

Y 3015

M.C.A. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2006.

Elective

CA 045 — COMPUTER PERIPHERALS AND INTERFACING TECHNIQUES

(Regulation 2002)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What are the images on CRT displays?
2. Mention the parallel and serial interface of a printer controller.
3. How can the data be recorded into Floppy Disk?
4. List the electro mechanical subsystems of a hard disk.
5. What are the different standard LAN protocols used for sharing?
6. Compare the different operation modes of PC-AT.
7. How can a digital signal be affected during the transmission through long wire?
8. What is the use of RS-232 interface?
9. List the monitor problems that are indistinguishable from the display adapter.
10. What are the problems associated with physical layout?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the print mechanism of impact and non impact printer with each two examples and also list the differences. (16)

Or

- (b) (i) Discuss the features of CGA over MDA. (8)
- (ii) Compare HGA and HGA plus. (8)

12. (a) (i) Explain the common concept and different concept between FDD and HDD. (10)

(ii) Write short notes on RAID levels. (6)

Or

(b) (i) Explain in detail the standard formats for recording on a magnetic disk with a neat diagram (8)

(ii) Explain a brief description of the FDC system interface. (8)

13. (a) List the hardware and software features of PC/AT 286 and AT 386. (16)

Or

(b) Explain in detail the PC-AT interfacing to any four peripheral devices. (16)

14. (a) (i) Explain how a serial character format can be transmitted in asynchronous communication with diagram. (10)

(ii) Write short notes on Plug and Play system. (6)

Or

(b) Explain in detail the timing diagram for read and write bus cycle. (16)

15. (a) (i) Discuss about what are the essential checks that are missed by the enthusiastic engineers. (8)

(ii) Explain what are the steps to be performed to upgrade a motherboard from 256K to 640K with diagram. (8)

Or

(b) (i) List the common fault and symptoms of display adapter. (8)

(ii) Explain how the keyboard can be tested using advanced diagnostics tools. (8)