

B.Sc. Part-I Semester-I Examination
COMPUTER SCIENCE/COMPUTER APPLICATION/INFORMATION
TECHNOLOGY-I (NEW)

(Fundamentals of Information Technology & C Programming)

Time : Three Hours]

[Maximum Marks : 80

- N.B.:**-- (1) Question No. 1 carries 8 marks & all other questions carry equal (12) marks.
(2) Assume suitable data wherever necessary.

1. (A) Fill in the blanks :

- (i) DMP stands for _____.
- (ii) URL means _____.
- (iii) 1KB equals to _____ bytes.
- (iv) The header file is included in the program for standard I/O statements. 2

(B) Choose the correct alternative :

- (i) CPU is a combination of :
 - (a) Input Unit and Storage
 - (b) Control Unit and O/P Unit
 - (c) ALU and Input Unit
 - (d) ALU, Control Unit and memory Unit.
- (ii) Who invented the high level language 'C' ?
 - (a) Niklaus Writh
 - (b) Dennis M. Ritchie
 - (c) Seymor Strostrup
 - (d) John Hudson
- (iii) Which of the following is the correct usage of conditional operator in C ?
 - (a) $a > b ? c = 30 : c = 40 ;$
 - (b) $a > b ? c = 30 ;$
 - (c) $\max = a > b ? a > c ? a : c : b > c ? b : c$
 - (d) $\text{return } (a > b) ? (a : b) ;$
- (iv) Which of the following is an arithmetic operator ?
 - (a) $\&\&$
 - (b) $/$
 - (c) $>$
 - (d) $= =$ 2

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

- (i) What is RAM ?
- (ii) What is Keyword ?
- (iii) What is Interpreter ?
- (iv) What is an Algorithm ? 4

2. (A) Explain the generations of computers. 6
(B) What are impact and non-impact printers ? Explain. 6

OR

3. (A) Explain the terms :
(i) Mouse 6
(ii) Scanner. 6
(B) Describe the block diagram of computer with its functional units. 6
4. (A) What is an Operating System ? State the types of operating system. Explain the multitasking operating system. 6
(B) What is Windows Explorer ? Explain. 6

OR

5. (A) Explain the file structure of O.S. with different file types. 6
(B) Explain the Time Sharing Operating System. 6
6. (A) What is Computer Networking ? Why it is required ? Explain. 6
(B) What is Internet ? How it is useful ? Explain the types of Internet connections. 6

OR

7. (A) What is Protocol ? Explain the FTP and HTTP Internet protocols. 6
(B) What is Web Browser ? Explain any one web browser. 6
8. (A) What are flow-charts ? Explain with the various symbols used to draw flow-chart. 6
(B) Explain the structure of C-Program with an example. 6

OR

9. (A) What are Programming Languages ? State and explain the features of C-Programming language. 6
(B) What are Translators ? Explain the terms Compiler, Interpreter and Assembler. 6
10. (A) What are data types in C ? Explain its types. 6
(B) Explain the logical and bitwise operators used in C with example. 6

OR

11. (A) What are unary operators in C ? Explain increments and decrement operators with example. 6
(B) Explain the conditional operator in C with suitable example. 6
12. (A) Explain the formatted I/O statements printf () and scanf () with an example. 6
(B) Write a program in 'C' to swap the two given values. 6

OR

13. (A) Explain the switch-case statement in C with suitable example. 6
(B) Write a program in C to find the sum of any ten numbers and its average. 6