

## B.Sc. (Part-I) Semester-I Examination

COMPUTER SCIENCE OR COMPUTER APPLICATION OR INFORMATION  
TECHNOLOGY-I (NEW)

## (Fundamentals of Information Technology and C Programming)

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) All questions are compulsory.

(2) Question No. 1 carries 8 marks and all other questions carry 12 marks each.

(3) Assume suitable data wherever necessary.

1. (A) Fill in the blanks :

(i) Functions which are designed and developed by programmer are called as \_\_\_\_\_ function.

(ii) HTTP stands for \_\_\_\_\_.

(iii) MODEM stands for \_\_\_\_\_.

(iv) Scanner is \_\_\_\_\_ device. 2

(B) Choose the correct alternative :

(i) The lowest storage unit to measure memory is :

(a) Mega byte

(b) Nibble

(c) Binary digit

(d) Byte

(ii) Comments in C is started and ended with :

(a) // /\*

(b) /\* /\*

(c) /\* /\*

(d) /\* /\*

(iii) Which of the following is NOT a loop statement ?

(a) while

(b) do-while

(c) switch

(d) for

(iv) The symbol used in flowchart for decision making is :

(a) Rectangle

(b) Circle

(c) Parallelogram

(d) Diamond 2

(C) Answer the following in **one** sentence :

(i) Define Operating System.

(ii) Define topology.

(iii) What is Operator ?

(iv) What do you mean by entry-controlled loop structure ? 4

2. (A) Differentiate between impact and non-impact printer. 6

(B) Explain the characteristics of computer. 6

OR

3. (A) Differentiate between RAM and ROM. 6  
(B) Explain why secondary memory is required. Draw a block diagram of computer and explain functions of each unit. 6
4. (A) Explain rename, append, close, write operations on files. 6  
(B) Explain the concept of online and real time operating system. 6

**OR**

5. (A) Explain with suitable examples file naming with respect to file handling. Explain protection, password and Read only flag attribute. 6  
(B) Define operating system. What are its objectives ? Explain time sharing O.S. 6
6. (A) Differentiate between LAN and WAN. 6  
(B) Explain and draw diagram showing arrangement of nodes in mesh topology with some advantages and disadvantages. 6

**OR**

7. (A) Explain the concept of FTP, HTTP. 6  
(B) Explain with diagram Ring topology. 6
8. (A) Write an algorithm and draw a flowchart to exchange contents of two variables using third variable. 6  
(B) Describe the complete structure of C program with suitable example. 6

**OR**

9. (A) Explain the concept of the terms – Assembler, Interpreter and Compiler. 6  
(B) Write an algorithm and draw a flowchart to check if the number is divisible by 2 or not. 6
10. (A) Explain implicit and explicit type conversion with suitable examples. 6  
(B) Explain conditional operator with syntax and find out biggest number in given two numbers. 6

**OR**

11. (A) Explain with concept, syntax and suitable example symbolic constants. 6  
(B) What do you mean by pre and post increment operator used in C language ? Write suitable examples to support your answer. 6
12. (A) Write a program in C to display first 5 odd numbers. 6  
(B) Explain with syntax and suitable example do-while ( ) loop. 6

**OR**

13. (A) Write a program in C, to find the sum of numbers from 5 to 15 (using For statement). 6  
(B) Explain the working, syntax and suitable example of while ( ) loop. 6