Course Code   EDEC 228
SEMESTER – II
Computer Science

Unit –I

- As per prescribed syllabus by Gujarat State Higher Secondary Board for Std. IX to XII.

UNIT- II Computer Text book , Aids & Laboratory :

- Qualities of good computer science text book –criteria for evaluation of computer science text book

- Computer Application in educational Institutions – academic and non academic – Research Activities – Maintaining Students records.

- Importance and uses – types – Improvised aids for teaching – mass media and its advantages – Library – Exhibitions – field visits – Project and computer science club – use and advantages.

- Need for computer laboratory – value of the computer science library Special features of computer lab – Setting acomputer alb – Laboratory management – Arranging practical for pupils – Evaluation of practical.

UNIT-III Evaluation :

- Concept of evaluation – Need and importance – types – formative – summative -objective based evaluation, evaluation for achievement, diagnosis and prediction.

- Tools and techniques in evaluation - – Construction of different types of test :– Blue print – Characteristic of a good test (Teacher made tests – standardized tests)

- Computer Aided Evaluation - On line examination (diagnostic testing – remedial testing – online testing).

Unit –IV Practicum :

- Practice of a minimum of three skills on micro teaching

- Preparation of Lesson plan and Unit plan

- Preparation of teaching aids

- Preparation of Programmed Instruction

- Linear Programming (Minimum of 20 frames)

- Multimedia Presentation (Minimum of 20 slides)

- Preparation of transparencies

- Construction of an achievement test

- Critical analysis of content course of standard IX to XII syllabus.

- Identification and cataloguing of three websites relating to the prescribed school curriculum Comparative evaluation of any two web pages bearing on the same unit in the school curriculum

REFERENCES :

1. **Windows 98 Complete.** (1998). BPB Publications.

2. **HTML Complete.** (1999). BPB Publications.

3. **Linux Complete.** (2000). BPB Publications.

4. **A Text book of Multimedia.** (2006). New Delhi: Computer Publications Ltd.

5. Craig Zacker. (2001). **Networking: The Complete Reference.** Tata McGraw- Hill Publishing.

6. Gagne R.M. (1990). **The Learning Principles: Analysis of Concept Learning**. Merril

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8. Gorden B. Davis. (1982). **Introduction to computers.** McGraw- Hill Publishing coy.

9. Harold F.O' Neli. (1981). **Computer – Based Instruction.** Academic Press.

10. Joe Kraynak, and Jow Harbraken. (1997), **Internet 6 – in – 1.** Prentice-Hall of India P Ltd.

11. John Maddison. (1983). **Education in the Micro Electronics Era.** The Open University Press.

12. Karl Schwartz. (2000). **Training Guide-Microsoft Windows 2000.** DDC Publishing Inc.

13. Kaushik. and VijayaKumari. (1997). **Essentials of Teaching and Learning,** Bhargava

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15. Krishnan, N. (2001). **Computer Fundamentals and Windows with Internet Technology.**

16. SciTech Publications Pvt. Ltd.

17. Madnick, S.E. and Danovan, J.J. (1987). **Operating Systems.** McGraw – Hill Book Company.

18. Peter Norton. (1999). **DOS Guide.** Prentice-Hall of India.

19. Rajaraman, V. (1998). **Fundamentals of Computers.** Prentice-Hall of India Pvt. Ltd.

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20. Singh,Y. K. (2009). Teaching Practice. New Delhi: APH Publishing Corporation.

21. Sharma, R. N. (2008). Principles and Techniques of Education. Delhi: Surjeet Publications.

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23. Agarwal J. C. (2006). Essential of educational technology. Teaching and learning. New

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