

SEMESTER- IV

COURSE CODE: MS4TC4

CREDITS: 4

ICT ON TEACHING AND LEARNING

COURSE OBJECTIVES:

CO1: Develop the professional ability in ICT

CO2: Understand the impact of ICT

CO3: Explain the various educational resources

CO4: Describe the various assessment techniques

CO5: Explain ways to create online community

CO6: Understand the scope of ICT and its applications in teaching learning.

CO7: Analyse the types of ICT and apply them in education

CO8: Classify the new trends and techniques in education for achieving the goals of effective teaching and learning.

CO9: Get acquainted with emerging trends in E.T. along with resource centres of E.T. & e-learning.

CO10: Familiarize with AI in education

UNIT - I: INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

Definition, meaning, importance and scope of ICT - Applications of Information and Communication Technologies - Classroom and ICT; Professional development and ICT - Emergence of new information technology- convergence of computing and telecommunications.

UNIT - II: ICT MEDIATED EDUCATION

Concept, Importance, Meaning, Objectives & Nature of ICT mediated education - Teaching-Learning Environment: Types and Modes of using ICT - Learning Environments - Features of an ICT Mediated Teaching-Learning Environment - Physical Constituents of Classroom/Environment - Social Constituents - Supporting Learners in learning

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UNIT -III: ICT AND TEACHING LEARNING PROCESS

ICT and Teaching and learning Process - Need for ICT Selection - Factors affecting ICT Selection - Selection of ICT - Integration of ICT – TPACK – E- learning, Web based learning, MOOC - Educational e-resources.

UNIT - IV: ICT FOR EDUCATIONAL MANAGEMENT AND ASSESSMENT

Definition – e-governance – importance of ICT in manpower planning and HRD – Applications of ICT in Educational Management – Use of ICT in financial management – Creating online community of Parents, Teachers and students for Effective management – TQM and applications of ICT in TQM - Concept and meaning of Computerized Test construction and Administration – Role of ICT in Assessment – Web based Assessment – Electronic support as a tool in assessment process – Use of Blogs for assessment – Advantages and Disadvantages of ICT based assessment

UNIT - V: ARTIFICIAL INTELLIGENCE (AI) IN EDUCATION

Artificial intelligence: Meaning and history – AI integrated education – Principles and objectives of AI integrated learning – Role of schools in the success of AI integrated learning – Meeting of National Goals through AI integration – Assessment of AI integrated learning.

SUGGESTED ACTIVITIES:

1. Select any one topic in the B.Ed. syllabus and integrate ICT in the selected topic
2. Create an online community to integrate the students and teachers in the classroom
3. Administer a Test using ICT
4. Create a personal blog and upload the ICT tools in the blog
5. Visit a nearby Teacher Education Institution and teach the students using ICT

TEXTBOOKS:

1. Kulkarni, S.S. (1986). *Introduction to Educational Technology*. Oxford & IBH.
2. Kumar, K.L. (1997). *Educational Technology*. New Age International (P) Ltd


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3. Mangal, S.K. (2002). *Essentials of teaching learning and information technology*. Tandon Publisher.
4. Prasad, K. (Ed.,) (2004). *Information and communication technology: Recasting development*. B.R.
5. Rajasekar. S. (2005). *Computer education and educational Computing*. Neelkamal
- Yadav, D.S. (2006). *Foundations of information technology*. New Age International (P) Limited.
6. Wayne, H; Maya, B and Charles, F. (2019). *Artificial intelligence in education*. Centre for Curriculum Redesign.

SUPPLEMENTARY READINGS:

1. Gaskell, Jim & Miller, Jeff. "Constructivist Approaches to Developing Diverse Communities of Learners Online: Examples from the MET program." Fourth Pan Commonwealth Forum on Open Learning Conference. 30 October - 3 November, 2006.
2. Harasim, L. (1990). *Online education: perspectives on a new environment*. Praeger.
3. Kochhar, S.K. (2000). *School administration and organization*. Sterling.
4. Rajasekar, S. (2010). *Computers in education*. Neelkamal.
5. Rinebert Winston., Skinner, B.T. (1968). *The technology of teaching*. Applenton, Century Crofts.
6. Sadagopan S. (2008). *E - Governance today*. The ICFAI University Press.
7. Sharma, R. A. (2001). *Technological foundations of education*, R. Lal Book Depot,
8. Sharma, Sita Ram & A.L. Vohra. (1993). *Encyclopedia of educational technology*. Anmol.

E-RESOURCES:

1. <http://egyankosh.ac.in/>
2. <https://334.edb.hkedcity.net/doc/eng/framework1/info.pdf>
3. <https://www.learningclassesonline.com/2018/07/ict-notes-in-english-medium-pdf-free.html>
4. http://cbseacademic.nic.in/web_material/Curriculum20/AI_Integration_Manual.pdf

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COURSE OUTCOMES:

After completing this course, the students will be able to

CO1: Develop professional ability in ICT

CO2: Apply the ICT skills in communications

CO3: Describe the impact of ICT on learning environments

CO4: Prepare the learners in learning

CO5: Identify the various educational resources

CO6: Integrates ICT in teaching learning process

CO7: Differentiate the advantages and disadvantages of ICT in assessment

CO8: Administer the test and evaluation by using ICT

CO9: Create online community by integrating ICT

CO10: Use Artificial Intelligence in teaching-learning and assessment process

OUTCOME MAPPING

COURSE OUTCOME	PROGRAMME SPECIFIC OUTCOMES																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
CO1	✓								✓	✓			✓				
CO2	✓								✓	✓			✓				
CO3	✓								✓	✓			✓				
CO4	✓								✓	✓			✓				
CO5	✓								✓	✓			✓				
CO6	✓								✓	✓			✓				
CO7	✓								✓	✓			✓				
CO8	✓								✓	✓			✓				
CO9	✓								✓	✓			✓				
CO10	✓								✓	✓			✓				

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