

Course Work Syllabus for Ph.D. in Education (Regular Mode)

(Session 2025 - 26 Onwards)



**DEPARTMENT OF EDUCATION
IGNTU, AMARKANTAK-484887 (M.P.)**

GUIDELINES FOR Ph. D. COURSE WORK IN EDUCATION

Programme outcomes:

The predominant aim of Ph.D. in Education Programme is to create the dynamic researcher with sound research knowledge and professionalism in teacher education in general and particularly in its various dimensions. The Admission Criteria, Course Work, Examination, Evaluation, etc. are to be follows as per IGNTU Ph.D. Guidelines 2022 and the amendments as per the UGC directions time to time and implemented by the IGNTU. More specifically, the Ph.D. in Education programme intends to:

- a) Provide the research scholar to understand and appreciate knowledge structures and paradigms of education.
- b) Develop expertise for effective research in pedagogical aspects and other aspects of the education in different capabilities.
- c) Create a dedicated and ethical participation in educational research with stronger commitments.
- d) Think creatively and flexibly to synthesize and transform variety of practicable ideas in the research.

Course Work

The course work is prerequisite for Ph.D. preparation. The duration of the course work will be of one semester. The course work shall be of 16 credits and shall consist of 04 courses. The Course structure is as follows:

Ph.D. (Education) Semester-I (Course Work)

Course No.	Course Name	Credit	Hours	Marks
Ph.D. - 101	Research Methodology and Statistics in Education	4 (3+1)	60+30	100 (60+40)
Ph.D. - 102 (RCS-103)	Computer Application *	4 (3+1)	60+30	100 (60+40)
Ph.D.- 103A	Research and Publication Ethics (RPE)	2 (1+1)	30+20	50 (30+20)
Ph.D.- 103B (DSE-1)	Teacher Education *	2 (1+1)	30+20	50 (30+20)
Ph.D. - 104 (DSE - 2)	Departmental Specific Elective (optional) a) Tribal Education b) Language Development through Educational Technology c) Educational Psychology d) Educational Technology e) Digital Literacy f) Curriculum Development	4 (3+1)	60+30	100 (60+40)
Total		16 (11+5)	240+130 (370)	400 (240+160)

	Marks			Credits		
	Theory	Practicum	Total	Theory	Practicu	Total Credits
Semester - I	240	160	400	11	5	16

Internal cum Practical: Assignment, Presentation, Activity (Paper-based)

Pattern of Theory Question Papers

There are two Patterns of Theory Examinations - one with a duration of 3 hours for 60 marks: the other with a duration of 2 hours for 30 marks.

- For 60 marks paper with a duration of 3 hours' time consists of five essay type of questions with internal choice. The candidate is expected to answer all the five questions in about five pages each. Each question carries 12 Marks.
- For 30 marks paper with a duration of 2 hours' time consists of three essay type of questions with internal choice. The candidate is expected to answer all the three questions in about five pages each. Each question carries 10 Marks.

MODEL QUESTION PAPER for End-Semester Examination**Ph.D. Course work (Education)****Paper Name:****Paper Code:****Time:** 03 Hours**Maximum Marks:** 60 (12X5)**Instructions:**

- Answer the following **FIVE** Questions in about five page each.
- Each question carries **TWELVE** marks.

Q. 1(a)

OR

Q. 1(b)

Q. 2(a)

OR

Q. 2(b)

Q. 3(a)

OR

Q. 3(b)

Q. 4(a)

OR

Q. 4(b)

Q. 5(a)

OR

Q. 5(b)

MODEL QUESTION PAPER for End-Semester Examination**Ph.D. Course work (Education)****Paper Name:****Paper Code:****Time:** 02 Hours**Maximum Marks:** 30 (10X3)**Instructions:**

- Answer the following **THREE** Questions in about five page each.
- Each question carries **TEN** marks.

Q. 1(a)

OR

Q. 1(b)

Q. 2(a)

OR

Q. 2(b)

Q. 3(a)

OR

Q. 3(b)

Note:

1. The question paper should cover all the units judiciously.
2. Application type of questions may also be included.
3. Examiners may give questions from practicum.

Ph.D. – 101		
RESEARCH METHODOLOGY AND STATISTICS IN EDUCATION		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To explore research in the field of education. ➤ To equip the students to examine the philosophical and socio-cultural context of research and relate it to the contemporary paradigm shift. ➤ To explore different traditions such as empiricism, rationalism and constructivism, etc. ➤ To investigate educational processes, systems and institutions. 		
Course Content / Syllabus		
Unit 1	Educational Research	12 Hrs.
	<ul style="list-style-type: none"> • Meaning, Nature, Scope and Importance of Research • Types of Research: Qualitative and Quantitative Research • Selection and Formulation of Research Problem • Steps, Function, and Importance of Literature Review. • Objectives, Hypotheses and Variables. 	
Unit 2	Research Designs	14 Hrs.
	<ul style="list-style-type: none"> • Concept of Population and Sample; Methods of Sampling. • Quantitative Research Designs: Experimental, Non-experimental research designs: descriptive, Correlation, Survey and Ex post facto research. External and Internal Validity of Quantitative Design. • Qualitative Research Designs: Case Study, Ethnographic and Analytical (Historical). External and Internal Validity of Qualitative Design. 	
Unit 3	Tool Construction, Data Collection and Report Writing	12 Hrs.
	<ul style="list-style-type: none"> • Construction and adaptation of tools: Observation, Questionnaire, Interview, Inventory, Rating Scale, etc. • Types of Data: Primary and Secondary • Data Collection Technique • Organisation of Research Report - Preliminaries, Content of report, reporting Style, Bibliography, Appendices. • Criteria for the evaluation of the Research Report. 	
Unit 4	Parametric Statistics	12 Hrs.
	<ul style="list-style-type: none"> • Test Scales: Standard scores, the T&C scale and Stanines • Measures of Relationships: Concept and computation of the Coefficient of Correlation. Bi-serial, Point biserial and phi coefficient. Multiple correlation, Regression equation and Prediction. • Analysis of Variance and Covariance concept and computation. • Factor Analysis: Nature and basic assumptions of factor analysis and its application. 	
Unit 5	Non-Parametric Statistics	10 Hrs.
	<ul style="list-style-type: none"> • Concept and computation of Sign test, χ^2-test, Sign-Rank test of Differences. • Composite - Rank method, K-S Test with small and large samples. 	

References:

- ❖ Creemers, B. (2010). *Methodological Advances in Educational Effectiveness Research*. London: Routledge.
- ❖ Creswell, J.W. (2013). *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd Edition. Thousand Oaks, CA, Sage.
- ❖ Flyvbjerg, Bent (2001). *Making Social Science Matter: Why Social Inquiry Fails and How it can Succeed Again*, UK: Cambridge University Press.
- ❖ Kumar, Renjith (2009). *Research Methodology: A Step-by-Step Guide for Research*. Delhi: Pearson Education.
- ❖ Mertens, O.M. (2015). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative and Mixed Methods*. Thousand Oaks, CA: Sage Publications.
- ❖ Robson, C. (2002). *Real World Research*. 2nd Edition. Oxford: Blackbell.

Ph.D. -102 (RCS - 103) COMPUTER APPLICATIONS		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To explore the computer applications in the research in education. ➤ To equip the students to examine the use of computer hardware and software in the context of research and relate it to the contemporary paradigm shift. ➤ To explore different Computer softwares which are useful for the research student to work on his/her analysis of the research data. ➤ To utilize the research writing tools and software for the research report. 		
Course Content / Syllabus		
Unit 1	Fundamentals of Computer	12 Hrs.
	<ul style="list-style-type: none"> • Characteristics of Computers, Evolution of computers, Computer generations, Basic computer organisation; • System software, Application software, Application packages, I/O devices, computer memory, • Introduction to operating system and characteristics, Windows, Mac, etc. 	
Unit 2	Computer Hardware basics and Software Installation	12 Hrs.
	<ul style="list-style-type: none"> • PC Boot Process and BIOS, Description of Different parts of a computer, personal computer configuration, performing installation of operating system and other application, Usage of relevant tools and recovery using various tools/software, perform cabling, connecting, and configuring of a peer-to-peer network (Wi-Fi/Broadband) • Use of identifying different Desktop Icons: My Computer, My Documents, Changing Desktop Backgrounds, Mouse Pointer, Screen Saver and Notepad, WordPad, MS Paint, • Operating System Installations and Procedures/ Booting Procedures, Windows Configurations & Adding Device Drivers. 	
Unit 3	Introduction to Internet, WWW and Web Browsers	12 Hrs.
	<ul style="list-style-type: none"> • Basic of Computer networks; LAN, WAN; Concept of Internet; Applications of Internet; connecting to internet; • What is ISP; Knowing the Internet; Basics of internet connectivity related troubleshooting, World Wide Web; Web Browsing software(s), Search Engines; Understanding URL; Domain name; IP Address; Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration; Instant Messaging; Netiquettes. • Using e-governance website, website for journal access, website for research applications: Shodhganga, Shodh Gangotri, ResearchGate, SWAYAM, NPTEL, UGC-CARE, etc. 	
Unit 4	ICT Tools for Documentation of Research Work	12 Hrs.
	<ul style="list-style-type: none"> • Various format of e-research paper, e-book and e-document: .cbr, .cbz, .cb7, .cbr, .cha, .djvu, .doc, .docx, .epub, .fb2, .html, .ibook, .cdr, .inf, .azw, .lit, .pre, .mobi, .exe, .pkg, .pdb, .txt, .pdb, .pdf, .ps, .tr2, .tr3, .oxps, .xps; 	

	<ul style="list-style-type: none"> • Various useful Software for image to text, .pdf to .doc/.docx, Voice to text/.docx, text to image, .pdf to jpeg/png, .doc/.docx to image and other type of conversion; • E-document Conversion Tools Compatible with Multiple Formats, Plagiarism Checker software and its utilization. 	
Unit 5	Research Writing Tools and Software	12 Hrs.
	<ul style="list-style-type: none"> • General Purpose Software Package: REF-N-WRITE, Microsoft office: Word, Power Point, Excel; Software for Writing Your Dissertation: LaTeX, LyX, Scrivener; • Referencing Tools and Reference Management Software: Zotero, Mendeley, Docear etc., Grammar Checkers and Sentence Correction Tools: MS Word Spelling & Grammar checker S/W: Grammarly Desktop Apps and Online Grammar checking sites; • Image and Video editing software. 	
References:		
<ul style="list-style-type: none"> ❖ Grotenhuis, Manfredte, and Matthijssen, Anneke (2015). Basic SPSS Tutorial. United States, SAGE Publications. ❖ Raubenheimer, Jacques. Mendeley: Crowd-sourced Reference and Citation Management in the Information Era (2014). United Kingdom, True Insight Publishing. ❖ Goel, Anita (2010). Computer Fundamentals. India, Pearson Education. ❖ Maidasani, Dinesh (2005). Learning Computer Fundamentals, MS Office and Internet & Web Tech. India, Laxmi Publications. ❖ Wishnietsky, Dan H. (1997). Internet Basics: An Educator's Guide to Travelling the Information Highway. United States, Phi Delta Kappa Educational Foundation. ❖ McCormick, Keith, and Salcedo, Jesus. (2017). SPSS Statistics for Data Analysis and Visualisation. Germany, Wiley. 		

Ph.D. – 103 (A)		
RESEARCH AND PUBLICATION ETHICS		
Credit - 2 (1+1)	Total Marks – 50 (External - 30, Internal – 20)	Hours - 30
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To explore research in the field of education. ➤ To equip the students to examine the philosophical and socio-cultural context of research and relate it to the contemporary paradigm shift. ➤ To explore different traditions such as empiricism, rationalism and constructivism, etc. ➤ To investigate educational processes, systems and institutions. 		
Course Content / Syllabus		
THEORY		
Unit 1	Philosophy and Ethics	04 Hrs.
	<ul style="list-style-type: none"> • Introduction to philosophy: definition, nature and scope, concept, branches • Ethics: definition, moral philosophy, nature of moral judgements and reactions. 	
Unit 2	Scientific Conduct	04 Hrs.
	<ul style="list-style-type: none"> • Ethics with respect to science and research; Intellectual honesty and research integrity. • Scientific misconduct: Falsification, Fabrication, and Plagiarism (FFP). • Redundant publications: duplicate and overlapping publications, salami slicing. • Selective reporting and misrepresentation of data. 	
Unit 3	Publication Ethics	07 Hrs.
	<ul style="list-style-type: none"> • Publication ethics: definition, introduction and importance. • Best practices/standards setting initiatives and guidelines: COPE, WAME, etc; Conflicts of interest. • Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types • Violation of publication ethics, authorship and contributorship; Identification of publication misconduct, complaints and appeals 	
PRACTICUM		
Unit 4	Open Access Publishing	04 Hrs.
	<ul style="list-style-type: none"> • Open access publications and initiatives • SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies. • Software tool to identify predatory publications developed by SPPU. • Journal finder/journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc. 	
Unit 5	Publication Misconduct	04 Hrs.
	<p>A. Group Discussions (2 Hrs.)</p> <ol style="list-style-type: none"> 1. Subject-specific ethical issues, FFP, authorship 2. Conflicts of interest. 3. Complaints and appeals: examples and fraud from India and abroad. 	

	B. Software tools (2 Hrs.) Use of plagiarism software like Turnitin, Urkund and other open-source software tools.	
Unit - 6	Databases and Research Metrics	07 Hrs.
	A. Databases (4 Hrs.) 1. Indexing databases 2. Citation databases: Web of Science, Scopus, etc. B. Research Metrics (3 Hrs.) 1. Impact Factor of journal as per Journal Citation, Report, SNIP, SJR, IPP, Cite Score. 2. Metrics: h-index, g-index, i10 index, altimetric.	
References: <ul style="list-style-type: none"> ❖ Bird, A. (2006). Philosophy of Science. Routledge. ❖ Macintyre, Alasdair (1967). A Short History of Ethics. London. ❖ P. Chaddah, (2018). Ethics in Competitive Research: Do not get scooped; do not get plagiarised, ISBN:978-9387480865 ❖ National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies Press. ❖ Resnik, D. B. (2011). What is ethics in research & why is it important? National Institute of Environmental Health Sciences, 1-10. Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm ❖ Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. https://doi.org/10.1038/489179a ❖ Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019). ISBN:978-81-939482-1-7. ❖ http://www.insaindia.res.in/pdf/Ethics_Book.pdf 		

Ph.D. 103 - B (DSE - 1)		
TEACHER EDUCATION		
Credit - 2 (1+1)	Total Marks – 50 (External - 30, Internal – 20)	Hours - 30
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To help the students to understand teacher education as a discipline ➤ To acquaint the students with the need and significance of teacher education. ➤ To acquaint the students with the agencies of teacher education. ➤ To enable them to undertake studies in teacher education. ➤ To stimulate them to reform teacher education. ➤ To create a perspective among the students about the implications of education for solving the prevailing problems of teacher education in India. 		
Course Content / Syllabus		
Unit 1	Teacher Education: Level of Knowledge - Theoretical	12 Hrs.
	<ul style="list-style-type: none"> • Teacher Education- Concept, Aims and objectives of Teacher Education at Primary, Secondary, Higher education levels, • Analysing emerging trends and issues- Emerging role and responsibilities of teachers in building modern India, • Professionalism and accountability in Teacher Education. 	
Unit 2	Pre-Service and in-Service Education	10 Hrs.
	<ul style="list-style-type: none"> • Pre-service Education: Different systems. • In-service education: importance - Agencies of In-service education - Teacher education and teaching effectiveness; • Innovative programmes in In-service Teacher Education. • Agencies of Teacher Education <ol style="list-style-type: none"> 1. National Level: UGC, ICSSR, CASE, NCERT, NIEPA, CASE, IASE 2. State level: DSERT, SCERT, SBTE, SIE, CTE with reference to teacher education. 	
Unit 3	Recent Trends in Research in Teacher Education	08 Hrs.
	<ul style="list-style-type: none"> • Teaching as a Profession, Professional development, Professional ethics for a teacher, • Professional Organisations for various levels and their roles - Areas of Research in Teacher Education in India; • Teacher Evaluation- Criteria, Methods and Techniques of online education and examination in teacher education program. 	
References:		
<ul style="list-style-type: none"> ❖ Basu, A N. (1947). Education in Modern India. Calcutta: Orient Book Co. ❖ Brunar, J. S. (1966). Towards a Theory of Instruction. Massachusetts: The Battanap Press. ❖ Buch, M.B. & Palasane, M.M. (1947). Reading in In-service Education; S P University. ❖ Chaurasia, G. (1967). New Era in Teacher Education. Delhi: Sterling Publication. ❖ Chaurasia, G. (2000). Teacher Education and Professional Organization. Delhi: Authors Press. ❖ DevGowda, A.C. (1973). Teacher Education in India. Bangalore: Book Bureau. ❖ Ebel, R.L. (1956). (Ed.). Teacher Education, American Association of Colleges for Teacher Education. Queenta. ❖ Jangira, N.K. (1984). Teacher Training and Teacher Effectiveness: An Experiment in Teacher Education. Delhi: National Publication House. ❖ Mukherjee, S.N. (Ed.) (1968). Evaluation of Teacher of India (Vol-I). Delhi; S. Chand & Co. ❖ NCERT (1978). Innovation in In-service Education and Training of Teacher's Practice & Theory Paris: OECD. ❖ NCTE. (1978 & 2005). Teacher Education Curriculum: A Framework. New Delhi: NCERT. ❖ Sharma, S.P. (2003). Teacher Education-Principles Theories and Practices. New Delhi: Kanishka Publishers. ❖ Tuckman, B.W. (1975). Measuring Educational Outcome: Fundamental of Testing. New York: Harcourt Brace Jovanovich. 		

Paper - 104 (DSE - 2) TRIBAL EDUCATION (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Content / Syllabus		
TRIBAL SOCIETY OF INDIA		
Unit 1	Tribes and their classification <ul style="list-style-type: none"> • Tribal: Concept and definition of tribes in the Indian Context. • Geographical distribution of Tribes in India. Characteristics. • Classification of tribes: on the basis of Language, Culture, Tradition, Economy and Technology. 	12 Hrs.
Unit 2	Society and Social Change <ul style="list-style-type: none"> • Society: Concept, Social Groups (Primary and Secondary), Community and Social Institutions. Family, Marriage and Kinship in Tribal Society. • Social Change: Concept, Responsible Factors and Agencies. Sanskritization among Indian tribes: Cases of Gond, Bodo, Bhil, Baiga, Oraon. 	12 Hrs.
Unit 3	Tribal Culture and Food Habits <ul style="list-style-type: none"> • Tribal's way of life, Occupations, Structure of Tribal Family, Perception of Illness and Cultural Practice of Diagnosis, • Traditional and scientific knowledge of the tribe. • Food and Nutrition, the impact of alcoholism. 	12 Hrs.
Unit 4	Tribal Education & Status <ul style="list-style-type: none"> • Historical Background of Indian Tribes • Education and its present Status; Factors influence for Tribal Education. • Barriers/Problems of Tribal Education in India and its remedies. 	12 Hrs.
Unit 5	Tribes and Higher Education <ul style="list-style-type: none"> • Tribes and Higher Education system of India • The Educational Schemes of Tribes for Higher Education. • Recommendation of National and International organisations on Tribal Education. 	12 Hrs.
References: <ul style="list-style-type: none"> ❖ Mohanty, Namita (2013). Tribal Education Issues and Approaches, Satparkash Katla, New Delhi. ❖ Pani, P.K. (2014). Tribes and Tribal Problems, Classical Publishing Company, Karampura, New Delhi. ❖ Taneja, B.K. (2014). Changing Tribal Society in India: Issues and Challenges, Abhijeet Publications, New Delhi. ❖ Bhowmick, P.K., Singh, K., & Rajak, M.P. (2016). Tribal Health in North East India, New Delhi. ❖ Loustaunan, M.O., and Sobo, E.J. (1997). The Cultural Context of Health, Illness and Medicine. -Westport, CT: Bergin and Garvey. 		

Paper - 104 (DSE - 2)- LANGUAGE DEVELOPMENT THROUGH EDUCATIONAL TECHNOLOGY (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To understand the concept of E-modules. ➤ To explore research in the field of Indian Tribes. ➤ To inquire educational status of Tribal Students of India. ➤ To inquire about the research studies on E-modules and Communication skills. ➤ To investigate the educational process and the latest development in tribal education. 		
Course Content / Syllabus		
Unit 1	E-modules Development	12 Hrs.
	<ul style="list-style-type: none"> • Meaning, Definition, Objectives of E-modules, Scope of E-modules in Research, • Role of E-modules in education, Components of E-modules, E-modules and their application in education. 	
Unit 2	Communication Skills	12 Hrs.
	<ul style="list-style-type: none"> • Meaning, nature and scope of communication skills, Components of Communication skills, • Types of Communication skills. Speaking- How to converse with people, how to communicate effectively, • Communication skills in Research: Importance and their uses. 	
Unit 3	Tribal Education in India	12 Hrs.
	<ul style="list-style-type: none"> • Tribes in India: Definition, Characteristics and Geographical Distribution in India, • Current status of tribal education in India, Scope of tribal education in research, Govt Plans for tribal education, Tribal educational process in India. 	
Unit 4	Research studies related to E-modules & Communication skills	12 Hrs.
	<ul style="list-style-type: none"> • E-modules and Communication skills used in research, Definition of Listening. • Reading, Writing and communicating, Barriers in the path of communication, listening to conversation (Formal & Informal). 	
Unit 5	Latest Development in Tribal Education	12 Hrs.
	<ul style="list-style-type: none"> • Developmental Status of Tribal Education and Development in India, Analysis of Tribal Education, Education as a Developmental Tool for Tribes. • Tribal development programmes in the National perspective and appraisal of different development programmes. 	
References:		
<ul style="list-style-type: none"> ❖ Bhowmick, P.K., Singh, K., & Rajak, M.P. (2016). Tribal Health in North East India, New Delhi. ❖ Hasnain Nadeem (2017). Tribal India. ❖ Loustaunam, M.O. and Sobo, E.J. (1997). The cultural context of Health, Illness and Medicine. – Westport, ct: Bergin and Garvey. ❖ Mohanty, Namita (2013). Tribal Education Issue and Approaches, Satprakash Katla, New Delhi. ❖ Pani, P.K. (2014). Tribes and Tribal Problems, Classical Publicating Company, Karampura, New Delhi. ❖ Taneja, B.K. (2014). Changing Tribal Society in Indian issue and Challenges. 		

Paper - 104 (DSE - 2) EDUCATIONAL PSYCHOLOGY (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ Understand the dynamics of Individual development. ➤ Understand the dynamics of group behaviour. ➤ Understand the concept of personality and adjustment. ➤ Describe the dynamics of social behaviour. ➤ Understand the Guidance programme. 		
Course Content / Syllabus		
Unit 1	<i>Educational Psychology and Development</i>	12 Hrs.
	<ul style="list-style-type: none"> • Educational Psychology: Concept, Need and Scope; Approaches (Clinical, Differential and Psychoanalytical) and Methods (Observation, Experimental and Questionnaire). • Adolescence Development: Development related to cognitive, Conative and Affective domains, with an emphasis on critical thinking and Human Emotions • The Theories of Development (Freud, Erikson and Piaget). 	
Unit 2	<i>Personality and Adjustment</i>	12 Hrs.
	<ul style="list-style-type: none"> • Personality: Trait and type approaches: Allport, Cattell, and Eysenck, Psychodynamic and psychosocial approaches: Freud and Erikson. • Behavioristic and social learning approaches: Skinner, Bandura and Mischel. Humanistic and phenomenological approaches: Rogers and Kelly. • Adjustment: Factors influencing mental health and the role of education for building good mental health of students and teachers; Adjustment issues related to Stress, Anxiety, Frustration and Aggression and their prevention and control. 	
Unit 3	<i>Dynamics of Social Development</i>	12 Hrs.
	<ul style="list-style-type: none"> • Group Dynamics: Social Loafing, Social Facilitation, Influence and Social Perception; Group processes- Group formation, group effectiveness and group dynamics. • Attitude, Nature, and Development. Measurement and theories of attitude change. • Prejudice and Stereotypes, Interpersonal attraction. 	
Unit 4	<i>Learning process and Motivation</i>	12 Hrs.
	<ul style="list-style-type: none"> • Theories and laws of learning; Socio-metrics, economics and politics issues in learning. • Motivation, theories and dynamics of motivation, psychological factors affecting performance, viz, stress, anxiety, tension and aggression. • Individual differences and their impact on skill learning and performance. 	
Unit 5	<i>Guidance and Counseling</i>	12 Hrs.
	<ul style="list-style-type: none"> • Concepts, Need, Principle and Areas of Guidance. Techniques of guidance, Role playing. • Career counselling, Case study and Interview. Counselling - 	

	<p>Nature, Goals and Principles of Counselling. Role and functions of counsellors and their Professional Training; Approaches to counselling: Directive, Non-Directive, Behavioristics, Gestalt and humanistic.</p> <ul style="list-style-type: none"> • Areas of Counselling: Educational, Vocational, Personal, and Occupational Guidance Programme. Exceptional Children- Gifted, Retarded and Handicapped. 	
<p>References:</p> <ul style="list-style-type: none"> ❖ Barron, Robert A., & Byrne, Donn (2002). Social Psychology. New Delhi: Pearson Education. ❖ Barry and Johnson (1964). Classroom Group Behaviour. New York: Macmillan. ❖ Bridges (1932). Emotional development in early infancy, Child development. ❖ Cronbach (1954). Educational Psychology. Harcourt Jovanovich, Inc. ❖ Crow, D. (1963). Educational Psychology. Urasia Publishing House. ❖ Echols, MN. (1942). Mental Hygiene and the Teacher Educational Method. ❖ Elis & Robert, S. (1965). Educational Psychology D. Van Nostrand Company, Inc. ❖ Feist, J. & Fiest, G. J. (2009). Theories of personality. New York: McGraw-Hill. ❖ Feltham C, L Horton, (2006). The SAGE Handbook of counselling and psychotherapy. New Delhi: Sage Publications ❖ Friedman, H. S. & Schustack, M. W. (2003). Personality: Classic theory and modern research (2nd Ed). Singapore: Pearson Education. ❖ Finder. D. C. (2007). The personality puzzle (4th Ed). New York: Norton College Books. ❖ Garrison (1960). Growth and Development: Longmans. ❖ Gelso, CJ, & Fretz, B.R., (1995). Counselling psychology. Bangalore: Prism Books Pvt. Lad ❖ Goldstein, E. B. 2008, Cognitive psychology, (2nd Ed.). Belmont: Wadsworth. 		

Paper - 104 (DSE - 2) EDUCATIONAL TECHNOLOGY (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ Develop conceptual understanding of educational technology and its evolution. ➤ Explore ICT tools and instructional design models relevant to teaching and learning. ➤ Analyze the role of emerging technologies (AI, AR/VR, learning analytics) in education. ➤ Design technology-integrated learning experiences suitable for Indian classrooms. ➤ Critically reflect on ethical, equity, and policy issues around educational technology in global and Indian contexts. 		
Course Content / Syllabus		
Unit 1	<i>Introduction of Educational Technology</i>	12 Hrs.
	<ul style="list-style-type: none"> • Meaning & Nature of Educational Technology, Define Technology of Education: Technology in Education; Assumptions of Educational Technology, • Factors Influencing the Application of Technology, Scope and Significance of Educational Technology. 	
Unit 2	<i>Objectives and Approaches, Forms of Educational Technology</i>	12 Hrs.
	<ul style="list-style-type: none"> • Objectives of Educational Technology; Approaches of Educational Technology, Hardware Approach, Software Approach, System Approach • Forms of Educational Technology: Teaching Technology, Instructional Technology, Behaviour Technology. 	
Unit 3	<i>Advantages & Limitations, uses of Educational Technology</i>	12 Hrs.
	<ul style="list-style-type: none"> • Advantages of Educational Technology, Limitations of Educational Technology, Importance and Uses of Educational Technology, • Socio-Academic Relevance of Educational Technology. 	
Unit 4	<i>Teaching Strategies, Methods & Techniques of Educational Technology</i>	12 Hrs.
	<ul style="list-style-type: none"> • Meaning & Definition, Characteristics of Teaching Strategies, • Various Types of Teaching Strategies: Lecture Strategy, Demonstration Strategy, Questionnaire Strategy, Discussion Strategy, Heuristic Strategy, Project Strategy, Problem-Solving Strategy, Teaching Method: Student & Teacher Centred Method. 	
Unit 5	<i>Information and Communication in Educational Technology</i>	12 Hrs.
	<ul style="list-style-type: none"> • Information and Communication Technology: Meaning, Nature and Advantage. Components of Educational Technology: Software-Meaning and type (System Software, Application Software, Utility Software, Open-Source Software). • Hardware Fundamentals (Anatomy, Input devices, Output devices, Storage devices, Display devices), Co-Network (LAN, WAN, Internet). 	
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Paper - 104 (DSE - 2) DIGITAL LITERACY (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ Know the applications of ICT in Education ➤ Practice in the use of MS Windows and MS Office ➤ Describe Flanders Interaction Analysis, along with the concept and types of evaluation ➤ Demonstrate the use of ICT and its integration in education ➤ Operate the use of the internet and its importance in teaching ➤ Develop digital portfolios in their teaching subjects ➤ Use ICT and the pedagogical strategies associated with the subject concepts effectively ➤ Practice the use of digital concepts and develop digital lessons in the subject. 		
Course Content / Syllabus		
Unit 1	Educational Technology	12 Hrs.
	<ul style="list-style-type: none"> • Meaning, Definition, and Scope of Educational Technology. • Communication: Meaning, Cycle, and Barriers • Interaction Analysis: Meaning, Definition, and Classification of Interaction Analysis System. • Flanders Interaction Analysis: Concept, Procedure and Its Significance in Teaching Learning. 	
Unit 2	Trends in Educational Technology	12 Hrs.
	<ul style="list-style-type: none"> • Team Teaching, Mobile Teaching, Simulated Teaching • Computer learning, Laptop learning, iPod learning • Brainstorming, Multi-Media Teaching • Smart Classroom: Concept, Equipment, Organisation, Operation & its importance in teaching. 	
Unit 3	ICT application in Education	12 Hrs.
	<ul style="list-style-type: none"> • ICT- Meaning, Definition, Need and importance, Merits and Demerits. Use of ICT in Teaching-Learning Process. • Classification of the modes: searching for information and exchanging information • Use of ICT tools for School Education. 	
Unit 4	Digital Literacy	12 Hrs.
	<ul style="list-style-type: none"> • Digital Literacy: Concept and Definition; • Types of Literacy- Information Literacy, Computer Literacy, Digital Literacy, Media Literacy. • The Characteristics of Digital Literacy; Challenges of Digital Literacy. 	
Unit 5	Digital Initiatives and Artificial Intelligence in Education	12 Hrs.
	<ul style="list-style-type: none"> • Concept, Objectives, and Function of the Digital Initiatives in Higher Education; Digital Initiatives of Government and Other Agencies; Uses and Challenges of Digital Initiatives. • Concept, Objectives, Functions, and Types of the Artificial Intelligence in Education • Artificial Intelligence Tools in Education • Artificial Intelligence and the Future of Teaching and Learning 	

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Paper - 104 (DSE - 2) CURRICULUM DEVELOPMENT (Optional)		
Credit - 4 (3+1)	Total Marks - 100 (External - 60, Internal - 40)	Hours - 60
Course Outcomes:		
<ul style="list-style-type: none"> ➤ To enable them to apply the principles of curriculum development. ➤ Understand the necessity for curriculum change. ➤ To develop a futuristic vision for devising new curriculum designs. ➤ To analyse the importance of curriculum change. ➤ To develop an understanding of the necessity of curriculum evaluation. 		
Course Content / Syllabus		
Unit 1	Introduction to Curriculum	12 Hrs.
	<ul style="list-style-type: none"> • Meaning and Scope of curriculum; Types: Tangible and hidden curriculum. • Role of society, culture, and social change in India and its curricular implications. • Principles of Curriculum Construction. 	
Unit 2	Curriculum Development	12 Hrs.
	<ul style="list-style-type: none"> • Foundations of Curriculum Development: Philosophical, Socio-cultural and Psychological. Concept and criteria of Curriculum Development: Scope, Sequence and Continuity etc. • Curriculum Development: Stages: planning, designing, Implementation and evaluation. • Models of Curriculum Planning and Development: (1) Technical-Scientific Models -Tyler Model; Taba Model (2) Non -Technical – Non Scientific Models- Inter personal relation (Carl Roger's) Model; Deliberation Model. 	
Unit 3	Curriculum Design	12 Hrs.
	<ul style="list-style-type: none"> • Curriculum Design: Concept & Criteria of Curriculum Development; Components and Types of Curriculum Design: Subject- Centred, Learner Centred, Activity- cum-Experience Centred, Undifferentiated and Differentiated, Interdisciplinary and Multidisciplinary Curriculum. • Core Curriculum & Elements of Core - ABC (Articulation, Balance and Continuity) of Curriculum development. Components • Curriculum as per NPE- 1968, 1986, and 2020 	
Unit 4	Curriculum Change	12 Hrs.
	<ul style="list-style-type: none"> • Meaning & need for curriculum change. • Factors affecting curriculum change. • Role of community, administrator, curriculum consultants, teachers & students in curriculum change. 	
Unit 5	Curriculum Evaluation	12 Hrs.
	<ul style="list-style-type: none"> • Need for Curriculum Evaluation; Criteria for evaluating Curriculum - Tools for Evaluation. • Construction and standardization of evaluative instruments. • Curriculum research- need, scope and recent contributions. • Functions of curriculum evaluation and forms of curriculum evaluation. Developing a curriculum evaluation plan 	

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ACTIVITIES AND PRACTICUM

(The practicum hours are included in the syllabus hours and considered for internal assessment)

Each scholar has to undertake at least two of the following activities:

1. Prepare the report and present the report in the seminar.
2. Preparing a Research Proposal.
3. Review of research in a particular area based on the abstracts of a survey of research in education.
4. Establishment of the reliability of any psychological test and its interpretation.
5. Preparing references in APA Style on two each on the following an analytical report regarding the variation in them: (a) Single author book (b) More than two authors' book; (c) Edited Book (d) Chapter in Edited Book (e) Journal article (f) Unpublished thesis/presentation/manuscript.
6. Conducting a detailed survey on the educational status of a village of not less than 50 households.
7. Based on the curriculum development studies and area of research practicum will be designed by the teachers along with assignments and presentations.
8. Any other activity that the course in-charge recommends.