[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 845 **E** **Your Roll No.....**

Unique Paper Code : 234291

Name of the Course : **B.Sc. (Prog.) / B.Sc. (Hon.)**

Name of the Paper : CSAT–201 (Computational Skills)

Semester : II

Duration : 3 Hours Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Section **A** is compulsory.
3. Attempt any **5** questions from Section **B.**

SECTION A

1. Answer the following :

   (a) Name any one input device commonly used with ATMs. (1)

   (b) In which component of CPU addition and comparison of data is performed. (1)

   (c) What is operating system ? Name two key functions of operating system. (2)

   (d) Convert $(5A1)_{16}$ to decimal. (2)

   (e) $(1011111)_2 + (1110101)_2 = (?)_2$ (2)

   (f) Differentiate between RAM and ROM. (2)

   (g) How is a character stored in a computer ? (2)

   (h) What are point-and- draw devices ? Give two examples. (2)

   (i) Give 2's complement of $(11011111)_2$. (2)

   (j) Differentiate between animation and video with suitable examples. (3)

   (k) Distinguish between second and fourth generation computers. (3)

   (l) Write the full form of ASCII, WWW, URL. (3)

P.T.O.

SECTION B

2. (a) What is a computer network ? Discuss the advantages of LAN over WAN. (5)

   (b) What is internet search engine ? Give two examples. (2)

   (c) Name any two social websites. List their key features. (3)

3. Differentiate between any **four** of the following :

   (i) Electronic mail and posta 1 mail

   (ii) Monitor and Screen image projector

   (iii) OCR and OMR

   (iv) Data scanning devices and image scanning devices

   (v) Plotters and printers (2.5×4=10)

4. (a) What is multimedia ? Give any four applications of multimedia. (3)

   (b) Discuss briefly the Star and Ring network topologies. (3)

   (c) What is a collating sequence ? Give example. (2)

   (d) Describe any two storage devices. (2)

5. (a) Perform the following conversions

   (i) Convert $(745)_8$ to Hexa-decimal

   (ii) Convert $(165.64)_{10}$ to binary

   (iii) Convert $(B27)_{16}$ to decimal (2×3=6)

   (b) Perform the following operations

   (i) Add $(11011.01)_2$ and $(11101)_2$.

   (ii) Subtract 75 from 84 using 2's complement. (1+3)

6. (a) Define algorithm. Write an algorithm to find simple interest on a given amount. (6)

   (b) What is cache memory ? And how it is different from primary memory ? (4)

7. Write short notes on any **four** of the following :

   (i) Computer codes

   (ii) ALU

   (iii) CPU registers

   (iv) Web browsers

   (v) Computer virus (2½×4=10)