Course: M.A. Education

Semester	II
Paper Number	MAEDCR22
Paper Title	**Educational Technology**
No. of Credits	6
No. of periods assigned per week	Theory: Six
Course description / objective and outcome	Students will be able to: 1. Internalize the concepts, components, application and challenges of Educational Technology. 2. Explain the resources and challenges of Educational Technology. 3. Articulate and examine models & systems of communication 4. Describe and apply instructional models of teaching & instructional design. 5. Identify and analyse teaching learning process and technology and recent trends in educational technology.
Syllabus	**Module 1: (40 marks)** **Unit-I:** **Basic of Educational Technology** o Concept, Nature & Scope of Educational Technology o Components of Educational Technology: Hardware; Software ; System Approach o Advantages & Disadvantages of E.T **Communication & Interaction** o Communication System- Concept, Elements, Types o Classroom Communication Model; Barriers of Communication o Instructional Design on the basis of learning theories: *Behaviorists; Social Cognitive; Constructivist; Psychoanalysis* **Unit-II:** **Teaching & Planning Instruction** o Organizing knowledge for instruction: Procedural knowledge, propositional knowledge o Teaching Skills and their components: Questioning skills, Interaction skills, Lecturing skills, Reinforcement skills etc. o Models of teaching: *Bruner's Concept Attainment Model, Roger's Nondirective Model, Shaver's Jurisprudential Model* o Instructional designs: Principles, role, process, model,

	advantage and disadvantages **Applications & Resources of Educational Technology** o E.T in formal education; non-formal education; informal education; Distance Education; Open learning systems, MOOCs o Use of ICT in teaching learning: CCTV, INSAT, Tele & Video Conferencing, Computer Simulated Multimedia Approach o Resource Centers for E.T- CIET, UGC, NOS, State ET Cell, AVRC, EMRC, NIST etc. (activity for the improvement of teaching-learning process) o Problems & Issues of implementation of E.T: Digital Divide **Module 2: (40 marks)** **Unit III:** **Development of Instructional Design** o Development of Instructional design: ADDIE, ASSURE, Dick & Carey Systems Approach Model; Gagne's nine events of instruction; 5E Model of Constructivism o Stages of teaching: Pre-active; Interactive & Post Active **Teaching Learning Process & Technology** o Web 3.0 o Technology Mediated Learning: TPACK, Learning Management System, Computer Assisted Learning, CBT, CAI, CML o Models `of Teaching **Unit IV:** **Modification of Teaching Behavior** o Formulation of instructional objective & Task analysis o Micro-teaching: concept, characteristics, procedure, major skills & role of supervisor; Simulated Teaching o Flander's interaction analysis technique & modern development **Recent Trends in E.T** o Emerging Practices: Team Teaching & Co-teaching; Artificial Intelligence/Machine Learning; Blended/Hybrid Learning; Cloud Computing; Learning Analytics; Adaptive Learning; Gamification, Flipped Classroom; E learning; Mobile Learning o Technology for children with diverse needs
Texts / References	Suggested Readings: 1. Maloy, R. W., Verock, R., Edwards, S. A. & Trust, T (2021). Transforming Learning with New Technologies (4th ed). Pearson 2. Roblyer, M. D. & Hughes, J. E. (2019). Integrating Educational Technology into Teaching: Transforming Learning Across Disciplines (8th ed). Pearson

	3. Thomas, M. (2013). Technologies, Innovation, and Change in Personal Learning Environments. IGI Global 4. Spector, J. M. (2016). Foundations of Educational Technology: Integrative Approaches and Interdisciplinary Perspectives (2nd ed). New York: Routledge 5. Huang, R., Spector, J. M. & Yang, J. (2019). Educational Technology: A Primer for 21st Century. Singapore: Springer Nature 6. Llyod, L. &Barreneche, G. (2014). Educational Technology for the Global Village: Worldwide Innovation and Best Practices. Medtord: Information Todav Inc. 7. Smith, P. L. & Ragan, T. J. (2005). Instructional Design (3rd ed). John Wiley & Sons 8. Gagne, R. M. (2010). Instructional Technology: Foundations. Routledge 9. Reiser, R. A. & Dempsey, J. V. (2018). Trends and Issues in Instructional Design and Technology (4th ed). New York: Pearson 10. Branch, R. M. (2009). Instructional Design: the ADDIE Approach. New York: Springer 11. Connel, R. W. (2020). Teachers' Work. Routledge 12. Dell'Olio, J. M. & Donk, T. (2007). Models of Teaching: Connecting Student Learning with Standards. California: Sage Publications 13. Joyce, B., Weil, M. & Calhoun, E. (2015). Models of Teaching (9th ed). Pearson 14. Le, T. & Le, Q. (2012). Technologies for Enhancing Pedagogy, Engagement and Empowerment in Education: Creating Learning-Friendly Environments, Hersey: 1GI Global 15. Herring, M. C., Koehler, M. J. & Mishra, P. (2016). Handbook of Technological Pedagogical Content Knowledge (TACK) for Educators, New York: Routledge
Evaluation	CIA- 20 marks End Sem Exam- 80 marks