure for Four year integrated B.A./ B.Sc. B.Ed. Course are given as under:

I.   PE: Perspective in Education-500 Marks
II. CPS: Curriculum and Pedagogical Studies-500 Marks
III. **Engagement with Field and School Internship-1000 Marks**
   - PR: Practicum-400 marks
   - SI: School Internship-400 marks
   - EPC: Enhancing Professional Capacities-200marks

S.No	Paper Code	Title of the Course	Marks		Total
			Internal	External	
Semester-I					
1.	PE-1	Foundations of Education	10	40	50
2.	PE-2	Childhood and Growing Up	10	40	50
3.	PR-1	Environmental Awareness	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-II					
4.	PE-3	Adolescence and Growing Up	10	40	50
5.	PE-4	Cotemporary Indian Education	10	40	50
6.	PR-2	Youth Red Cross, First Aid awareness programme	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-III					
7.	PE-5	Learning and Teaching-I	10	40	50
8.	CPS-1	Assessment for Learning-I	10	40	50
9.	PR-3	Project on SSA/Midday meal/Community survey	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-IV					
10.	PE-6	Learning and Teaching-II	10	40	50
11.	CPS-2	Assessment for Learning-II	10	40	50
12.	PR-4	Construction and Administration of two unit tests in school subject with reporting	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-V					

13.	CPS-5	**A. Pedagogy of School Subject-I** *Language(Odia/English); Mathematics; Biological Science*	10	40	50
14.	CPS-7	**B. Pedagogy of School Subject-I** *Social Science; Physical Science*	10	40	50
15.	PR-5	Acquisition of Core Teaching Skills	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-VI					
16.	CPS-6	**A. Pedagogy of School Subject-II** *Language (Odia/English); Mathematics; Biological Science*	10	40	50
17.	CPS-8	**B. Pedagogy of School Subject-II** Social Science; Physical Science	10	40	50
18.	PR-6	Analysis/Evaluation of Text Books prescribed by BSE,Odisha	50	-	50
Sub-Total			**70**	**80**	**150**
Semester-VII					
19.	PE-7	Knowledge and Curriculum-I	10	40	50
20.	PE-9	Gender, School and Society	10	40	50
21.	CPS-3	Language across Curriculum	10	40	50
22.	CPS-4	Action Research	10	40	50
23.	EPC-1	Understanding the self	10	40	50
24.	EPC-2	Critical Understanding of ICT	10	40	50
25.	SI-1	School Internship-Part-I	200	-	200
26.	PR-7	ICT Practicum	50	-	50
Sub-Total			**310**	**240**	**550**
Semester-VIII					
27.	PE-8	Knowledge and Curriculum-II	10	40	50
28.	PE-10	Inclusive Education	10	40	50
29.	CPS-9	Health, Yoga & Physical Education	10	40	50
30.	CPS-10	Guidance and Counseling	10	40	50
31.	EPC-3	Reflecting Reading and study of	10	40	50

		classic in Education on Texts			
32.	EPC-4	Visual and Performing Arts(Theory)	10	40	50
33.	SI-2	School Internship-Part-II	200	-	200
34.	PR-8	Visual and Performing Arts(practical)	50	-	50
Sub-Total			**310**	**240**	**550**
GRAND TOTAL (All 8 Semesters)			**1040**	**960**	**2000**

Syllabus for Four Year Integrated
B.A, B.Ed / B.Sc, B.Ed. Programme

Syllabi for four year Integrated B.A. /B.Sc. B.Ed. Programme prescribed by Ravenshaw University from I to VIII semester for regular course will be applicable w.e.f the session 2016-2017. The contents of course has been developed by the Board of Studies in education in line with the guidelines of NCTE and curriculum in practice developed by the Department of Teacher Education and SCERT for Two year B.Ed programme has been approved by the Academic Council of the Ravenshaw University as spelt out here under.

I.PE: Perspective in Education-500 Marks

II.CPS: Curriculum and Pedagogical Studies-500 Marks

IV. Engagement with field and School Internship-1000 Marks

- PR: Practicum-400 marks
- SI: School Internship-400 marks
- EPC: Enhancing Professional Capacities-200marks

Semester-I					
S.No	**Paper Code**	**Title of the Course**	**Marks**		**Total**
			Internal	**External**	
1.	**PE-1**	**Foundations of Education**	**10**	**40**	**50**

Objectives
On completion of this course, the student-teacher
- *states meaning of education and forms own concept of education;*
- *identifies various functions, modes and processes of education and the aims of education*
- *describes education policies and strategies recommended by different commissions and ideas of educational thinkers*
- *describes the relevance of the knowledgeregarding the four pillars of education in the present context*
- *explains how education is based on philosophy, psychology and sociology*
- *elaborates the linkage between education and various dimensions of national development.*

Detailed Course Content
Unit-I: Concept of Education
- Meaning, Nature, Scope, Function, Process and Mode of Education (Formal, Non-formal

and Informal)

- Aims of Education: Individual and Social; Aims of Education as envisaged in Secondary Education Commission (1952-1953), Education Commission (1964-1966), National Policy on Education (1986/92), and National Curriculum Framework (2005).
- Four pillars of education and its implications for teachers of 21st Century advocated by UNESCO (Delor's Commission report)
  1. Learning to Know;
  2. Learning to Do;
  3. Learning to Live Together; and
  4. Learning to Be.

Unit-II. Foundations of Education

- Philosophy and Education: Meaning and relationship; Influence of philosophy in determining aims, curriculum and methods of teaching with reference to major schools of Educational Philosophy – Idealism,Naturalism and Pragmatism.
- Sociology and Education: Meaning and relationship; Implications of Sociology for aims, curriculum and methods of Teaching.
- Psychology and Education: Meaning and relationship; Implications of psychology for Education in organizing contents and understanding the teaching-learning process (understanding learner, teacher characteristicsand pedagogy).
- Educational thoughts of Gandhi, Tagore, Sri Aurobindo, Rousseau, and Dewey with reference to aims, curriculum and methods of teaching

Unit-III. Education and National Development

- National development – Dimensions and Indicators
- Education as an investment for Human Resource and Socio-economicDevelopment
- Education for sustainable development
- Education for inclusive development- Dimensions (social, economic,cultural, technological, spatial), Strategies for promoting inclusion, Role of education
- Education for disaster management

Tasks/Assignment

Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Analysis of the ongoing school curriculum in your area of interest with reference to NCF-2005
- Analysis of the ongoing school curriculum in your area of interest with reference to NPE-1986
- Comparative analysis of educational thought of Gandhi and Tagore
- Visit an Integral school and write a report on school programmes with reference to the Philosophy of Aurobindo

Suggested Readings:

Anand, C.L. et.al. (1983). *Teacher and Education in Emerging in Indian Society*, NewDelhi: NCERT.

Clarke, P. (2001). *Teaching and learning: The Culture of pedagogy*. New Delhi: Sage Publication.

Dewey, John (1916/1977). *Democracy and education*. New York: MacMillan.

Dewey, John (1956). *The Child and the curriculum, school and society*. Chicago, Illinois: University of Chicago Press.

Dewey, John (1997). *Experience and education*. New York: Touchstone.

Govt. of India (1986/'92). *National policy on education*. New Delhi: MHRD.

Krishnamurthy, J. (1947) *On education*. New Delhi: Orient Longman.

Krishnamurthy, J. (1953). *Education and significance of life*. New Delhi: B.I.Publications

Ministry of Education (1966). *Education and national development*. New Delhi:

Ministry of Human Resource Development (2004).*Learning without Burden: Report of the National Advisory Committee.* New Delhi: Min. of HRD.

Mukherji, S.M., (1966). *History of education in India*. Vadodara: Acharya Book Depot.

Naik, J.P. and Syed, N., (1974). *A student's history of education in India*. New Delhi: MacMillan.

NCERT (2005). *National curriculum framework 2005*. New Delhi: National Council of Educational Research and Training.

Ornstein, Allan C. & Levine, Daniel U. (1989).*Foundations of education* (4th Eds.). Boston: Houghton Mifflin Co.

Peters, R.S. (1967). *The Concept of education*. London: Routledge Kegan& Paul.

2.	PE-2	**Childhood and Growing Up**	10	40	50

Objectives

On completion of this course, the student-teacher :

- *describes the concept of growth and development of human child and explains the underlying general principles of growth and development;*
- *applies the knowledge of the principles of child development to study children*
- *describes briefly the periods and the typical characteristics of growth and development during each period;*
- *specifies the contexts and factors influencing development;*
- *describes the theories of socio-emotional, cognitive and language development and draws educational implications;*
- *describes the developmental characteristics during childhood development and its bearing on school and classroom practices;*

Detailed Course Content

Unit-I. Understanding learner development

- Growth and development – Concept and General Principles of Development.
- Different stages of human growth and development- infancy and childhood.
- Factors influencing development: heredity, environment, nutrition, child rearing practices, socio economic status, siblings and peers.
- Role of school in promoting growth and development of a child

Unit II: Context of Development

- Child Development as a multidimensional concept within a pluralistic society (physical, Emotional , Social and Cognitive)
- Impact of different parenting styles on child development
- Child development in socio- cultural context: Interplay of poverty, caste, gender and tribal communities.
- Methods of studying child development-Observation (Participatory and Non-participatory), Experimental and Case study

Unit-III. Theories of Child Development

- Erickson's theory of psycho-social Development
- Cognitive developmental stages of Piaget
- Conceptual and Language development theories of Vygotsky and Noam Chomsky.
- Kohlberg's Theory of Moral Development;(Brief theoretical framework and educational implications of all Theories)

Tasks and Assignment: Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Study of child rearing practices in adverse conditions

- Study of parenting style on growth and development of the child
- Perception of moral values of a child belonging to high economic status and low economic status

Suggested Readings

Arnett, Jeffrey(2007). *Adolescence and emerging adulthood: A cultural approach.* (3rd Edn.). Upper Saddle River, N.J.: Pearson

Berk, Laura E. (2011). *Child development* (9th Edn.). New Delhi: Prentice Hall of

Chauhan, S.S. (1978). *Advanced Educational Psychology*, Vikas Publishing house Pvt. Ltd., New Delhi.

Chauhan, S.S. (1978). *Advanced educational psychology*. New Delhi: Vikas

Dunn, R. (1983). Can students identify their own Learning Styles? *Educational Leadership*,40, P.P. 60-62.

Flavell, J.H. (1963). *The developmental psychology of Jean Piaget*. New York: Van

Fontana, D. (1995). *Psychology for Teachers (3rd edition).* The British Psychological Society, London: McMillan in association with BPS Books.

Hurlock, E. B. (1980). *Developmental psychology: All span approach*. New York:

Hurlock, E.B. (1980). *Child development* (6th Edn.). Tokyo: McGraw-Hill,India.
    introduction to educational psychology. New York: Holt, Rinehart andKogakusha Ltd.

Kundu, C.L. and Tutoo D.N. (1993). *Educational Psychology*, Sterling Publishers Pvt. Ltd.

Mangal, S. K. (1984). *Psychological Foundations of Education.* Ludhiana: Prakash Publishers McGraw Hill Book.Nostrand

Papalia D. E., and Sally, W. O. (1978). *Human Development*. McGraw Hill Publishing Company

Phens, J. M., and Evans, E. D. (1973). *Development and Classroom Learning : An Introduction to Educational Psychology.* New York: Holt Rinehart and Winston Inc. Publishing House Pvt. Ltd.

Stephens, J. M.; Evans, E. D.(1973). *Development and classroom learning: An*Technology. In Harris Duncun (1988) *Education for the New Technologies, World Year Book of Education*. London: Kogan page Inc

Tessmer, M., and Jonassen, D. (1988). Learning Strategies: A New Instructional Winston**.**

3.	PR-1	**Environmental Awareness**	**50**	-	**50**

Objectives
On completion of this practicum, the student-teacher

- *develops awareness of environment and natural resources.*
- *develops awareness of environmental pollution and its possible causes, effects and remedies.*
- *applies various strategies and methods for conservation and sustainable environmental development.*
- *reflects on the role of a teacher in environmental education.*

Engagement with field: Tasks and Assignments:

Each student-teacher is required to submit report/assignment on any two of the following activities (**2 x 25 marks = 50 marks**):

- Conduct a survey of any slum area and examine the standard of living of the inhabitants
- Prepare a report on impact of Social Networking Sites for creating environmental

awareness
- Visit an Industrial sites (air and water pollution) and prepare a report
- Prepare a project report on ways and means for presentation of environment
- Prepare models and exhibits for general awareness of public regarding environmental hazards
- Prepare resource material on any of the environmental problems along with suitable remedial strategy
- Develop and deliver a programme for environmental awareness and of school children and prepare a report
- Develop a short documentary on environmental sensitivity by using ICT tools.

Modes of Learning Engagements:

- Field Visits and survey
- Project work
- Organizing Debate and Declamation
- Organizing Various Activities like Poster making, slogan and colleague competition
- Documentary Films

	Sub-Total	70	80	150

		Semester-II			
4.	PE-3	**Adolescence and Growing Up**	**10**	**40**	**50**

Objectives

On completion of this course, the student-teacher

- *elaborates the developmental characteristics, contextual needs and tasks during adolescence and adulthood.*
- *specifies the role of school and teachers in addressing the challenges during this period of development;*
- *states the different forms and dimensions of individual differences and the ways of meeting the classroom issues arising out of the differences;*
- *identifies the learning needs during the different stages of development and adopt appropriate strategies in and out of school to meet the learning needs;*
- *develops an understanding of looking at one's own self, feeling and emotion; and*
- *reflects on how to relate the self to the world through emotions; and*
- *examines the factors responsible for establishing Identity in a Real World.*

Detailed Course Content

Unit-I. Developmental characteristics during adolescence

- Developmental Characteristics during adolescence and adulthood: Physical, Social, Cognitive and Language, Emotional and Moral; Challenges of adolescence.
- Context-specific developmental tasks based on specific needs and problems during adolescence; Problems of adjustment, Defense mechanism
- Role of school and teacher in addressing the challenges of developmental needs of adolescents in various contexts.

Unit-II. Understanding Individual Differences among Learners

- Individual differences due to cognitive, social and emotional attributes; Concept of Learning and factors promoting learning, Individual differences in learning in terms of mental ability, rate of learning, motivation to learn, learning style, attitude etc.; recognizing the uniqueness of the learner
- Learners with different mental abilities: intelligence and creativity- concept, nature and assessment; classification of learners based on Gardner's theory of Intelligence
- Addressing individual differences in learning – learning needs of different types of learners (gifted and backward learners; fast and slow learners).

Unit III: Development of Identity

- Self and Emotions-Formation of self (Self-concept, self-esteem, Self-efficacy); Emotions: Goleman's Theory of Emotional Intelligence.
- Establishing Identity in a Real World- Peer relations: competitions, cooperation and peer pressure; Role of teacher in establishing identity.

Tasks/Assignment: Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Case Study of a problem child / a slow learner/ a disadvantaged child.
- Analysis of the common behavioural problems observed in the classroom
- Preparation of context specific learning materials such as work sheet on self and emotional intelligence.

Suggested Readings

Arnett, Jeffrey(2007). *Adolescence and emerging adulthood: A cultural approach.* (3rd Edn.). Upper Saddle River, N.J.: Pearson

Berk, Laura E. (2011). *Child development* (9th Edn.). New Delhi: Prentice Hall of

Chauhan, S.S. (1978). *Advanced Educational Psychology*, Vikas Publishing house Pvt. Ltd., New Delhi.

Chauhan, S.S. (1978). *Advanced educational psychology.* New Delhi: Vikas

Dunn, R. (1983). Can students identify their own Learning Styles? *Educational Leadership*,40, P.P. 60-62.

Flavell, J.H. (1963). *The developmental psychology of Jean Piaget.* New York: Van

Fontana, D. (1995). *Psychology for Teachers (3rd edition).* The British Psychological Society, London: McMillan in association with BPS Books.

Hurlock, E. B. (1980). *Developmental psychology: All span approach.* New York:

Hurlock, E.B. (1980). *Child development* (6th Edn.). Tokyo: McGraw-Hill,India.

introduction to educational psychology. New York: Holt, Rinehart andKogakusha Ltd.

Kundu, C.L. and Tutoo D.N. (1993). *Educational Psychology*, Sterling Publishers Pvt. Ltd.

Mangal, S. K. (1984). *Psychological Foundations of Education.* Ludhiana: Prakash Publishers

McGraw Hill Book.Nostrand

Papalia D. E., and Sally, W. O. (1978). *Human Development.* McGraw Hill Publishing Company

Phens, J. M., and Evans, E. D. (1973). *Development and Classroom Learning : An Introduction to Educational Psychology.* New York: Holt Rinehart and Winston Inc. Publishing House Pvt. Ltd.

Stephens, J. M.; Evans, E. D.(1973). *Development and classroom learning: An*Technology. In Harris Duncun (1988) *Education for the New Technologies, World Year Book of Education.* London: Kogan page Inc

Tessmer, M., and Jonassen, D. (1988). Learning Strategies: A New Instructional

Winston**.**

5.	PE-4	Cotemporary India and Education	10	40	50

Objectives

On completion of this course, the student- teacher:

- *describes the prevailing social inequities, diversities and marginalization in India and their implication for education;*
- *states the relevant Constitutional provisions, policy recommendations and the provisions in different acts relating to education specifically to school education;*
- *explains the various emerging concerns and issues of school education*
- *states the roles of teachers in addressing the concerns and issues; and*
- *develops a set of professional values required to address the issues and concerns through curricular, and co-curricular activities*

Detailed Course Content

Unit-I. Diversity, Inequality and Marginalization in Indian Society

- Understanding Indian Society with reference to diversities in Language,Culture, Religion, Socio-economic class, Ethnic group.
- Stratification of Indian Society with reference to Caste, Class, Gender Region (Rural–urban disparity). Education in a stratified society.
- Role of Education in addressing the needs of Marginalized groups in Indian society: SC/ST, Women, differently abled , minority community

Unit-II. Constitutional Provisions, Policies and Acts in Education
- Constitutional provisions and values for resolving the issues of diversity,inequality and marginalization in education.
- Policies and programmes for addressing these issues – NPE 1986/ 92; SSA and RMSA; RCFCE Act, 2009 (RTE Act) – objectives and provisions; State Policy on Multilingual Education in Odisha (2014).
- Problems in implementation of the policies with reference to access,enrolment, retention and quality in education.

Unit-III. Emerging Concerns for Education
- Life skill education – concept and importance; core life skills (WHO); role of school, teacher and community for developing life skills of the learners; National Skill Development Framework.
- Liberalization, Privatization and Globalization of education– meaning and their impact on the contemporary education with reference to curriculum, pedagogy and management.
- Quality education – concept, dimensions, indicators and initiatives for enhancing quality education in school. Concept of TQM and quality Assurance in Education.

Tasks and Assignments

Each student-teacher is required to submit report/ assignments selecting *one* of the following(1 **x 10 marks = 10 marks**):
- Preparation of a report on school-based activities for enhancing life skill education
- School visit and preparation of a report on implementation of RTE Act in rural schools
- School visit and preparation of a report on implementation of RMSA in secondary schools

Suggested Readings

Glasser, W. (1990). *The quality school: Managing students without coercion*. NewYork: Perennial Library.

Govt. of India (1992). *Report of core group on value orientation to education*. NewDelhi: Planning Commission, Govt.of India.

Kaur, B. (2006). *Teaching peace, conflict and pride*. New Delhi: Penguin Books.Kumar, Arvind (2003). *Environmental challenges of the 21st century*. New Delhi:APH Publishing Corporation.

Kumar, Krishna (1996*). Learning from conflict*. New Delhi: Orient Longman.

MHRD (2008). *Framework for implementation of RashtriyaMadhyamikShikshaAbhiyan: A scheme for universalisation of access to and improvement ofquality at the secondary stage*. New Delhi: Department of School Educationand Literacy.

MHRD (2011). *SarvaShikshaAbhiyan:Framework for implementation based on theRight of Children to Free and Compulsory Education Act, 2009*. New Delhi:Department of School Education and Literacy.

Ministry of Law and Justice (2009). *Right to education*. New Delhi: Govt of India.NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.

Panneerselvam, A. &Ramkrishnan, M. (1996). *Environmental science education*. New Delhi: Sterling Publishers.

Puri, M. & Abraham. (Eds.) (2004). *Handbook of inclusive education for educators,administrators and planners*. New Delhi: Sage Publications.

Sharma, R.A. (1998). *Environmental education*. Meerut: Surya PublicationUNESCO (1990). *Source Book on environmental education for secondary teachers*.

Bangkok : UNESCO Principal Regional Office for Asia PacificUNESCO (1994). *Source Book on environmental education for elementary teacher educators*. Bangkok : UNESCO Principal Regional Office for Asia PacificUNESCO (1997).

Trends in environmental education. Paris : UNESCO

UNESCO (1998). *Educating for a sustainable future: A transdisciplinary vision forconcerted action.* Paris: UNESCO.

UNESCO (2001). *Learning the way to peace: A teacher's guide to peace education.*Paris: UNESCO.

UNESCO (2004). *Education for all: The quality imperative.* EFA Global MonitoringReport. Paris: UNESCO.

UNESCO (2012). *Shaping the education of tomorrow: 2012 Report on the UNdecade of education for sustainable development.* Paris: UNESCO.

Unicef (2000). *Defining quality in education.* New York: Programme Division(Education), Unicef.

WHO (1991). *Comprehensive school health programme.* New Delhi: World HealthOrganization Regional Office.

WHO (1997). *Life skills education for children and adolescents in schools:Introduction and guidelines to facilitate the development and implementation of life skills programmes.* Geneva: Division of Mental Health and Preventionof Substance Abuse, World Health Organization.

WHO (1999), *Partners in Life Skills Training: Conclusions from a United NationsInter-Agency Meeting.* Geneva: World Health Organization.

WHO (2004). *Skills for health: An important entry-point for health promoting/childfriendlyschools.* Geneva: World Health Organization.

6.	PR-2	**Youth Red Cross, First Aid awareness programme**	**50**	**-**	**50**

Objectives:

On completion of this course, the student- teacher:

- develops respect for the human being, non-discrimination on the basis of nationality, race, gender, religious beliefs, disability, class or political opinions, mutual understanding, friendship, cooperation and lasting peace among people, service by volunteers.
- develops a better understanding internally through promoting humanitarian values.
- delivers humanitarian message of Red Cross both within and outside the society, and to advocate tolerance and coexistence in the communities.
- develops knowledge on Disaster Management policy, strategy, and plans
- enhances community capacities and creating awareness of Red Cross
- improves the capacity of advocacy, coordination, collaboration and integration among students
- develops awareness on health policy, strategy, design and develop health care programmes
- strengthens prevention focused volunteer based community health care
- helps and supports the vulnerable to handle HIV/AIDS epidemic and respond to public health crisis with particular focus on HIV Aids

Tasks and Assignments

Each student-teacher is required to submit report on any two of the following awareness activities at least one from each group (2 **x 25 marks = 50 marks**): Visit to organizations concerned with the following activities, interact with the members, experience the reality and

submit reports on experiences. Each of the student-teacher is required to create awareness on any one of the following activities in a locality and write a report.

A. Suggested Activities **for Youth** Red Cross Awareness Programme : Creating awareness among people on the following areas:

- Organize a blood donation camp and create awareness of primary health care in a school of your locality and write a report.
- A student teacher is required to prepare a diet chart for the persons suffering from Cholesterol/thyroid/diabetics. She/he is required to submit a report on organization of awareness programme for the students of secondary level on balanced diet and effect for sound health.
- Visit the nearest hospital and meet the doctors and patients affected with HIV/AIDs. Arrange a programme for secondary school students and prepare a report on prevention of HIV/AIDS   for healthful living.
- Observe the food habits of children studying in primary level, orient them the values of proper food habit and submit a report on emphasizing ill effect of junk food.
- Arrange a programme inviting a doctor to orient the students at secondary level on problems of adolescents and submit a report on it.

B. Suggested Activities for First Aid Awareness Programme:-

- Each student teacher is required to collect information on cause and effect of allergic reaction/asthma/choking /fainting /suns stroke and make the students aware at secondary level through different modes and write a report on such activities.
- Collect basic information on traffic rules and regulations for safety drive. Prepare a report after organization of   traffic awareness programme among school students and public.
- Collect information on benefit of first aid kit. Prepare a first -aid kit useful for your family and school, organize an awareness programme in a school about its significance to the staff and students.

Modes of Learning Engagements

- Case studies
- Problem solving and enquiry methods
- Workshop
- Small assignments which may include observation of relevant days, preparation of bulletin board material, games, worksheet etc.
- Conducting a seminar and developing a seminar document
- Project work and writing of project report
- Discussion of activities pertaining to two different classes and subject

Sub-Total	**70**	**80**	**150**

7.	PE-5	Learning and Teaching-I	10	40	50

Objectives

On completion of this course, the student- teacher

- *States the meaning, nature, dimensions and basic conditions of learning*
- *Discusses and analyze the broad perspectives of behaviouristic, social cognitive, constructivist and humanistic views of learning and their educational implications*
- *Enumerates the various stages and strategies of teaching for effective learning*

Detailed Course Content

Unit 1. Understanding learning process

- Meaning, nature, and dimensions of learning; Learning as a process and as an outcome
- Basic conditions of learning – Maturation, Readiness, Attention, Motivation, Fatigue, Materials, Learning Style, Tasks and Methods etc.
- Types/Categories of learning: Gagne's categories of learning

Unit 2. Theoretical perspectives of learning

- Behaviouristic Theories: Classical Conditioning of Pavlov and Operant Conditioning of Skinner–Theoretical framework and educational implications
- Social Cognitive Theories: Social Learning Theory of Bandura, Advance Organizer Theory of Ausubel - Theoretical framework, and educational implications
- Constructivist theories: Radical constructivism of Jean Piaget and Social constructivism of Lev Vygotsky; Theoretical framework, and educational implications Humanstic theory of Learning: Contribution of Carl Roger.

Unit 3. Teaching for effective learning

- Correspondence between teaching and learning
- Stages of teaching: Pre-active, Inter-active and post- active
- Levels of Teaching: Memory, understanding and reflective level
- Teaching strategies: Reflective and critical thinking and meta-cognition

Tasks and Assignment

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Preparation of report of observation of two classroom situations on any subject.
- Preparation of a paper for a seminar presentation on comparing the educational implications of any two theories of learning in the context of promoting meaningful Learning.
- Preparation of a term paper describing the characteristics of effective teacher behavior.
- Choose any topic from your method and prepare an Advance Organizer for the same OR prepare a Programmed Learning module bearing in mind Skinner's Theory of Operant Conditioning

Suggested Readings

DeCecco, J.P.,&Crawford,W.R. (1974). *Psychology of learning and instruction*:*Educational psychology*. Englewood Cliffs, N.J.: Prentice Hall.
Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4thedition). New York: Holt, Rinehart and Winston.

Klausmeir,H.J., & Ripple, R.E.(1971). *Learning and human abilities: Educational Psychology.* New York: Harper & Row.

Lefrancois, Guy R. (1994). *Psychology for teaching*. Belmont, California:Wadsworth Publishing Company.

Lindgren, H.C. (1980). *Educational psychology in the classroom.* New York: Oxford University Press.

Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). *Constructivism: The new paradigm: From theory to practice*. New Delhi: Atlantic Publishers.

Nolen-Hoeksema, Susan, Fredrickson, Barbara L., Loftus, Geoff R., &Wagenaar,Willem,A.(2014). *Atkinson &Hilgard's introduction to psychology*. Belmont, California: Wadsworth.

Piaget, J. and Inhelder, B. (1969). *The psychology of the child*. London: Routledge Kegan Paul.

Sahakian, W.S. (1976). *Introduction to the psychology of learning*. Chicago: Rand McNally College Publishing Company.

Snowman &Baihler (2006). *Psychology applied to teaching*. Boston: Houghton Mifflin Company.

vonGlasersfeld, F. (1995). *Radical constructivism: A way of knowing and learning.* Washington D.C.: Falmer Press.

Vygotsky, Lev (1986). Thought and language. Cambridge, MA: The MIT Press.

Woolfolk, A.E. (2012). *Educational psychology* (12th Edn.) Englewood Cliffs, N.J.:Prentice Hall.

8.	CPS-1	Assessment for Learning-I	10	40	50

Objectives: On completion of this course, the student-teacher

- *States the nature, purpose and types of educational assessment and evaluation*
- *Explains the key concepts such as formative and summative assessment, evaluation and measurement, test, examination*
- *Develops and uses different types of tools and techniques for continuous and comprehensive assessment of learning in the school situation*
- *States the importance of assessment for learning and its processes for enhancing the quality of learning and teaching*
- *Becomes aware about different techniques of assessment that aid students' learning*
- *Plans realistic, comprehensive and dynamic assessment procedures with feedback mechanism.*

Detailed Course Content

Unit 1. Assessment , Evaluation and Learning

- Assessment and Evaluation: Meaning, purpose of assessment
- Interrelationship between assessment and evaluation. Classification of Assessment based on: purpose (Placement, Formative, diagnostic and Summative)
- Scope (Teacher-made tests, Standardized tests), Attributes measured (Achievement, Attitude, and Aptitude etc.)
- Nature of Information gathered (Qualitative, Quantitative), Mode of Response (Oral,

Written and Performance), Nature of Interpretation (Norm-referenced and Criterion-referenced), and the Context (Internal, External).

Unit 2. **Assessment for Learning**

- Meaning, importance and purpose; Nature- formative, continuous with learning, comprehensive (assessing all aspects of learning- cognitive, affective and psychomotor), Culturally conducive assessment in the elements from the local culture of the learners.
- Continuous Comprehensive Assessment: Meaning, Importance and Scope
- Learning and Assessment: Assessment of Learning, Assessment for Learning, and Assessment as Learning
- Assessment at the end of learning experience: processes of assessment of learning, testing and non-testing methods of assessment, observation, interview, FGD

Unit 3. Tools and Techniques of Assessment

- Wide range of formal (testing, observation schedules, video recordings etc.) and informal methods (participant observation, talking, taking notes, interviewing, engaging in activities etc.)
- Use of testing (achievement tests of different forms, diagnostic tests, proficiency test etc.) and non-testing (analysis of verbal and non-verbal activities, reflective journals, projects, portfolio etc.) tools
- Use of multiple methods and tools (situation specific combinations)
- Self and Peer-assessment techniques, observation, Portfolio, interview, focused group discussion, rubrics, anecdotes, check list, rating scale
- Provision of feedback for students and parents and reporting learning performance
- Role of Parents for improving teaching, role of teachers to conduct remedial teaching.

Tasks/ Assignments

Each student-teacher is required to submit assignment on any one of the following:

- Case study of a participatory assessment programme
- Preparation of a plan for CCA activities for any class during an academic session
- Appraisal of current CCA practices in the secondary schools
- Constructing a test or an examination paper in one's subject area; critical review of the test prepared

Suggested Reading

Anderson, L.W. (2003). *Classroom assessment: Enhancing the quality of teacher decision making*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

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

Cooper,D. (2007). *Talk about assessment: Strategies and tools to improve learning.* Toronto,Ontario: Thomson Nelson.

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

Garrett, H.E. (1973). *Statistics in psychology and education* (6th ed.). Bombay: Vakils, Feffers & Simon.

Gronlund, N.E. & Linn, R.L. (2009). *Measurement and assessment in teaching* (10th Edn). Upper Saddle River, NJ: Pearson Education, Inc.

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.

Popham, W.J. (1993). *Modern educational measurement*. Englewood Cliffs, N.J.: Prentice Hall.

Popham, W.J. (2010). *Classroom assessment: What teachers need to know* (6th ed.). New York: Prentice Hall.

Shepard, L.A.(2000). The role of assessment in learning culture. *Educational Researcher*, 4-14.

Stiggins, R. (2005). *Student-involved classroom assessment*. (4th ed). Columbus, Ohio: Merrill.

9.	PR-3	Project on SSA/Midday meal/Community Survey	50	-	50

Each student teacher is required to submit report on two any two of the following assignment/activities

- Enrolment trend of a slum area
- Activities undertaken by SSA for improvement of Girls'eduation
- Activities undertaken by SSA for Improvement of SC/ST children
- Improvement of Socially disadvantaged children through SSA
- Activities undertaken by SSA for Community awareness regarding primary education
- Infrastructural development of a primary school through SSA
- Status and problems/effectiveness of midday meal programme in a primary school.
- Awareness programme in a slum about health/nutrition/sanitation
- Organization of a reading hour for children at a local school or library
- Donation of used children's books to a school /community library
- Organisation of Awareness programme on Girls's education in slum/village

		Sub-Total	70	80	150

Semester-IV

10.	PE-6	Learning and Teaching-II	10	40	50

Objectives
On completion of this course, the student- teacher
- *explains the process of learning as meaning making and the ways of facilitating meaningful learning in and out of the school*
- *employs the processes of teaching and managing classroom situations for meaningful learning*
- *elaborates the processes of preparation and continuing professional development ofteacher in the context of a professional ethics*

Detailed Course Content

Unit-1Teaching for Construction of Knowledge
- Meaning and attributes - active or manipulative, constructive, reflective,

intentional, complex, contextual, collaborative, and conversational;
- Learning as meaning making: Concept and process of meaning making; Learner as meaning maker- Characteristics of learner as meaning maker – curiosity, interest, active engagement: Role of inquiry in meaning making
- Meaningful Learning as Experiencing: Observing, Perceiving and internalizing, and Deriving meaning from experiences;
- Facilitating Meaningful Learning in and out of school: strategies and role of Teacher

Unit-2 Teaching for Meaningful Learning
- Teaching and Learning: Teaching as instructing vs Teaching as facilitating learning; Teaching as empowering learners; Bruner's Model of Teaching for meaningful learning - process and implications for classroom instruction in promoting meaningful learning
- Teaching in Diverse Classrooms – Paradigm shift in organizing learning : Teacher centric to learner centric, and to learning centric (characteristics and process); Grouping for facilitating learning- Ability Grouping, Heterogeneous Grouping, Grouping by interest, Grouping by Choice;
- Modes of teaching-learning – face to face and distance mode, oral-aural and digital, individualized and group-based

Unit-3 Teaching as a profession

- Importance and Characteristics of teaching profession; Characteristics of aneffective teacher
- Teacher Preparation : Needs, components and modes: pre-service and in service teacher education programmes for different school levels (pre-school, elementary, secondary)
- Teacher Development: Needs and Stages – Survival, Consolidation, Renewal and Maturity; Continuing Professional Development of In-service Teachers - Needs and Strategies
- Teachers' Professional Ethics and Accountability : Meaning, importance and dimensions; Recommendations of NPE 1986/92; Strategies for ensuring teacher accountability

Tasks and Assignment
Each student-teacher is required to submit assignments selecting *any one*of the following(1 **x 10 marks = 10 marks**):
- Preparation of report of observation of two classroom transactions based on 5E and ICON model
- Survey of teachers' classroom activities of at least teachers and preparation of report.
- Conducting group activities in the classroom and preparing a report on the process in terms of students' participation and quality of learning.
- Observing classroom transactions of teachers with high and low experience in teaching.

Suggested Readings
DeCecco, J.P.,&Crawford,W.R. (1974). *Psychology of learning and instruction*: *Educational psychology*. Englewood Cliffs, N.J.: Prentice Hall.
Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th

edition). New York: Holt, Rinehart and Winston.

Klausmeir,H.J., & Ripple, R.E.(1971). *Learning and human abilities: Educational Psychology*. New York: Harper & Row.

Lefrancois, Guy R. (1994). *Psychology for teaching*. Belmont, California: Wadsworth Publishing Company.

Lindgren, H.C. (1980). *Educational psychology in the classroom.* New York: Oxford University Press.

Mohapatra, J.K., Mahapatra, M. and Parida, B.K. (2015). *Constructivism: The new paradigm: From theory to practice*. New Delhi: Atlantic Publishers.

Nolen-Hoeksema, Susan, Fredrickson, Barbara L., Loftus, Geoff R., &Wagenaar,
Willem,A.(2014). *Atkinson &Hilgard's introduction to psychology*. Belmont, California: Wadsworth.

Piaget, J. and Inhelder, B. (1969). *The psychology of the child*. London: Routledge Kegan Paul.

Sahakian, W.S. (1976). *Introduction to the psychology of learning*. Chicago: Rand McNally College Publishing Company.

Snowman &Baihler (2006). *Psychology applied to teaching*. Boston: Houghton Mifflin Company.

vonGlasersfeld, F. (1995). *Radical constructivism: A way of knowing and learning.* Washington D.C.: Falmer Press.

Vygotsky, Lev (1986). Thought and language. Cambridge, MA: The MIT Press.

Woolfolk, A.E. (2012). *Educational psychology* (12th Edn.) Englewood Cliffs, N.J.:Prentice Hall.

11.	CPS-2	**Assessment for Learning-II**	10	40	50

Objectives: On completion of this course, the student-teacher
- analyzes the trends and issues in learning and learner assessment
- becomes the use of a wide range of assessment tools, and learn to select and construct these appropriately
- analyzes and interprets results of the assessment using rudimentary statistical methods

Detailed Course Content

Unit-1 .Construction of test and Its Use

- Steps; Planning, Preparing, Trying-out and Evaluation
  - Planning the test: Development of table of specifications (blue print)
  - Preparing the test: principles of preparing test items-objective based items-Extended and Restricted response types, Objective type items (free response type- short answer and completion: fixed response type-matching, forced/alternate choice, multiple choice): Assembling and editing the items
- Characteristics of a good test: Reliability, Validity, Usability (discussion on concept, type and procedure)
- Administration of the test and analysis of students' performance: Preparation of report and its use in enhancing learning

Unit-2 Issues in Assessment and Policy Provisions

- Current practices: Over-emphasis on Summative Assessment (Periodic and common/ high-end examinations) marking: competitive examination- its adverse effects on learners,

education system and society

- Issues and Problems: Marking vs. Grading, objectivity vs. Subjectivity, Close ended vs. Open-ended test items, relative neglect of non-cognitive aspects, non-use of diverse methods and tools for assessing diverse learners
- Policy perspectives: Recommendations of NPE 1986/92, NCF 2005, RCFCE Act 2009: Non-detention policy and its implications for assessment and quality of learning
- Emerging practices in assessment : online assessment, participatory assessment

Unit-3 Elementary Statistics

- Measures of Central Tendency: Mean, Median, Mode-Calculation, uses and limitations
- Measures of Variability : Range, Average Deviation, Quartile Deviation, Standard Deviation- Calculation, uses and limitations
- Correlation: Calculating Coefficient of Correlation by rank-difference and Product moment method
- Concept of Normal Probability Curve, Characteristics of normal curve and its uses
- Standard Scores Z-Score, T-Score and Percentile

Tasks/ Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Preparation of 50 objective-based items, at least 5 from each type of test items in any school subject
- Construction of an achievement test on any topic
- Analysis of examination marks obtained by the students in any subject in a class and preparation of a report for sharing

Suggested Reading

Anderson, L.W. (2003). *Classroom assessment: Enhancing the quality of teacher decision making*. Mahwah, New Jersey: Lawrence Erlbaum Associates.

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

Cooper,**D.** (2007). *Talk about assessment: Strategies and tools to improve learning.* Toronto,Ontario: Thomson Nelson.

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

Garrett, H.E. (1973). *Statistics in psychology and education* (6th ed.). Bombay: Vakils, Feffers & Simon.

Gronlund, N.E. & Linn, R.L. (2009). *Measurement and assessment in teaching* (10th Edn). Upper Saddle River, NJ: Pearson Education, Inc.

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.

Popham, W.J. (1993). *Modern educational measurement*. Englewood Cliffs, N.J.: Prentice Hall.

Popham, W.J. (2010). *Classroom assessment: What teachers need to know* (6th ed.). New York: Prentice Hall.

Shepard, L.A.(2000). The role of assessment in learning culture. *Educational*

Researcher, 4-14.

Stiggins, R. (2005). *Student-involved classroom assessment*. (4th ed). Columbus, Ohio: Merrill.

12.	PR-4	Construction and Administration of two unit tests in school subject with reporting	50	-	50

Tasks and Assignment

Each student-teacher is required to prepare at least two unit tests in their respective method subjects(2 **x 25 marks = 50 marks)**

		Sub-Total	70	80	150
		Semester-V			
13.	CPS-5	**A. Pedagogy of School Subject-I** *Language(Odia/English); Mathematics; Biological Science*	10	40	50

A. Pedagogy of Odia-I

Objectives

On completion of this course, the student-teacher

- *states the importance and place of Odia as mother tongue in school curriculum.*
- *develops the strategies to address the problems of Odia language acquisition in multilingual context.*
- *uses various strategies for facilitating the acquisition of language skills in Odia.*
- *decides appropriate pedagogic approaches to transact different types of lessons in Odia.*
- *prepares appropriate tools for comprehensive assessment of learning in Odia.*

Detailed Course Content

Unit 1 Odia as Mother Tongue in School Curriculum:

- Importance of mother tongue in the life and education of an individual
- Place of Odia as mother tongue in school curriculum in Odisha (both at elementary and secondary levels) in the context of language policy recommended by NPE, 1986 (three language formula)
- Objectives of teaching-learning Odia at elementary and secondary levels
- Inter-dependence of language skills in Odia
- Strategies for facilitating acquisition of four-fold language skills in Odia

Uint2 Pedagogic Approaches to Teaching-Learning Odia:

- Psychology of language learning and acquisition with reference to Odia as mother tongue.
- Problems and issues related to acquisition of Odia language in multi-lingual context
- Traditional versus modern methods of teaching-learning Odia

- Different approaches and strategies to the teaching-learning of :
- Odia prose (detailed and non-detailed)
- Odia poetry
- Odia composition (through Rubric)
- Odia grammar
- Strategies for enrichment of Odia vocabulary (word formation and spelling)
- Strategies for developing creative writing skills

Unit-3 **Curricular Activities in Odia:**
- Preparation of Unit Plan
- Preparation of Lesson Plan following constructivist approach (5E and ICON Models)
- Learning resources and planning learning activities
- Learning assessment in Odia: : Assessing comprehension and expression skills; preparation of objective-based and objective-type test items
- Portfolio Assessment in Odia
- Comprehensive Assessment of Learning in Odia
- Planning remedial measures

Tasks & Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):
- Preparation of Five Lesson Plans on the topics from the prescribed text following 5E and ICON Models (at least two plans in each model)
- Preparation of a blue print on any topic from the prescribed text and development of test items in conformity with the blue print.

Suggested Readings

Dhal, G.B. (1974). *Dhwani bijanana*. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.

Mohanty, B. (1970). *Odia bhasara utpati O 65arma bikasha.* Cuttack : Friends Publishers.

Mohanty, J., Barik, N. & Khandai, U. (1983). *Odia sikshadana paddhati.* Cuttack : Nalanda.

Mohapatra, D. (1976). *Odia Dhwani tattwa O sabdha sambhar*. Cuttack : Grantha Mandir.

Mohapatra, N. & Das, S. (1943). *Sarbasara vykarana.* Cuttack : New Student's Store

Nayak, B. (1974). *Matrubhasa Sikshadana paddhati*. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.

Padhee, B. (1972). *Odia bhasara rupa tattwa.* Berhampur : Pustak Mandir.

Rout, P.C. (1986). *Matrubhasa sikshadana paddhati.* Jajpur : Saraswati Printers

Sahoo, B. (1975). *Bhasa bigyanara rupa rekha*. Cuttack : Paramarthi Printers

Sarangi, N. (2001). *Bruhat odia vykarana.* Cuttack : Satyanarayan Book Store

Tripathy, K.B. (1977). *Odia bhasa tattwa O lipira krama bikash.* Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.

A. Pedagogy of English- I

Objectives
On completion of this course, the student-teacher

- analyzes the issues relating to importance and place of English in school curriculum, acquisition of skills in English, realization of aims and objectives of learning English and language policy as conceived in NPE,1986 and NCF–2005
- uses various approaches, methods and strategies for teaching-learning English
- transacts various types of lesson plans covering all aspects of English language following different approaches

Detailed Course Content

Unit 1: English in School Curriculum
- Language policy in India with reference to NPE,1986 and NCF–2005
- Importance of English language in India in historical perspectives (Pre-Independence Period & Post-Independence Period)
- Place of English as a compulsory subject in school curriculum
- Objectives of learning English at secondary levels
- English language skills – components, independence and interdependence

Unit 2: Acquisition of Second Language (English): Approaches, Methods and Strategies
- Psychology of language acquisition and language learning
- Acquisition of English language :problems and issues with reference to multi-lingual context
- Importance of language context and input-rich classroom environment for acquisition of English language skills like listening, speaking, reading and writing.
- Understanding of different methods and strategies :Translation Method, Direct Method, Bi-lingual Method, Communicative Approach

Unit 3: Transaction of Contents
- Transaction of Prose (detailed and non-detailed), poetry, grammar and composition lessons–Approaches:Methods and Strategies
- Preparation of Unit Plan
- Preparation of Lesson Plan following communicative approach and constructivist approach (5E and ICON Models)
- Strategies for Assessment of English Language

Tasks and Assignment

Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):
- Preparation of five lesson plans on the topic from the prescribed text following 5E and ICON Model

Suggested Readings

Bansal, R.K. (1971). *An outline of general phonetics*. Bombay : Oxford University Press

Bansal, R.K. and Harrisson, J.B. (1972). *Spoken English for India*. Madras : Orient Longman

Baruah, T.C. (1984). *The English teachers handbook*. New Delhi : Sterling Publishers

Billows, F.N. (1961). *The techniques of language teaching. London* : William Heffer and Sons.

Carrol, J.B. (1972). *Systems and structures of English*. London: Oxford University Press.

Das, B.K. et al. (2009). *An introduction to professional English and soft skills*. New Delhi : Cambridge University Press

Dash, N. and Dash, M. (2007). *Teaching English as an Additional Language*:Atlantic Publishers and Distributors (P) Ltd.

Dodson, C.J. (1963). *The bilingual method. London* : Pitman Publishing. Frisby, A.W. (1970). Teaching English: notes and comments. London: ELBS.

Gokak, V.K. (1963). *English in India: Its present and future*. New Delhi: Asia Publishing House.

Harish David, P. (1969). *Testing English as second language*. New Jersy : McGraw Hill

Hornby, A.S. (1962). *The teaching of structural words and sentence patterns.* London: Oxford University Press.

Jones, Daniel (1967). *An outline of English phonetics*. London : William Heffer and Sons

Kohli, A.L. (1970). *Techniques of teaching English.* Jalandhar : Dhanpat Rai and Sons.

Krishna Swamy, N. and Sri Raman, T. (1994). *English teaching in India*. Madras : T.R. Publication.

Palmer, H.E. (1980). *Grammar of spoken English*. Cambridge: Heffer.

Prabhu, N.S. (1989). *Second language pedagogy*. New Delhi : Oxford University Press

Sachdeva, M.S. (1973). *A new approach to teaching of English in India*. Ludhiana : Prakash Brothers

Saraswati, V. (2004). *English language teaching*. New Delhi : Orient Longman

Sharma, A.K. (1985). *Aspects of English language teaching in India.* New Delhi : Bharat Book Depot.

Sinha, S.P. (1978). *English in India.* New Delhi : Janaki Prakashan

A.   Pedagogy of Biological Science-I

Objectives:

On completion of this course, the student-teacher
• States the nature and importance of Biological Science and its relevance in secondary school curriculum in context with recent curriculum reforms in School Curriculum.
• Uses various methods and approaches to teaching-learning Biological Science suitable for the secondary school classes.

Detailed Course Content

1. **Biological Science as a dynamic body of knowledge**

- Nature of Biological Science: Nature and Scope of Science and Biological Science in particular, Importance of Biological Science in daily life,
- Objectives of teaching-learning Biological Science at the secondary school level,
- Interrelationship of biology and other disciplines of science and their integration

2. **Biological Science Curriculum**

- Place of Biological Science in school curriculum
- Emphasis of NCF-2005 on transaction of curriculum. Going beyond biological science text book
- Implementation critical pedagogy in biology classroom
- Space for parents and community

3. Approaches and Methods of Teaching-learning Biological Science

- Observation – Types, importance in Bio-Science, process, recording of observation
- Experimentation: Experimentation under controlled conditions within laboratory and beyond laboratory situation; Process and limitations.
- Problem Solving: Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- Demonstration-cum-Discussion
- Project: Situation analysis, selection of the project, preparation of the project proposal, implementation of the project, evaluation and reporting.

Tasks & Assignments:

Each student-teacher is required to submit assignments on any one of the following

1. Developing five activities/experiments in Biological Science and prepare a brief report
2. Prepare a report on place of bio- science in school curriculum
3. Prepare a report on problem solving method using a suitable topic from secondary school Bioscience.

Suggested Readings

NCERT,National Curriculum Framework-2005

NCERT,Position paper of NFG on Teaching Science-2005

Buffaloe, Neal. & Throneberry, J. B. (1972). Principles of biology teaching. New Delhi: Prentice Hall of India.

Herr, Norman (2007) The Sourcebook for teaching science. San Francisco, CA: Jossey-Bass.

Kulashrestha, S.P. (2009). Teaching of biology. Meerut: R.Lall Book Depot.

Mangal, S.K. & Mangal, S. (2007). Teaching of biological science. Meerut: International Publishing House.

Miller, D.F. & Blayses, G.W.(2011). Methods and materials for teaching biological sciences. New York: McGraw Hill.

Sharma, R.C. (1998). Modern science teaching. New Delhi: Dhanpat Rai and Sons. TESS India (2015). Key resources. The Open University U.K.(http//creativecommons.org/licences/ and http//www.tess-india.edu.in/)

Vaidya, Narendra (1992). Science teaching for 21st century. New Delhi: Deep and Deep. Zaidi, S.M. (2004). Modern teaching of life sciences. New Delhi:Deep and Deep

Zaidi,S.M (2004).modern teaching of life sciences.New Delhi: Anmol Publications

A. Pedagogy of Mathematics-I
Objectives

On completion of this course, the student- teacher

- *Narrates the evolution and nature of Mathematics and its importance in the school curriculum in the context of the recent curricular reforms*
- *Uses various methods and approaches of teaching and learning Mathematics especially suitable for the secondary school classes*
- *Plans lessons in Mathematics using traditional and constructivist approaches for effective classroom transactions*

Detailed Course Content

Unit-I Foundations of Mathematics Education

- *Nature of Mathematics*: Nature and Scope of Mathematics, Nature of Mathematical propositions, Mathematical proof, structure and logic; history of Mathematics with special reference to Indian Mathematics.
- *Learning of Mathematics*: Importance of Mathematics at elementary and secondary level, Objectives of teaching-learning Mathematics at the two levels,
- Emphasis of NCF-2005 on transaction of curriculum. Going beyond Mathematics text book

Unit-II Teaching-learning strategies in Mathematics

- *Teaching for Understanding Proof:* Proof by induction and deduction; proof by analysis and synthesis,
- *Problem Solving in Mathematics*: Importance of problem solving in Mathematics, Steps of problem solving in Mathematics, Problem Posing, Generating and solving real life problems using Mathematical principles, Situation model for solving word problems.

Unit –III Teaching Learning Resources in Mathematics

- Learning Materials in Mathematics: Types, functions, preparation and utilization of learning materials - Textbook, Models, Calculators and
- Activities in Mathematics: Mathematics Quiz, Mathematics Club activities, Mathematics Exhibition, Planning and organizing, Mathematics laboratory activities, Mathematics outside the classroom,computers, Graphic calculators, Maintaining portfolio in Mathematics

Tasks & Assignment

Each student-teacher is required to complete assignments on ***any one*** of the following:

- Prepare a report on use of problem solving method by taking 5 examples in secondary school mathematics.
- Preparation of five lesson plans on any topic from the Mathematics texts of the secondary school based on 5E and ICON models.

Suggested Readings

Cooney, Thomas J. et al. (1975). *Dynamics of Teaching Secondary School Mathematics*. Boston: Houghton Mifflin.
Driscoll,M., Egan, M., Nikula, J., & DiMatteo, R. W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10*. Portsmouth, NH: Heinemann

NCERT, Position Paper of NFG on Teaching of Mathematics-2005,
NCERT, National Curriculum Framework-2005.

14.	CPS-7	**<u>A.Pedagogy of School Subject-I</u>** *Social Science; Physical Science*	10	40	50

A. Pedagogy of Physical Science-I

Objectives

On completion of this course, the student-teacher

- *states the nature and importance of physical science and its relevance in Secondary school curriculum.*
- *uses various methods and approaches to teaching-learning Physical Science suitable for the secondary school classes.*
- *plans lessons in physical science for effective classroom transactions.*
- *develops and collects activities and resource materials for their use in*
- *enhances quality of learning of Physical Science at the secondary level.*

Detailed Course Content

UNIT-1. Physical Science in School Curriculum

- *Nature of Physical Science*: Nature and Scope of Science and Physical Science in particular,
  - Importance of Physical Science in daily life,
  - Objectives of teaching-learning Physical Science at the secondary school Level
  - Emphasis of NCF-2005 on transaction of curriculum. Going beyond biological science text book

UNIT-2. Methods of Teaching-learning Science

- *Experimentation-* Experimentation under controlled conditions within laboratory and beyond laboratory situation; Process and limitations.
- *Problem Solving-* Problem identification, formulation of hypotheses, collection of data, testing hypotheses and arriving at solution.
- *Demonstration-cum-Discussion*
- *Project* – Situation analysis, selection of the project, preparation of the project proposal, implementation of the project, evaluation and reporting.

Unit-3 Teaching Learning Materials and Resources

- Preparation of Unit Plan; Preparation of Lesson Plans (Traditional, Activity Approach and constructivist approach (5E model and ICON model)
- Teaching- Learning Materials – Preparation, collection, procurement and use of teaching-learning materials in Science like, Charts, Graph,
- Bulletin Board, Models; ICT materials like , Filmstrips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet;

Tasks & Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Developing five activities/experiments in Physical Science and prepare a brief

Report.
- Preparation of a model/tool/device based on any principle of Physical Science included in the course preferably using locally available materials.
- Preparation of five lesson plans on any topic of Physical Science included in the Science textbook for the secondary schools

Suggested Readings

NCERT,National Curriculum Framework-2005
NCERT,Position Paper of NFG on Teaching of Science-2005
Das, R.C. (2005). *Science teaching in schools*. New Delhi: Sterling Publishers.
Herr, Norman & Cunningham, James (1999). *Hands-on chemistry activities withreal-life applications.* San Francisco, CA: Jossey-Bass.

A. Pedagogy of Social Science –I

Objectives

On completion of this course, the student- teacher;

- develops an understanding of the nature of Social Sciences, both as individual discipline and as an integrated/ interdisciplinary area of study;
- identifies, prepares, collects different teaching-learning resource materials and use effectively in the classroom;
- reflects on the prevailing pedagogical practices in classrooms and uses constructivist perspectives while facilitating learning of social sciences;
- acquires basic knowledge and skills to analyze and transact the Social Sciences curriculum effectively following wide-ranging teaching learning strategies in order to make it relevant for life;

Unit-I Status and Issues in Social Science

- Meaning, Nature, Scope and Importance of Social Sciences
- Correlation of social sciences with life, nature, mathematics, science and technology and Integrating subjects; moving from topics to themes
- Place of social sciences in the present school curriculum at secondary level
- General and subject specific objectives of social sciences at secondary level
- Epistemological frame for social sciences envisage inNCF-2005

Unit-II Learning Resources in Social Sciences

- Primary and Secondary Sources: Data from field, library materials such as textual/reference materials, journals, magazines, newspapers, reports, documents, records and gazettes, dictionaries and encyclopedias
- Teaching-learning resources in Social Sciences: Preparation, collection and use of content specific teaching learning materials-
  -atlas, map, globe, map book
  -timeline, historical map
  -table, diagram, graph
  -chart, picture, photograph, model
  -T. V., radio, CDs, multimedia and internet, satellite imagery and aerial photograph.

Unit-III Teaching-learning Strategies in Social Sciences

- Interactive, critical pedagogy and constructivist strategies in social sciences
- Teaching-learning strategies in social sciences: Narration cum discussion, problem solving, observation, field trip, project work, concept mapping, collaboration, co-operative learning, dramatization, simulation, bal-panchayat, mock parliament, storytelling, computer assisted learning and teaching-learning strategies for children with different abilities

(Meaning and uses of above mentioned teaching-learning strategies in different subject areas)

Tasks and Assignment:
Each student-teacher is required to submit *one* assignment from the following (1 **x 10 marks = 10 marks**):

- Organization of environmental and social awareness programmes like Election Awareness programmes, female feticide etc.
- Submit a Report on field trips visit to Historical place, Geographical place
- Prepare a report on Pedagogical content analysis and concept map
- Organization of Balpanchayat, Mock parliament

(Conduct through these teaching Learning strategies like project, case study and action research of above mentioned subject areas)

Suggested Readings

Arora, K .L. (1976).*The Teaching of Geography*.Jullandhar: Prakash Brothers.

Bhaduri, A. (2005). *Development with Dignity: A case for full Employment*, New Delhi: National Book Trust.

Blaug, M. (1992).*The Methodology of Economics or How Economist Explain*. Cambridge: Cambridge University Press.

Carr, E. H. (1962). *What is History?* London: Knopf.

Carretero, M., and Voss, J. F. (Eds.) (1994).Cognitive and Instructional Processes in History and the Social Sciences. Hillsdale: Lawrence Erlbaum Associate.

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

Dasgupta, P. (2007). *Economics: Avery Short Introduction*.Oxford University Press.

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

Drake, F. D. & Lynn, R. N. (2005).*Engagement in Teaching History: Theory and Practices for Middle and Secondary Teachers*. Columbus, OH: Pearson.

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

Ghate, V.D. (1956). *Teaching of History*. Bombay: Oxford University Press.

Graves, N.G. (1982). *New Source Books for Geography teaching*. Longman.

Hall, David (1976). *Geography Teacher*. London: Unwin Education Books.

Huckle, J. (1983). *Geographical Educational Reflection and Action*. London: Oxford UniversityPress.

James, T. H., Arthur,J. and Hunt, M. (2001). *Learning to Teach History in the Secondary School: A Companion to School Experience*. London: RoutledgeFalme.

Kent, A. (Ed.) (2000). *Reflective Practice in Geography Teaching*. London: Paul Chapman Publishing Ltd.

Kochhar, S. K. (1970). *Teaching of Political Science.* New Delhi: Sterling Publishers Publishing House.

Lewis, B. (1975). *History: Remembered, Recovered, Invented*. New York: Simon and Schuster, Inc.

Mehlinger, Howard D. (Ed.) (1981). *UNESCO Handbook for the Teaching of the Freedom Struggle in India and Pakistan*. New Delhi: Penguin India.

Morrey, D. C. (1972).*Basic Geography*. London: HienManns Education Books.

Smith, M. (2002).*Teaching Geography in Secondary Schools: A Reader*. London: Taylor& Francis.

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

Stanford, M. (1985).*The Nature of Historical Knowledge*. Oxford: Basic Blackwell.

Trigg, R. (1985). *Understanding Social Science: A Philosophical Introduction to the Social Sciences*. Oxford: Basic Blackwell.

UNESCO.(1965). *Source Book for Geography Teaching*. London: Longman.

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

15.	PR-5	Acquisition of Core Teaching Skills	50	-	50
		Sub-Total	**70**	**80**	**150**

Semester-VI

16.	CPS-6	**B.Pedagogy of School Subject-II** *Language (Odia/English); Mathematics & Biological Science*	10	40	50

B. Pedagogy of Odia II

Objectives

On completion of this course, the student-teacher

- *explains the fundamentals of Odia linguistics and their relevance in teaching learning Odia.*
- *plans appropriate pedagogic treatment of the prescribed textual contents (in Odia) of classes IX and X.*

Unit-1 Relevance of Linguistics in Odia Language Acquisition:

- Elements of Language – sound, vocabulary and structure
- Odia Dhwani (Sound) – Types and manner of articulation
- Odia Vocabulary – Types (Tatsama, Tadbhava, Deshaja, Baideshika), Word formation process and principles (use of Upasarga, Anusarga, Pratyaya, Samasa and Sandhi), Semantics (Lexical and Contextual)
- Odia Syntax – Processes and Principles
- Use of Linguistics in effective teaching-learning of Odia language

Unit-2 Pedagogical Treatment of Content:

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below.

Content	Aspects of Pedagogical treatment

• Poems-Matira Manisha, Gopa Prayana, Hey Mora Kalama, Padma • Prose Pieces-Jatiya Jivana, Prakruta Bandhu, Odia Sahitya Katha • Grammar-Karaka, Bibhakti, Samasa(Pieces to be selected from class X Text as indicated)	• Identification of language items(new vocabulary, expression and grammar components) • Identification of scope in the content to be presented for facilitating learning language skills • Formulation of learning objectives • Selection of methods and approaches/strategies • Preparation of teaching-learning materials • Designing of learning activities • Planning teacher and student activities for effective interaction • Assessment strategies (focusing formative)

Unit-3 Pedagogical Tools and Resources for Language Teaching
- Concept mapping techniques;
- Concept map as tool for learning new vocabulary and comprehending texts;
- Tools for information processing, assimilating and synthesizing in meaningful ways that signifies language for context learning;
- Teaching aids and their relevance for effective transaction;
- Use of audio visual aids;
- Use of multimedia and ICT for language teaching

Tasks & Assignments

Each student-teacher is required to submit *one* assignment from the following (1 **x 10 marks = 10 marks)**:
- Preparation of a model question paper

- Evaluation of Oriya text books/work books

- Preparation of teaching aids and learning material

Suggested Readings

Dhal, G.B. (1974). *Dhwani bijanana*. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.

Mohanty, B. (1970). *Odia bhasara utpati O 65arma bikasha.* Cuttack : Friends Publishers.

Mohanty, J., Barik, N. & Khandai, U. (1983). *Odia sikshadana paddhati.* Cuttack : Nalanda.

Mohapatra, D. (1976). *Odia Dhwani tattwa O sabdha sambhar*. Cuttack : Grantha Mandir.

Mohapatra, N. & Das, S. (1943). *Sarbasara vykarana.* Cuttack : New Student's Store

Nayak, B. (1974). *Matrubhasa Sikshadana paddhati*. Bhubaneswar : Odisha Rajya Pathya Pustaka Pranayana Sanstha.

Padhee, B. (1972). *Odia bhasara rupa tattwa.* Berhampur : Pustak Mandir.

Rout, P.C. (1986). *Matrubhasa sikshadana paddhati.* Jajpur : Saraswati Printers

Sahoo, B. (1975). *Bhasa bigyanara rupa rekha*. Cuttack : Paramarthi Printers

Sarangi, N. (2001). *Bruhat odia vykarana.* Cuttack : Satyanarayan Book Store

Tripathy, K.B. (1977). *Odia bhasa tattwa O lipira krama bikash*. Bhubaneswar : Odisha

Rajya Pathya Pustaka Pranayana Sanstha.

B. Pedagogy of English II

Objectives

On completion of this course, the student-teacher

- *uses the understanding of phonetics for facilitating students' speaking in English*
- *develops test items to assess learning in English and provide feedback as well as prepare enrichment materials*
- *plans appropriate pedagogical treatment of the prescribed contents for Effective classroom transaction*

Detailed Course Content

Unit 1: English Language and its Articulation

- Analysis of English language with reference to its substance, form and context
- Sounds of English language : Consonants and Vowels (Pure and Diphthongs)
- Articulation of sounds in English – appropriate use of organs of speech
- Patterns of stress and intonation in English language
- Kinds of errors made by the Odia speaking learners while speaking English and their remediation

Unit 2: Teaching-Learning Assessment in English

- Teaching-learning materials in English: Types and Importance: Effective use of Teaching-Learning Materials: Preparation of context specific teaching-learning materials in English
- Assessment in English: assessing skills in English; framing different types of objective-based test items (Extended Response Type, Restrictive Response Type and Objective Type),Portfolio assessment in English
- Continuous and Comprehensive Evaluation :Diagnostic Evaluation , Remedial Instruction, Role of evaluation in the appraisal of pupil's learning, Steps of evaluation of pupil's learning, An appraisal of the present system of evaluation in English

Unit 3: Pedagogical Treatment of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below:

Content	Aspects of Pedagogical treatment
- Any six topics (Three prose pieces and Three poems) from the prescribed text for Classes IX and X by BSE, Odisha - Parts of Speech - Time and Tense - Change of Voice - Direct and Indirect speech - Sentence Pattern Translation and Composition (Writing letter and essay, noting, drafting, reporting)	- Identification of language items (new vocabulary, expression and grammar components) - Identification of scope in the content to be presented for facilitating learning of language skills - Specification of learning objectives - Selection of methods and approaches / strategies - Preparation of teaching-learning materials - Designing of learning activities

	• Planning teacher and student activities for effective interaction • Assessment strategies (Using varieties of tools and techniques)

Tasks and Activities

Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Diagnosis of learner difficulty in speaking English and preparation of the remedial exercise
- Preparation of a blue print on any topic from the prescribed text and development of test items in line with the blue print
- Pedagogical content analysis of any topic from the prescribed text in term of identification of language items (new vocabulary, expressive and grammar composition) and designing of learning activities and assessment strategies

Suggested Readings

- Bansal, R.K. (1971). *An outline of general phonetics.* Bombay : Oxford University Press
- Bansal, R.K. and Harrisson, J.B. (1972). *Spoken English for India. Madras* : Orient Longman
- Baruah, T.C. (1984). *The English teachers handbook.* New Delhi : Sterling Publishers
- Billows, F.N. (1961). *The techniques of language teaching.* London : William Heffer and Sons.
- Carrol, J.B. (1972). *Systems and structures of English.* London: Oxford University Press.
- Das, B.K. et al. (2009). *An Introduction to professional English and soft skills.* New Delhi : Cambridge University Press
- Dash, N. and Dash, M. (2007). *Teaching English as an Additional Language*: Atlantic Publishers and Distributors (P) Ltd.
- Dodson, C.J. (1963). The *bilingual method. London : Pitman Publishing. Frisby*, A.W. (1970). Teaching english: notes and comments. London: ELBS.
- Gokak, V.K. (1963). *English in India: Its present and future.* New Delhi: Asia Publishing House.
- Harish David, P. (1969). *Testing English as second language*. New Jersy : McGraw Hill
- Hornby, A.S. (1962). *The teaching of structural words and sentence patterns*. London: Oxford University Press.
- Jones, Daniel (1967). *An outline of English phonetics. London* : William Heffer and Sons
- Kohli, A.L. (1970). *Techniques of teaching English*. Jalandhar : Dhanpat Rai and Sons.
- Krishna Swamy, N. and Sri Raman, T. (1994). *English teaching in India*. Madras : T.R. Publication.

- Palmer, H.E. (1980). Grammar of spoken english. Cambridge: Heffer.
- Prabhu, N.S. (1989). Second language pedagogy. New Delhi : Oxford University Press
- Sachdeva, M.S. (1973). A new approach to teaching of english in India. Ludhiana : Prakash Brothers
- Saraswati, V. (2004). English language teaching. New Delhi : Orient Longman
- Sharma, A.K. (1985). Aspects of english language teaching in India. New Delhi : Bharat Book Depot.
- Sinha, S.P. (1978). English in India. New Delhi : Janaki Prakashan

B. Pedagogy of Biological Science-II

Objectives

On completion of this course, the student teacher

- plans units'lessons in biological science using traditional and constructivist approaches for effective classroom transactions
- develops and collects activities and resource materials for their use in enhancing quality of learning of biological science at secondary level
- uses appropriate tools and techniques for continous and comprehensive assessment of learning biological science.
- states the concepts in Biological science included in secondary school curriculum and make pedagogical analysis of the concepts.

Detailed Course Contents

1. Teaching Learning Materials and Resources

- Teaching-Learning Materials in Science: Preparation, collection, procurement and use of teaching-learning materials in Science like, Charts, Graph, Bulletin Board, Models, ICT materials like Filmstrips, Slides, Transparencies, TV, Audio and Video, Computer, and Internet;
- Learning Activities – Science laboratory activities; Observing flora and fauna in their natural setting, Science Club, Science Seminar, Preservation of biological specimens for learning and building Biological Museum, Science Exhibition and field Trips
- Preparation of Unit Plan; Preparation of Lesson Plans -Traditional, Activity Approach and constructivist approach(ICON & 5E model).

2. Assessment in Science learning

- Construction of Classroom tests and Unit tests, designing blueprint, preparation of test items.
- Assessment devices ; Assignments, projects work, portfolios, Observation of activities.
- Diagnosis of learning difficulties in Biological Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

3. Pedagogical analysis of Contents

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below:

Content	Aspects of pedagogical treatment
- Improvement of Food production - Cell and its Organization - Nutrition, Respiration, Excretion and Reproduction - Biodiversities - Natural Resources and its Pollution - Our Environment; Ecosystem, Ecological system flow of energy, Bio-geochemical cycles in nature, Environmental degradation	• Identification of concepts and sub-concepts, • Expected specific learning outcomes, • Methods / approaches of teaching-learning, • Teaching-learning materials to be used, • Expected teacher and students activities, and • Assessment strategies

Tasks & Assignments:

Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Preparation of five lesson plans on any topic of Biological Science included in the Science textbook for the secondary schools.
- Preparation of a unit test on any topic by developing the Blue Print and the test items conforming to the blue print.
- Collection and preservation of biological specimens from the immediate environment (at least five, selecting minimum two each from preservable plants and animals/insects)

Suggested Readings

NCERT,National Curriculum Framework-2005
NCERT,Position Paper of NFG on Teaching of Science-2005
NCERT,Position Paper of NFG on Examination Reforms-2005
Buffaloe, Neal. & Throneberry, J. B. (1972). Principles of biology teaching. New Delhi: Prentice Hall of India.
Herr, Norman (2007) The Sourcebook for teaching science. San Francisco, CA: Jossey-Bass.
Kulashrestha, S.P. (2009) Teaching of Biology. Meerut: R.Lall Book Depot.
Mangal, S.K. & Mangal, S. (2007). Teaching of biological science. Meerut: International Publishing House.
Miller, D.F. & Blayses, G.W.(2011). Methods and materials for teaching biological sciences. New York: McGraw Hill.
Sharma, R.C. (1998). Modern science teaching. New Delhi: Dhanpat Rai and Sons. TESS India (2015). Key resources. The Open University U.K.(http//creativecommons.org/licences/ and http//www.tess-india.edu.in/)
Vaidya, Narendra (1992). Science teaching for 21st century. New Delhi: Deep and Deep. Zaidi, S.M. (2004). Modern teaching of life sciences. New Delhi:Deep and Deep
Zaidi,S.M (2004).modern teaching of life sciences. New Delhi: Anmol Publications.

B. Pedagogy of Mathematics-II

Objectives

On completion of this course, the student teacher

- *Conduct continuous and comprehensive assessment for enhancing the quality of Mathematics learning.*
- *Explain the concepts in Mathematics included in the secondary school curriculum and make pedagogical analysis of those concepts*

- *Develop and collect activities and resource materials for their use in enhancing the quality of learning Mathematics at the secondary level*

4. Curricular components
Activities in Mathematics: Mathematics Quiz, Mathematics Club activities, Mathematics Exhibition, Planning and organizing Mathematics laboratory activities, Mathematics outside the classroom. computers, Graphic calculators, Maintaining portfolio in Mathematics

5. Assessment *of* and *for* Mathematics Learning
• Assessment *of* Mathematics learning: Unit test – Designing blue print, item construction, marking schemes
• Assessment *for* Mathematics Learning: Assignments, Projects and portfolios in Mathematics, group and collaborative assessment in Mathematics
- Non-testing methods of assessment *of/for* mathematics Learning: Observation of learners in action, rating of participation in various Mathematics tasks and activities,
- Diagnosis of difficulties in learning Mathematical concepts, Remediation of the difficulties, enrichment programmes in Mathematics learning –National Mathematics Talent Search, Mathematics Olympiad.
- Planning for continuous assessment of classroom learning in Mathematics.

6. Pedagogical Treatment of Content
Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below.

Content	Aspects of Pedagogical treatment
Number System, Ratio and Proportion ▪ Set, Relations, and Functions ▪ Algebraic equations: Linear, Simultaneous and Quadratic Equations and their graphical solutions, Polynomials ▪ Theory of Indices, Logarithm and Anti-logarithm ▪ Lines and Angles, Axioms,	Identification of concepts and sub-concepts ▪ Expected specific learning outcomes ▪ Methods / approaches of teaching-learning ▪ Teaching-learning materials to be used ▪ Expected teacher and students activities

Triangles, Polygons and Circles, Coordinate Geometry, ▪ Trigonometric Ratios and Identities Problems on Height and Distance	▪ Assessment strategies

Tasks & Assignments
Each student-teacher is required to complete assignments on *any one* of the following:
• Preparation of a unit test on any topic by developing the Blue Print and the test items conformingto the blue print.
• Develop five activities in Mathematics to be used for enrichment programme.
• Diagnosis of learner difficulty in Mathematics and preparation of remedial exercise.
• Designing pedagogical treatment for any topic of Mathematics and designing learning activities.

Suggested Readings
Cooney, Thomas J. et al. (1975). *Dynamics of Teaching Secondary School Mathematics*. Boston: Houghton Mifflin.
Driscoll,M., Egan, M., Nikula, J., & DiMatteo, R. W. (2007). *Fostering geometric thinking: A guide for teachers, grades 6-10*. Portsmouth, NH: Heinemann.

17.	CPS-7	**B.Pedagogy of School Subject-II** *Social Science & Physical Science*	10	40	50

B. Pedagogy of Physical Science II
On completion of this course, the student teacher

- *uses appropriate tools and techniques for continuous and comprehensive assessment of learning in Physical Science.*
- *awares of non formal channels for science education*
- *states the concepts in Physical Science included in the secondary school curriculum and make pedagogical analysis of those concepts*

Unit-1 Curricular Components
Encouraging learner to non-formal channels such as debate/discussion, project , science exhibition/fair , children science congress state and national level science exhibition , community participation

Unit-2 Assessment in Science learning
- Construction of Classroom tests and Unit tests, designing blueprint, Preparation of test items.
- Assessment devices; Assignments, projects work, portfolios, Observation of activities.
- Diagnosis of learning difficulties in Physical Science, Remediation of difficulties, Enrichment Programmes.
- Planning for continuous assessment of classroom learning.

Unit-3 Pedagogical treatment of Contents
- Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated in the right cell below:

Content	Aspects of pedagogical treatment
- Atomic Structure: Atoms and Molecules, Classification of elements, - Motion, Laws of Motion, Concepts of Work, Energy, Pressure and their measurement, - Energy: Sources and forms of energy, Renewable and non-renewable energy - Electricity and Magnetism: Electric Circuit, Potential Difference, Magnetic Field, Lines of Force, Electro- magnetic induction. - Chemical Reactions and Equation - Heat, Light and Sound	- Identification of concepts and sub-concepts, - Expected specific learning outcomes, - Methods / approaches of teaching-learning, - Teaching-learning materials to be used, - Expected teacher and students activities - Assessment strategies

Tasks & Assignments

Each student-teacher is required to submit *one* assignment from the following(1 **x 10 marks = 10 marks**):

- Preparation of a unit test on any topic by developing the Blue Print and the test items Conforming to the blue print.
- Designing pedagogical treatment for any topic of Physical Science and designing learning activities

Suggested Readings
NCERT*, National Curriculum Framework*-2005
NCERT, *Position Paper of NFG on Teaching of Science*-2005
NCERT, *Position Paper of NFG on Examination Reforms*-2005
Das, R.C. (2005). *Science teaching in schools*. New Delhi: Sterling Publishers.
Herr, Norman & Cunningham, James (1999). *Hands-on chemistry activities with real-life applications.* San Francisco, CA: Jossey-Bass.

B.Pedagogy of Social Science –II

Objectives

On the completion of this course, the student- teacher:

- develops skills and pedagogical competencies to formulate specific learning outcomes for different contents of History, Geography, Political sciences and Economics;
- acquires different characteristics to become a professionally competent social science teacher

- constructs appropriate tools and techniques for assessment of the students learning outcomes in social sciences
- critically analyze text book and syllabus of social science subjects at different stages of school education
- develops skill to organize and conduct various activities related to social science areas

Unit-IV Lesson Planning and Instruction in social sciences

- Planning for instruction in social sciences (Planning of different skills, strategies, activities and learning experiences in different social sciences subject areas)
- Development of yearly plan, unit plan and lesson plan(5 E and ICON)
- ICT based lesson planning and transaction in different social sciences

Unit-V Assessment in Social Sciences

- Importance of assessment in social sciences and Continuous comprehensive assessment (CCE) in social sciences
- Indicators for assessment in social sciences
- Quantitative and qualitative tools and techniques in social sciences (checklist, anecdotal records, observation, sociometry, rating-scale, rubrics and portfolio)
- Construction of tests: questions for testing cognitive and co-cognitive areas of learning
- Analysis of social science text books in the light of concepts, pedagogical processes, resources, child perspective, national and state interests (social sciences text books of different school boards may be taken up for discussion and analysis)

Unit-VI Pedagogical Analysis of Content

Each of the following contents shall be analyzed in terms of the pedagogical treatment indicated below:

Content	Aspects of Pedagogical Treatment
History • The French Revolution • Peasants and Farmers • Clothing: A social history • Nationalism in India • Work, life and leisure • Art and Culture **Geography** • India- size and location • Drainage • Climate • Natural vegetation and wild life • Population **Political Science** • Democracy in the contemporary world • Constitutional Design • Electoral politics • Working of institutions	Pedagogical content analysis of the units with reference to: ➢ Identification of concepts and sub concepts ➢ Preparation of concept map ➢ Determination of expected specific learning outcomes ➢ Identification of inter-disciplinarity of content ➢ Methods/ Approaches/ Strategies of Teaching learning ➢ Teaching learning materials to be used ➢ Expected teacher and students experiences and activities ➢ Assessment strategies (Formative)

• Democratic rights **Economics** • People as resource • Poverty as a challenge • Food security in India	

Tasks/Assignment

Each student-teacher is required to submit *one* assignment from the following (1 **x 10 marks = 10 marks**):

- Visit to the nearest historical sites/monuments/national archives/ state archives/museum
- Visit to local village/town/industrial sites/hydro/power point stations/mining/tourism places/agricultural/production sites
- Status Survey of Unemployment/socio-economic status of family/child labour/raw material/labour/finance and marketing
- Visit to Vidhansabha/municipal council/panchayati raj institutions and village

Suggested Readings

Arora, K .L. (1976).*The Teaching of Geography*.Jullandhar: Prakash Brothers.

Bhaduri, A. (2005). *Development with Dignity: A case for full Employment*, New Delhi: National Book Trust.

Blaug, M. (1992).*The Methodology of Economics or How Economist Explain*. Cambridge: Cambridge University Press.

Carr, E. H. (1962). *What is History?* London: Knopf.

Carretero, M., and Voss, J. F. (Eds.) (1994).Cognitive and Instructional Processes in History and the Social Sciences. Hillsdale: Lawrence Erlbaum Associate.

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

Dasgupta, P. (2007). *Economics: Avery Short Introduction.*Oxford University Press.

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

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

Ghate, V.D. (1956). *Teaching of History*. Bombay: Oxford University Press.

Graves, N.G. (1982). *New Source Books for Geography teaching*. Longman.

Hall, David (1976). *Geography Teacher*. London: Unwin Education Books.

Huckle, J. (1983). *Geographical Educational Reflection and Action*. London: Oxford UniversityPress.

James, T. H., Arthur,J. and Hunt, M. (2001). *Learning to Teach History in the Secondary School: A Companion to School Experience*. London: RoutledgeFalme.

Kent, A. (Ed.) (2000). *Reflective Practice in Geography Teaching*. London: Paul Chapman Publishing Ltd.

Kochhar, S. K. (1970). *Teaching of Political Science.* New Delhi: Sterling Publishers Publishing House.

Lewis, B. (1975). *History: Remembered, Recovered, Invented*. New York: Simon and Schuster, Inc.

Mehlinger, Howard D. (Ed.) (1981). *UNESCO Handbook for the Teaching of the Freedom Struggle in India and Pakistan*. New Delhi: Penguin India.

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

Sartori, G. (ED.) (1984). *Social Science Concepts: A Systematic Analysis*. New delhi: Sage

Publications.

Trigg, R. (1985). *Understanding Social Science: A Philosophical Introduction to the Social Sciences.* Oxford: Basic Blackwell.

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

18.	PR-6	Analysis/Evaluation of Text Books prescribed by BSE, Odisha	50	-	50
		Sub-Total	**70**	**80**	**150**
		Semester-VII			
19.	PE-7	Knowledge and Curriculum-I	10	40	50

Objectives

On completion of this course, the student- teacher :
- states and explains the nature of knowledge
- describes the process of constructing knowledge
- enumerates the different forms of knowledge and how it is reflected in schools subjects

Detailed Course Content

1. Understanding the Nature of Knowledge
- Knowledge: Concept and nature (difference between knowledge and skill, knowledge and information, rational and empirical)
- Types and theories of knowledge
- Knowledge Acquisition: sources of knowledge and process of acquisition

2. Construction of knowledge
- Knowledge transmission (teacher-centric) vs. Knowledge construction (learner-centric)
- Process of knowing : dialogue, activity and discovery -views of Socrates, Dewey and Bruner
- Construction of knowledge : theories of Piaget and Vygotsky; implications for curriculum

3. Forms of knowledge and Its organization and Testing
- Different Forms of knowledge as included in schools subjects
- Knowledge acquired through scientific method
- Vertical and Horizontal integration of knowledge
- Testing of knowledge: Correspondence theory, Coherence theory, dialectical theory and pragmatic theory

Tasks and Assignments:

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):
- Prepare a Flow diagram on forms of Knowledge and identify the forms of knowledge reflect in your respective school subjects.

- Organize a group discussion to deliberate the various forms of knowledge in different disciplines and submit the group report

20.	PE-9	Gender, School and Society	10	40	50

objectives

On completion of this course, the student-teacher

- *State the key concepts related to the gender issues.*
- *Identifies key gender issues in school, curriculum, textbooks andpedagogical process.*
- *Understands the ways to address gender issues in and out of school context.*

Detailed Course Content
1. Gender Related Concepts
- Key concepts: sex and gender, masculinity vs feminism, patriarchy, gender bias, gender parity, gender asymmetry
- Factors influencing gender identity construction: Home, School, Society and Culture
- Role of family, school, community and media in removing gender bias

2. Forms of Gender Inequality and Issues
- Forms and issues: Mortality inequality, Natality inequality, Special opportunity inequality, Professional inequality, Basic facility inequality, Ownership inequality, Household inequality
- Gender inequality in school context: access and participation, gender stereotype role assignments, curriculum and textbooks, inadequate gender sensitive facilities, teachers' preferential treatment, sexual abuse in school

3. Different Programmes for promoting girls education
- Rights of the Girls child
- Policy provisions – NPE (1986/92), NCF (2005), RTE (2009), State Women's Policy (2014) and National policy on women empowerment
- Analysis of programmes like NPEGEL,KGBV and SHG's

Tasks and Assignments
Each student-teacher is required to submit assignments selecting *any one*of the following(1 **x 10 marks = 10 marks)**:
- Surveys of five families on role distribution among family members and preparation report
- Preparation of a report on gender-based roles and practices of the students and staff
- Analysis of a secondary level textbook from gender perspective

Suggested Readings

Chakravarti, Uma. (2003). *Gendering cast through a feminist lens*. Calcutta, Bhatkal and Sen.
Govt. of India (1992). *National policy on education 1986/92*. New Delhi: MHRD, Govt. of India,
Govt. of India (1992). *Programme of action*. New Delhi: MHRD, Govt. of India.
Jone, Mary E. (Ed.) (2008). *Women's studies in India: A reader*. New Delhi : Penguin Books.
Nayar, U. & Duggal, J. (1997). *Women's equality and empowerment through curriculum: A hand book for teachers at primary stage*. New Delhi: NCERT
NCERT (2005). *National curriculum framework 2005*. New Delhi: NCERT.

Srivastava, Gouri (1997). *Women who created history: Exemplar materials for textbook writes and teachers*. New Delhi : NCERT

| 21. | CPS-3 | Language across Curriculum | 10 | 40 | 50 |

Objectives:
On completion of this course, the student-teacher :

- *identifies the language backgrounds of students and facilitate their transition from home / regional language to standard language.*
- *analyzes the nature of classroom discourse and devise strategies to improve communication skills of students.*
- *develops the appropriate skills of reading and writing among the learners and facilitate reading writing connection.*
- *Defines his/her role as facilitators of learners' language enrichment irrespective of the subjects they teach.*

Detailed Course Content

1.Language background of Learners
- Varied language contexts of the learners – dialect, regional varieties and standard language; significance of first language in learning
- Home language Vs School Language, written vs spoken language – Transmission and movement:
  challenges and strategies
- Understanding multilingual context -Challenges and strategies

2. Language in Classroom
- Nature of classroom discourse and significance of language
- Communication skills – promotion of oral skills through questions, discussion, sharing and interaction
- Language across various disciplines and subjects – humanities and science; Role of language in ensuring optimum learning in subject areas

3. Reading-writing connection
- Reading in different content areas for information and data gathering, critical understanding; Strategies for developing reading skills such as scanning, skimming, in-depth reading, note making
- Reading-writing connection in different content areas – Use of note making for preparing a write-up, use of information gathering for summarizing,
- Writing for various purposes – preparing report, writing paragraph,explanatory notes, expansion of ideas, presenting information in variousforms such as flow-chart, diagram, pie-chart, histogram
- process writing – generating / gathering ideas, drafting, revising and finalizing

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one*of the following(1 **x 10 marks = 10 marks)**:
- Preparation of a report on language diversities of learners in a secondary grade with strategies to address the cha llenges.
- Devising an action plan for developing the components (sub-skills) of reading / writing skill of the learners at the secondary level
- Expansion of an idea / ideas from the secondary level texts and presentation of the same in the form of flow-chart / pie-chart / tree diagram

Suggested Readings

Daniel, Larsen–Freeman (2010). *Techniques and principles of language teaching (2nd Edn.).* Landon: Oxford University Press.

Kumar, Krishna (2008). *The child's language and the teacher – A handbook*. New Delhi: National Book Trust.

Lightbown, P.M. and Spada, N. (1999). How languages are learned. Oxford: Oxford University Press.

22.	CPS-4	Action Research	10	40	50

Course Objectives:
After completion of this course the student teachers:

- explains the concept, need and importance of action research and its difference from pure and applied research in education.
- Conducts action research by selecting and using appropriate methods
- Follows the approved format and style in reporting the action research.
- Evaluates an action research project in terms of its objectives, processes and implication.

Detailed Course Content:
UNIT -I: Understanding Action Research
- Need for research in improving educational practices
- Importance, characteristics and objectives of action research
- Comparison between pure, applied and action research

UNIT -II: Conducting Action Research
- Designing action research project
- Procedures and steps in conducting Action research
- Tools and Techniques used for collection of data
- Techniques of data analysis
- Strength and weakness of Action research

UNIT III : Reporting Action Research
- Format and style
- Evaluating an action research project
- Sharing and reflecting on the process of research and implications of the outcomes

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Conduct an action research on any school/classroom problem and prepare a report

Suggested Reading

Atkins, L & Wallace, S. (2012). *Qualitative research in education*. London: Sage Publications.
Best, J.W., & Kahn, J.V. (1998). *Research in education* (8th ed.). Needham Heights,
MA: Allyn and Bacon.
Borg, W. (1981). *Applying educational research: A practical guide for teachers*. New
York: Longman.
Ferrance, Eileen (2000). *Action research*. Providence, RI: Laboratory at Brown University (LAB).
Johnson,A.P.(2005). *A short guide to action research* (2nd ed.). Boston: Allyn & Bacon.
Mertler, C.A.(2006). *Action research: Teachers as researchers in the classroom.*

NewDelhi: Sage Publications.
Oja, S.N., & Smulyan, L. (1989). *Collaborative action research: A developmental approach.* New York: Falmer Press.
Schmuck, R.A.(1997). *Practical action research for change*. Arlington Heights, Illinois: SkyLight Professional Development.
Stringer, E.T. (1999). *Action research*. Thousand Oaks, CA: Sage Publications.

| **23.** | EPC-1 | Understanding the self | 10 | 40 | 50 |

OBJECTIVES

On completion of this course, the student-teacher

- *Explains that any Self is a human resource to exercise all the resources cognitive, affective and psychomotor.*
- *Realizes that the Self does not have independent existence but related to nature, other selves and the 'Unknown' causing it and this great design of the Universe.*
- *Performs one's function to the possible extent as any part of the Nature is silently doing so; thereby developing self-actualization and self-esteem.*
- *Realizes that one is responsible as a person and as a teacher for the integrated development of oneself and one's pupils: Physical, cognitive, social, emotional, aesthetic, moral, and spiritual developments.*
- *Realizes the commonness and uniqueness prevalent in Nature and human nature and feel equality as the reality and contribute to the furtherance of evolution at mental level.*

Detailed Course Content
1. Self-Concept
- What is self:
- Dimensions of self: real, ideal and social
- Self-identity, self-esteem and self efficacy
- Johari window for self exploration and Margaret Mead "Looking Glass self"
- SWOT analysis for self understanding and self acceptance

(Activity: Critical Thinking Practices: Organization of brainstorming sessions to develop cognitive skills-independent thinking to promote critical thinking and creative thinking; decision making and problem solving with all their components Purpose of this activity is to help student teachers in understanding their cognitive skills using their cognitive resources of their self)

2. Development of Self-Actualization
- Self-awareness and Self-motivation
- Self-actualization: Concept of Self-actualization and Characteristic of a self actualize person
- Strategies for developing self actualisation

(Activity: Encouraging Nature observation, inner observation, nature walks, and reading biographies of great people who contributed their might out of self-abnegation but not with self-centeredness and sharing personal experiences)

3. Development of Professional Identity
- Professional Identity of Teacher: Variations(gender, relational, cultural); implicit beliefs, stereotypes and prejudices resulting from variations
- Problems related to professional identity of a teacher: Lack of self-esteem,

social status,
- Addressing problems related to professional identity

(Activity: Self-critical awareness about one's abilities and assets in different contexts of professional life and limitations in terms of knowledge, attitudes, skills and values).

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):
- Identification and documentation of one's assets and limitations as well as one's Opportunities and difficulties in the participated context.
- Documentation of the ways of dealing with conflicts in inter-personal relations at varied contexts.
- Documentation of stressed or emotionally loaded situations where in self-observation helped to build resilience.

Suggested Readings

Dalal A.S. (Ed.) (2001). *A greater psychology: An Introduction to the psychological thoughts of Sri Aurobindo*. Puducherry: Sri Aurobindo Ashram Pub.

Delors, Jaquis et al. (1996). *Learning the treasure within –Twenty first century education: Report of the UNESCO Education Commission*. Paris:UNESCO .

Goel, D.R. (2006). *Quality concerns in education*. Vadodara: CASE, M. S. University.

Krishnamurti J. (2000). *Education and significance of life*. Chennai, Krishnamurti Foundation India.

Krishnamurti, J. (1998). *On self- knowledge*. Chennai, Krishnamurti Foundation India.

UNICEF (2006): *Life skills modules-Adolescence education program*. New Delhi: UNICEF House.

24.	EPC-2	Critical Understanding of ICT	10	40	50

Objectives

On completion of this course, the student-teacher shall
· *describe a computer system*
· t*escribe the working of a computer*
· *operate the windows operating system*
· *use word processing package*
· *use internet for educational purpose*
· *use the word processing package in education*
· *appreciate the use of ICT in teaching and learning*
· *acquire the skill of trouble-shooting whenever there are problems in the working of computer*

Detailed Course Content
1. Computer Fundamentals
- What is computer - Basic anatomy of computer: Input Devices –Keyboards, Mouse, Touch

Screen, MICR, Light   Pen, Joy Stick, Digitizer, Scanner; Output Devices – VDU, Printers, laser, Inkjet; Data storage devices – Hard disk, Compact disk, Optical disk, Pen drive and other devices .

- Operating System: Types of Operating System – DOS, UNIX, WINDOWS; Brief introduction of Window; Utility & application of software.
- Introduction to Networking: Types of networking – LAN, WAN, WAN; World Wide Web – website.

3. **Introduction to Computer Applications**
- Word Processing: Creating Documents; Formatting Documents; Proofing and saving Documents; Printing Documents; Use of MS Words in education.
- Power Point Presentation (PPT): Creating a new PPT; Adding to presentation, Text Colours,

Fill-colors, Fill Effects, Line Effects; Line styles, Object Effects, Word Art, Animation Effects; Using Transition Effect; Giving an On-Screen Presentation, Navigation during presentation, Pausing the presentation; Use of PPT in education.

· Spread Sheet – MS Excel: Opening and saving a Worksheet; Spreadsheet operations; Editing a spreadsheet; Using Formulas and Functions; Use of MS Excel in Education.

3. ICT in Education
· Concept, Need and Importance of ICT in Education.
· Multimedia approach to education: Role of video conferencing, radio conferencing, television, EDUSAT and Internet in teaching-learning process. Their advantages and limitations.
· Challenges and Barrier to integration of ICT in Indian school Classrooms
· ICT Skilled Teacher – ICT skills and qualities of ICT teacher

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks)**:
- Developing a script on any topic of a school subject for an audio -visual programme.
- Developing a power point presentation on any one topic to be transacted at the secondary
- level
- Watching any five UGC Sponsored Educational programmes telecast by AVRC / EMRC
- and preparing a report

Suggested Readings
Gorden B. Davis (1982). *Introduction to computers*. New Delhi: Tata McGraw- Hill
Harold F.O' Neli. (1981). *Computer – based instruction*. Academic Press.
Kraynak, Joe & Harbraken, Jow. (1997). *Internet 6 – in – 1*. New Delhi: Prentice
Hall of India
Karl Schwartz. (2000). *Training Guide-Microsoft Windows 2000*. DDC Publishing
Inc.

Kumar, Gaurav (2014). *ICT Skill development*. Patiala : 21st Century Publication.
Kumar, Khushvinder and Kumar, Sunil (2004). *Computer Education*. Gurusar
Sadhar: GBD Publications.
Kumar, Khushvinder and Kumar, Sunil (2004). *ICT Skill Development*. Gurusar
Sadhar: GBD Publications.
Madnick, S.E. and Danovan, J.J. (1987). Operating Systems. New JersyMcGraw –
Hill Book Company.
Peter Norton. (1999). *DOS guide*. New Delhi: Prentice-Hall of India.

Rajaraman, V. (1998). *Fundamentals of computers*. New Delhi:Prentice-Hall of India.

Ralph, W. Gerard. (1967). *Computers and education*. New Jersey: McGraw-Hill Book Company.

Sharma, Lalit (2006). *Computer Education.* Ferozpur Cantt: Wintech Publications.

Sinha, P.K. (1992). Computer Fundamentals. New Delhi: BPB Publications.

Singh, Tarsem (2009). *Basic Computer Education.* Ludhiana: Tandon Brothers.

Singh, Tarsem (2009).ICT Skill Development. Ludhiana: Tandon Brothers.

25.	SI-1	School Internship-Part-I	200	-	200
26.	PR-7	ICT Practicum	50	-	50
		Sub-Total	**310**	**240**	**550**

;Semester-VIII

27.	PE-8	Knowledge and Curriculum-II	10	40	50

Objectives

On completion of this course, the student- teachers:

- *Differentiates different types of curriculum*
- *Explains the processes and principles of curriculum planning and development*
- *Elaborates the transaction, evaluation and renewal processes of curriculum*

Detailed course content

IV. Understanding curriculum

- Concept (difference between framework, curriculum and syllabus),Curriculum designs (subject-centered, learner-centered and Problem centered)
- Curriculum designs, dimensions and considerations: scope, sequence, continuity and balance
- Mandates for formulation of curriculum policy (Constitutional, socio-cultural, political, economic, global concerns and environmental)
- Curriculum framework – Concept, principles and coverage;NPE-1985, Revised in 1992, NCF 2005 and NCFTE 2009 –objectives, aspects and recommendations.

V. Curriculum planning and development

- Determinants of curriculum development: Content, Learning experiences and educational environment
- Principles of curriculum development
- Approaches to curriculum planning: Top down bottom up approaches and contextual approaches
- Processes / stages of curriculum development (preparation, tryout and finalization)

VI. Curriculum transaction, evaluation and renewal

- Classroom Transaction: Planning (time, space, manpower, material and scheme and plan of lessons), Preparation of curricular materials and activities(text and support materials, learning activities), mode of transaction and learners' involvement- resource management (use of TLMs, activity and question banks etc.,) use of assessment mechanism for learning
- Evaluation: Mode (internal and external), periodicity (continuous, periodic),

Mechanism (research studies, on-site observation, FGD, on-line feedback)
- Renewal: Use of evaluation feedback / inputs for Immediate / long-term revision

Tasks and Assignments:

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):
- Preparation of an appraisal report on any one aspect of the Systemic Reform envisaged in the NCF 2005 and its reflection in current practices.
- Identification of learning resources and designing of beyond classroom activities for transacting a lesson.

28.	PE-10	Inclusive Education	10	40	50

Objectives

On completion of this course, the student– teacher
- *Explains the changing concepts related to inclusive education.*
- *Elaborates the different categories of children with special needs, their problems in schooling and need of inclusive education to address their educational problems.*
- *States the barriers of inclusion in the existing schools.*
- *states the characteristics and dimensions of an inclusive school*
- *describes the process of developing an inclusive school*

Detailed Course Content

Unit-1 Inclusive Education:
- Changing concept of inclusion (Shifting from Separation to Integration to Inclusion); Inclusion as 'Education for all'
- Inclusion in Education- a human right (Right to Access, Equality and Quality Education
- Inclusive Education: Definition, rationale, characteristics and principles

Unit-2 Children With Special Needs
- Concept and Types of Children With Special Needs (physical, social and/or emotional) and their needs
- Problems in schooling the CWSN: Physical, Cognitive, Emotional
- Strategies for addressing their educational needs in inclusive set up: Early identification of Special needs children, provision of adequate staff, specific attention to their needs in classroom, removal of architectural barriers, provision of facilities, aids and equipments, interpersonal relation and support etc, Adapting the curriculum, Innovative practices in inclusive setting(peer tutoring, cooperative learning, team teaching, collaboration and consultation)

Unit 3 Inclusive School:
- Barriers for inclusion in school: Psycho-social, Infrastructural, Resource, Whole class-based instruction, Lack of participation
- Concept, dimensions and features of an inclusive school
- Developing an inclusive school: Creating inclusive cultures (building communities, establishing inclusive values), Producing inclusive policies (Developing the school for all, organizing support

for diversity), and Evolving inclusive practices (Orchestrating learning, mobilizing resources)

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Observation of an inclusive classroom set up and reporting
- Preparation of a report on classroom problems faced by any category of CWSN and the strategies adopted by the teacher.
- Preparation of a report on various types of interventions provided for any category of CWSN in school.

Suggested Readings

Ainscow, M. (1999) *Understanding the development of inclusive schools.* London: Falmer.

Ainscow, M., Dyson,A. and Weiner, S. (2013). *From exclusion to inclusion: Ways of responding in schools to students with special educational needs.* Berkshire, London: CIBT Education Trust.

Booth, Tony and Ainscow, Mel (2002). *Index for inclusion: Developing learning and participation in schools.* London: Center for S t u d i e s on Inclusive Education.

Dash, N. (2006). *Inclusive Education for Children with Special Needs*. Atlantic Publishers and Distributors (P) Ltd.

Dyson, A. and Millward, A. (2000) *Schools and special needs: issues of innovation and inclusion.* London: Paul Chapman.

Hart, S., Dixon, A., Drummond, M.J. and McIn tyre, D. (2004). *Learning without limits*. Maidenhead: Open University Press.

Nind, M., Sheehy, K. and Simmons, K. (eds). *Inclusive education: learners and learning contexts.* London: Fulton.

Thomas, G., & Loxley, A. (2007). *Deconstructing Special Education and Constructing Inclusion* (2nd Edn.). Maidenhead: Open University Press.

Tomasevski, K. (2004). *Manual on rights based education.* Bangkok: UNESCO.

UNESCO (1985). *Helping handicapped pupils in ordinary schools: Strategies for teacher training.* Paris: UNESCO.

UNESCO (1990). *World declaration on education for all and framework for action to meet basic learning needs.* International Consultative Forum on Education for All. Paris: UNESCO

UNESCO (1994). *The Salamanca world conference on special needs education: Access and quality.* UNESCO and the Ministry of Education, Spain. Paris: UNESCO

UNESCO (1996). *Learning: the treasure within. report to UNESCO of the International Commission on Education for the Twenty-fi rst Century.* Paris: UNESCO.

UNESCO (1998). *Wasted opportunities: When schools fail. Education for all. Status and trends.* Paris: UNESCO.

UNESCO (1999). *From special needs education to education for all: A discussion document.* Tenth Steering Committee Meeting UNESCO, Paris 30 September - 1 October 1998.

UNESCO (1999) *Welcoming schools: Students with disabilities in regular schools.* Paris: UNESCO

UNESCO (2005). *Guidelines for inclusion: Ensuring access to education for all.* Paris: UNESCO.

United Nations (1989). *Convention on the rights of the child.* New York: United Nations.

29.	CPS-9	Physical Education& Yoga	10	40	50

Objectives

On completion of the course, the student-teacher shall

- *Understand the importance of Physical Education in Human life*
- *List the different programmes of Physical Education*
- *Practice Yoga for peaceful and harmonious living*
- *Enumerate the relationship between Yoga and goals of life*

Detailed Course Contents

1. Understanding Physical Education

- Concept, need, scope, objectives
- Organization of various Physical Education Activities
- Role of Physical Education Teacher
- Preliminary idea of some common Games.

4. Programmes of Physical Education

- Preliminary idea of some common progrmmes of physical education
- Recreation and work-values of play
- Need for recreation, different types recreationary activities and their organization
- Provisional play and recreation in school time table
- Physical education in the context of NCF 2005

3. Yoga and Life goals

- Concept, need and objectives of Yoga
- Asthanga Yoga
- Benefits of Yogic practices
- Different postures / asanas
- Relation between Yogic practices and life goals

Tasks and Assignments

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Preparation of a report on different Physical Education programme s organized in school.
- Preparing a report on different Yogic practices
- Developing a set of recreation activities for secondary school students

| **31.** | CPS-10 | Guidance and Counselling | 10 | 40 | 50 |

Objectives

On completion of this course, the student-teacher

- *States the concept, need and principles of guidance.*
- *Explains the role of school in organizing different guidance programmes.*
- *Uses various tools and techniques of guidance in appropriate contexts.*
- *Narrates the process, tools and techniques of counselling.*
- *explains the qualities and role of a school counsellor*

Detailed Course Content

Unit-1 Understanding School Guidance Programme:

- Concept, Need and Importance and Principles of Guidance.
- Types of Guidance: Educational, Vocational and Personal (Nature and

Objectives of guidence at Secondary levels)

- Guidance Services in Schools – Counselling, Occupational Information
  Service, Pupil Inventory Services, placement and follow up
- Organizing guidance programmes in schools

Unit-2 Understanding School Counselling Programme:

- Meaning, principles and purposes of counselling
- Types of Counselling: Directive, Non–directive and Eclectic counselling
- Processes and techniques involved in counselling
- Qualities and role of a school counsellor

Unit-3 Tools and techniques of Guidance and Counselling:

- Guidance and counselling for Individual and group
- Tools in guidance and Counselling: Blanks, Cumulative Record Cards, Rating
  scale, Questionnaires, Psychological Tests and Inventories
- Techniques of Guidance (Observation, Interview and Sociometry) and Counselling
- Case study procedures in guidance

Task and Assignment

Each student-teacher is required to submit assignments selecting *any one* of the following(1 **x 10 marks = 10 marks**):

- Preparation of a comprehensive guidance programme for a school on the basis of
  need survey
- Preparation of a vocational / educational counselling programme for class–X students
- Preparation of a questionnaire for socio-economic survey of secondary school students
  for providing career counselling

Suggested Readings

Bhatnagar, Asha and Gupta, Nirmala (Eds.) (1999). *Guidance and counseling: A theoretical perspective*(Vol.I). New Delhi: Vikas

Bhatnagar, Asha and Gupta, Nirmala (Eds.) (1999). *Guidance and counseling: A practical approach* (Vol.II). New Delhi: Vikas.

Dave, Indu (1984). *The basic essentials of counseling.* New Delhi: Sterling Pvt. Ltd. Gazda

George R.M.(1989). *Group counseling: A development approach.* London: Allyn and Bacon

Gibson, R.L. & Mitchell, M.H. (1986). *Introduction to guidance.* New York: McMillan.

Nugent, Frank A. (1990). *An Introduction to the profession of Counseling.* Columbus: Merrill publishing Co.

Pietrofesa, J.J., Bernstein, B.,and Stanford,S.(1980). *Guidance:* An Introduction. Chicago: Rand McNally.

Rao, S.N. (1981). *Counseling psychology.* New Delhi: Tata McGraw Hill.

Saraswat, R.K. & Gaur, J.S.(1994). Manual for guidance counsellors. New Delhi: NCERT.

| 32. | CPS-10 | Reflective Reading- Study of Classics in Education | 10 | 40 | 50 |

33.	EPC-4	Visual and Performing Art (Theory)	10	40	50

Objectives

On completion of this course, the student-teacher shall be able to:

- *Explain different Art forms*
- *Prepare two dimensional and three dimensional teaching aids*
- *Collect materials from the locality and prepare low cost and no cost*
- *teaching aids*
- *Organize exhibitions of different Art forms*

Detailed Course Content

1. Visual Art

- Visual art: Importance, Scope, Characteristics of child art, folk art and fine art; Developing skills in visual art
- Survey of the natural resources: Survey of the natural resources in the immediate environment; collection of specimens for preparation of artistic materials; preparation of report on the collected materials and their use.
- Reproduction of Art: Reproduction of child art, tribal art, handicrafts, landscape, flowers, vegetables, trees, birds, animals, book illustrations comprising of human figures book covers, newspapers advertisements, invitation and greeting cards- collection of at least six of each kind and preparation of an album with proper captions. Drawing of pictures of vegetables, fruits, flowers, animals, birds, human figures and houses in simple form on the black board.

Unit2 Finished Drawing:

- Outlines of flowers, birds, animals and human figures;
- Multicolored design with geometrical forms and floral motif suitable for textile designs, book cover, invitation and greeting cards;
- Technique of preparing designs for line block and halftone printing.

Unit3 Pencil and colored layouts:

- Preparation of pencil and colored layouts for book cover designs, invitation and greeting card designs and poster designs;
- Practice of simple and decorative lettering suitable for block designs and signboards; Mounting pictures and organizing exhibitions.

Tasks and Assignments

Each student-teacher is required to submit assignment on *any one* of the following:

- Collection of any three forms of folk art and preparation of a detailed report.
- Preparation of a report on specimens of visual art available in the neighbourhood.
- Preparation of an album of greeting cards of children's concern with appropriate caption.

34.	SI-2	School Internship-Part-II	200	-	200

35.	PR-8	Visual and Performing Arts (Practical)	50	-	50

Objectives

On completion of this course, the student-teacher

- *explores the function of drama as a tool of instruction to move beyond the classroom and to invoke collective consciousness.*
- *develops awareness regarding the rich heritage of drama and contributions of artists.*

- *recognizes the role of drama as education in the secondary school*
- *learns to identify areas that are best suited for drama exploration*
- *examines through chosen themes, how learning can take place in the classroom through group drama exploration by a whole class of elementary school students.*
- *learns the use of drama in teaching- learning.*
- *explores the role of the teacher as creative guide in learning that is drama driven.*

Unit1 Introduction to Drama:
   Meaning and relevance of drama to life today, Elements of Drama: Literary elements, Technical elements, Performance elements; Character, Plot, Theme, Dialogue, Convention, Genre, Audience.

Unit2 Forms and Styles of Theatre:
   Comedy and Tragedy; Solo performance, Mime, Melodrama, Musical theatre, Realism, Symbolism, Ballet and Dance,   Street theatre, Folk theatre, etc Activity: Acting exercises for body and movement. Activity: Acting exercises for voice and speech, Activity: Viewing films or videos to identify and discuss dramatic styles, Activity: Creating a performance of a story based on student's own experiences

Unit3 Indian Folk and Street Drama:-Regional folk theatre – Jatra , Nabaranga, Swang**,** Influence of Folk Theatre on Street Play

Sub-Total	310	240	550
GRAND TOTAL (All 8 Semesters)	1040	960	2000

Syllabus for B.A/B.SC.B.ED. Programme (4 YEARS INTEGRATED COURSE)

(I to VIII Semesters)

RAVENSHAW UNIVERSITY, CUTTACK

(SESSION 2016-2020)