

Model Question Paper

(Model III)

**MAHATMA GANDHI UNIVERSITY**

IV Semester B.Sc. Programme Examination 20....

**ELECTRONIC EQUIPMENT MAINTENANCE**

**PH4B52U- COMPUTER HARDWARE AND NETWORKING**

Instructions:

1. Answer all questions in part A. This contains 4 bunches of 4 objective questions. For each bunch, grade A will be awarded if all the 4 answers are correct, B for 3, c for 2, d for 1 and E for 0.
2. Answer any 5 questions from part B, any 4 from part C and any 2 from part D.
3. Candidates can use non programmable calculators/tables

Time: Three hours

Total weight : 25

**PART A**

**Answer *all* questions**

**Each bunch of four questions carries a weightage of one**

**Bunch 1**

1. The physical memory capacity of 80286 processor is .....
2. Add – on cards are also called as .....
3. IDE is .....
4. WAN stands for .....

**Bunch 2**

5. In which network the ends are not connected:  
(a) Bus (b) ring (c) star (d) mesh
6. Which of the following is a network protocol?  
(a) Ethernet (b) Xmodem (c) HTTP (d) all of the above
7. Conventional DRAM is said to be .....  
(a) Synchronous (b) asynchronous (c) double rate (d) none of these
8. The network connector which can interconnect segments that use different physical media: (a) bridge (b) router (c) gateway (d) NIC

**Bunch 3**

State whether the following statements are True or False:

9. The main parts of start – up- routines are POST and initialization.
10. File Allocation table describes how each cluster is allocated on the disk.
11. In a parallel interface technique, the data is transmitted as 1 –bit at a time through a single wire.
12. Networks can be broadly classified as using either peer – to- peer or client/server architecture.

**Bunch 4**

13. The word modem is a combined abbreviation of the two words ..... and .....
14. .... is the geometric arrangement of the computers in a network.
15. .... is a positioning device.
16. CGA adapters can use both the character-mapped and ..... display techniques.

(Weightage 4 x 1 = 4)

**PART B**

**( Short answer questions- weight 1 each)**

**Answer any five questions**

17. What are the operating modes of 80386 processor?
18. What is POST? Where is it contained?
19. Name any two video display devices used with a microprocessor.
20. Name any two formatting systems used for Hard disk.
21. Write the difference between broadband and baseband networks.
22. What are the applications of graphical accelerators?
23. What do you mean by SCSI controllers?
24. Define Logical Block Address (LBA).

(Weightage 5 x 1 = 5)

**PART C**  
**( Short Essays/ problems- weight 2 each )**  
**Answer any four questions**

25. What are the functions of selectors and descriptors of 80286.
26. With a neat block diagram, explain the principle of On-line UPS.
27. Draw a block diagram to explain the components and their functions of a LAN.
28. With a neat block diagram, explain the principle of Internal and External modems.
29. Explain the working of a scanner.
30. With a neat diagram, explain the principle of an opto-mechanical mouse.

(Weightage 4 x 2 = 8)

**PART D**  
**( Essay type questions – weight 4 each)**  
**Answer any two questions**

31. With necessary block diagram, describe the working of Digital Camera. Show how various controls are affected.
32. With neat block diagram, explain the working of a CRT monitor.
33. Draw and discuss the internal block diagram of 8086.

(Weightage 2 x 4 = 8)

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