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Subject Title: Fundamentals of Computer Prepared by: M.pallavi

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Unit - I: SHORT QUESTIONS

1. Define computer?
2. List any four characteristics of computer?
3. List the applications of computers?
4. Discuss various output devices?
5. Discuss in brief about cache memory
6. Write a short on primary and secondary memory
7. Write brief note on RAM and ROM
8. What is USB flash drive?
9. Define memory cards?
10. Write a short note on offline storage devices?

Unit - II

11. Give an overview of decimal number system
12. Add the following numbers in gave base without converting to decimal.(1230)4 and (23)4
13. Explain the one's complement and two's complement representation of a binary number
14. Draw the symbols of the AND ,OR and NOT Gates
15. What about the k-map
16. Define computer software.
17. What is system software and application software
18. Define firmware and middleware.

Unit – I : ESSAY QUESTIONS

19. What is computer? Explain in brief the significance characteristics of a computer
20. Discuss in brief about the various generations of the computers.
21. Classify the computer on the basis of size and performance

22. Explain the block diagram of the computer /architecture of computer.
23. Explain about the input devices
24. Explain about the output devices
25. Give a brief introduction on computer memory .illustrate the hierarchy of memory
26. Write about the (i) Processor Register (ii) Cache memory
27. Explain in the detail about primary memory
28. Explain briefly about the ROM
29. Discuss about (a) secondary storage devices (b) Hard disk
30. What are the uses ,advantages and limitations of optical disks

UNIT-II

31. Describe the procedure of converting binary t decimal numbers .convert the following binary numbers into decimal numbers system.

    (i) $(10110111)_2$

    (ii) $(10010.1011)_2$

32. List the step to convert from decimal to binary with an example.
33. Explain binary addition ,subtraction ,multiplication and division with examples
34. Explain the ones and two's complement representation of a binary number.
35. Explain the subtraction of binary numbers using one's complement method with examples
36. Explain the subtraction of binary numbers using two's complement method with examples
37. Write about the octal number system .and also conversion from octal to decimal and decimal to octal.

36 Write about the hexadecimal number system .and also conversion from hexadecima to decimal and decimal to hexadecimal.

37 Discuss in brief the ASCII codes of the character

38 Explain the venn diagram with the different laws

39 Explain the following terms

(i) Standard form

(ii) Min term

(iii) Max term

(iv) Canonical form

40 Explain the method to convert SOP and POS forms into their standard forms.

41 Explain the Logic gates. Explain about the logic gates giving their graphic symbol and truth tables.

42 Define logic diagram and explain about converting a Boolean expression to logic diagram and vice versa.

43 Define the k-map .Explain the implementation and simplification of 2- variable and 3-variable k- map

44. Explain about 4-variable k-map

45 Explain briefly about the computer software

46 Explain in detail about the system software

47 Explain in detail about the application software

48 Write a short notes on

(i)Firmware

(ii) Middleware

49 Discuss about the software development life cycle (SDLC)