[This question paper contains 4 printed pages.]

5542   *Your Roll No.* ....

B.A. Prog. / I   D

COMPUTER APPLICATIONS

Paper-CS–I – Computer Fundamentals
and Software Packages

(Admissions of 2004 and onwards)

Time : 3 Hours   *Maximum Marks : 45*

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

Part **A** *is compulsory.*
Attempt any **two** *questions from Part* **B.**
Attempt **all parts** *of a question together.*

PART – A

1. (a) Describe briefly the four categories of computers.
   (2)

   (b) What is System Bus ? List the main functional
   groups of a system bus.   (2)

   (c) Expand the terms: PROM, EPROM, CMOS and
   WORM.   (2)

P.T.O.

(d) What are pointing devices ? Give two examples of pointing devices. (2)

(e) Write short note on device drivers. (2)

(f) What do you understand by "Software" ? What are the various categories of software available ? (2)

(g) Define the term "Animation". (1)

(h) Differentiate between :

   (i) Hacker and Cracker

   (ii) Desktop and Laptop (2)

PART – B

2. (a) With the help of a diagram, explain the working of a computer. (3)

   (b) Explain how computers can be used in the field of education and medicine ? (2)

   (c) List any four characteristics of fourth generation computers. (2)

   (d) What is SMPS ? What are its main functions ? (2)

(e) Explain the functions of Program counter and Accumulator in a CPU. (2)

(f) Carry out the following conversions :

   (i) $(1110010)_2 = (?)_8$

   (ii) $(148)_{10} = (?)_2$ (2)

(g) What is Cache Memory ? Explain the various levels of cache available. (2)

3. (a) What are the advantages and disadvantages of magnetic disk ? (3)

(b) Distinguish between :

   (i) Static RAM and Dynamic RAM

   (ii) LCD and CRT (4)

(c) Briefly explain the hierarchy of memories available in the computer system. (3)

(d) Write short notes on :

   (i) Scanners

   (ii) Plotters (4)

(e) Give a suitable application of MICR. (1)

4. (a) What is deadlock ? How can it be eliminated from the system ? (3)

(b) What are expansion cards ?   (1)

(c) Explain the desirable features of a good multimedia
    system.   (3)

(d) Define Virtual Reality. What are the key
    characteristics of virtual reality ?   (3)

(e) What do you understand by user authentication ?
                                                       (2)

(f) What is process scheduling ? List out different
    levels of process scheduling.   (3)

5. (a) Explain any three forms of software piracy. (3)

    (b) What are the functions of system utility programs ?
                                                       (3)

    (c) Explain how digital signature is used while sending
        a document across a network.   (3)

    (d) Explain biometric technique with an example.   (3)

    (e) Explain how software update is different from
        software upgrade.   (2)

    (f) Name the first super computer developed in
        India.   (1)