2022

(Held in 2023)

BACHELOR OF COMPUTER APPLICATION

Paper : BCAHC1016

(Computer Fundamental and ICT Hardware)

Full Marks : 60

Pass Marks : 24

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct answer : 1×5=5

(a) Which one is the optical memory used in computer?

(i) CD-ROM

(ii) Cache memory

(iii) Floppy disk

(iv) Hard disk

(b) 2's complement of 1010 is

(i) 1101

(ii) 0110

(iii) 1001

(iv) 1110

(c) Which of the following is not a type of computer code?

(i) EDIC

(ii) ASCII

(iii) BCD

(iv) EBCDIC

(d) What is the high-speed memory between the main memory and the CPU unit called?

(i) Register memory

(ii) Cache memory

(iii) Storage memory

(iv) Virtual memory

(e) A process is a

(i) single thread of execution

(ii) program in execution

(iii) program in memory

(iv) task

2. Answer the following questions : 2×5=10

(a) What is the function of arithmetic and logical unit?

(b) Convert $(A4)_{16}$ to decimal number system.

(c) Define Cache memory.

(d) What is Bootstrapping a computer?

(e) Calculate the 2's complement representation of 100110.

3. Answer any *five* of the following questions : 5×5=25

(a) Explain assembler, compiler and interpreter.

(b) Draw the block diagram of microprocessor.

(c) Write a flowchart to find the factorial of an integer number.

(d) Explain about linker and loader.

(e) Explain the concept of virtual memory.

(f) What is RAM? Explain different types of RAM.

(g) Explain impact and non-impact printers.

4. Answer any *two* of the following questions : 10×2=20

(a) Explain any INTEL processor in brief.

(b) Explain, in detail, about FAT and NTFS file system.

(c) Write short notes on any *two* of the following :

(i) Switch

(ii) RJ45 connectors

(iii) Patch panel

(iv) MODEM

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