4510 *Your Roll No.* ....

B.A. Prog. / I AS

COMPUTER APPLICATIONS

Paper CS-I : Computer Fundamentals and Software Packages

(Admissions of 2004 to 2010)

Time : 3 Hours *Maximum Marks : 45*

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

Answer **All** *questions.*

1. (a) What are the characteristics of Super Computers ?
   (2)

   (b) Perform the following conversions :—

   (i) $(42F)_{16} = (?)_{10}$

   (ii) $(11011.1011)_2 = (?)_{10}$ (2)

   (c) State the factors that should be considered while choosing a processor of a computer system. (5)

2. (a) What do you understand by Magneto-Optical storage devices ? Explain. (3)

   (b) What is a computer terminal ? State the different types of terminals. (4)

   P.T.O.

(c) Define the term Aspect ratio.   (2)

3. (a) What do you understand by Memory allocation ? What are the different strategies used to allocate memory space to a process ?   (4)

(b) Explain the life cycle of a process.   (3)

(c) What do you understand by Spooling ?   (2)

4. (a) Explain the importance and role of animation in making a multimedia application.   (4)

(b) What do you understand by data compression ?
                                                     (2)

(c) What is software piracy ? and how it can be avoided ?   (3)

5. (a) Define Computer Security ? What are factors responsible for effective computer security ?   (3)

(b) Differentiate between any **three** of the following :—

   (i) Application – level Gateway and Circuit level gateway

   (ii) CD and DVD

   (iii) Compiler and Interpreter

   (iv) Raster Scan display and Random scan display
                                              $(2×3=6)$