

[This question paper contains 3 printed pages.]

Your Roll No. ....

5302

B

**B.A. Prog./I**

(A)

**COMPUTER APPLICATIONS**

**PAPER-CS-I—Computer Fundamentals  
and Software Packages**

(Admissions of 2004 and onward)

Time : 3 Hours

Maximum Marks : 45

(Write your Roll No. on the top immediately on receipt of this question paper.)

All questions are compulsory.

1. (a) Draw a block diagram of a computer system. Explain the various components briefly. 4
- (b) Define Virtual Reality. What are the devices required for virtual reality ? 3
- (c) Explain 'Kinematics' in context of multimedia. 1
2. (a) Perform the following conversions : 4
  - (i)  $(1010110001)_2 = ( ? )_8$
  - (ii)  $(753)_8 = ( ? )_{10}$
  - (iii)  $(A27)_{16} = ( ? )_2$
  - (iv)  $(271)_{10} = ( ? )_2$

[P. T. O.]

- (b) What is Cache Memory ? Explain different types of Cache Memory. 2
- (c) What is the purpose of MODEM and Network Interface Card ? 2
3. (a) What are optical disks ? Differentiate between CD-ROM and DVD-ROM. 2
- (b) What are different types of ROM ? Explain briefly any *two* of them. 2
- (c) What are scanners used for ? Describe any *two* types of scanners. 2
- (d) Differentiate between impact and non-impact printers. 2
4. (a) What are the functions of operating systems ? Describe each *one* of them. 3
- (b) What is user interface ? Explain different types of user interface. 2
- (c) Explain the various states of a process. 3
5. (a) Explain various categories of application software and give suitable examples for each. 4
- (b) Write short notes on any *two* of the following : 4
- (i) Biometric Technique

(ii) Anti-virus Software

(iii) Digital Signature.

6. (a) Give full forms of the following : 3

(i) VLSI

(ii) BIOS

(iii) LCD

(iv) ASCII

(v) RISC

(vi) USB

(b) Explain the characteristics of super computers. 2