Course Title: Digital Education   **Credits- 3**

Teaching Hours: Theory (30) + Practical (15 * 2 = 30) = >Total 60 hrs

Course Objectives:

- To be able to use digital tools and technologies while learning
- To comprehend more innovative and engaging teaching-learning methods
- To encourage higher-level thinking and creativity through ICT
- To use digital education effectively both mentally and physically

Learning Outcomes:

- Understand the concept of Digital Education
- Discuss elementary details of using computer
- Develop ICT skill necessary for digital education
- Discuss elementary Internet concepts and using e-mail
- To know the various National Initiatives for Digital Education
- Take care of physical and mental well-being while using ICT

Unit-1: Understanding Digital Education

Introduction of Digital Education, Need of Digital Education, Modes of Digital Education, Implementation of Digital education, merits and demerits of digital education

Unit-2: Knowing computers:

What is Computer, Basic Applications of Computer; Components of Computer System, Central Processing Unit (CPU), VDU, Keyboard and Mouse, Other input/output Devices, Computer Memory, Concepts of Hardware and Software, Data and Information, Connecting keyboard, mouse, monitor and printer to CPU and checking power supply.

Unit-3: ICT skills

Fundamentals of Computer, Introduction to Operating System, basics of popular Operating system, Viewing of File, Folders and Directories, Creating and Renaming of files and folders, Digital documentations, understanding word processing, using spreadsheet, basics of presentation software and making small presentation

Unit-4: Internet and Communication

History of Internet, Introduction to Internet, Web Browser Basics, Internet Services, Searching the Web, Information Resources on Web, Security on the Internet, Downloading And Storing Data, Basics Of Electronic Mail; Getting An Email Account; Sending And Receiving Emails; Accessing Sent Emails; Using Emails, Electronic Commerce, Social Media, Netiquettes

Unit-5: Emerging trends in IT

AI, Machine Learning, Blockchain Management, Robotics, Bigdata, IOT, Cloud Computing, E-waste management.

Unit-6: National Initiatives for Digital Education

PM e-Vidya Program, DIKSHA- One Nation One Digital Platform, TV Channels- SWAYAM PRABHA, SWAYAM, Radio and Community Radio, Special e-Content for Visually and Hearing Impaired, Online Coaching

Unit-7: Guidelines for Physical Health & Mental Wellness during Digital Education

Ergonomic Aspects, Yoga, Exercises, Mental Wellness, Learning Environment, Elements of Safe Digital Education

TEXT BOOK:

1. Introduction to computer Science, ITL Education solution Limited, R&D Wing, PEARSON Education, Edition 2004

2. Textbook of Emerging Trends in Information Technology Publisher, Techtree Educations; First Edition by Ravi P Patki (Author)

REFERENCE BOOKS AND LINKS

1. Rajaraman V. – Fundamental of Computers, Prentice Hall of India Pvt. Ltd., New Delhi – 2nd edition, 1996

2. ICT Skill Development by Rishi Bansal and Puneet Kaur, Tandon Publications, Ludhiana

3. pragyata-guidelines_0.pdf (education.gov.in)

4. https://www.education.gov.in/en/e-contents

5. https://www.education.gov.in/en/ict-initiatives

PATTERN OF EXAMINATION

Weightage: - 70% (End Semester Exam) : 50 Marks (Theory) + 20 Marks (Practical)

30% (Internal Assessment)

Prepared By: *Prof. Pushpa Tewari*
Asst. Professor
Coordinator, Dept. of Computer Science (BCA)
Guru Nanak College, Dhanbad