

**B.Sc. (Part—I) Semester—I Examination**  
**COMPUTER APPLICATIONS (Voc.) (New)**  
**(Basic of Computer and Structured 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) A hard disk is divided into tracks which is further subdivided into \_\_\_\_\_.
  - (ii) A computer can not 'boot' if it does not have the \_\_\_\_\_.
  - (iii) Array subscript in C always start at \_\_\_\_\_.
  - (iv) Character constants should be enclosed between \_\_\_\_\_ . 2
- (B) Choose the correct alternative and rewrite the following :
- (i) \_\_\_\_\_ is a type of memory circuitry that holds computers startup routines.
    - (a) RIM (b) RAM
    - (c) ROM (d) Cache memory
  - (ii) Which is considered as direct entry input device ?
    - (a) Optical scanner (b) Keyboard
    - (c) Light pen (d) All of the above
  - (iii) Which one is not a reserve keyword in C language ?
    - (a) Auto (b) Var
    - (c) Case (d) Register
  - (iv) Prototype of a function means \_\_\_\_\_ .
    - (a) Name of function (b) Output of function
    - (c) Declaration of function (d) Input of a function 2
- (C) Answer the following in **one** sentence each :
- (i) Give the general syntax to declare one dimension array.
  - (ii) What is function ?
  - (iii) What is Booting ?
  - (iv) What is the use of getch ( ) function ? 4
2. (A) Explain Mini and Micro computer with its characteristics. 6
- (B) Explain the following :
- (i) RAM
  - (ii) TFT
  - (iii) EPROM. 6

**OR**

3. (A) Describe the following in brief :
- (i) Cache memory
  - (ii) Monitor
  - (iii) Pen drive. 6
- (B) Explain secondary storage devices with its functions. 6

4. (A) Explain the following functions of OS :  
(i) I/O management  
(ii) Process management. 6  
(B) Describe the following :  
(i) Memory management  
(ii) Desktop and Icons in Windows XP. 6  
**OR**
5. (A) Explain Operating System with its functions. 6  
(B) What are the features of Windows XP ? Explain. 6
6. (A) Explain the structure of C programs with advantages of C language. 6  
(B) Explain Bitwise Operators with suitable example. 6  
**OR**
7. (A) What are Constants ? Explain types of constants with example. 6  
(B) Explain ;  
(i) Relational Operator  
(ii) Logical Operator. 6
8. (A) Explain :  
(i) getch ( )  
(ii) putch ( )  
(iii) puts ( ). 6  
(B) Differentiate between While and Do-While statement. 6  
**OR**
9. (A) Explain if-else statement with example. 6  
(B) Write a program to print given pattern using nested loop :  
1  
2 3  
4 5 6  
7 8 9 10 6
10. (A) Explain initialisation and declaration of Two Dimensional Array with example. 6  
(B) What is Pointer ? Explain pointer and address arithmetic with example. 6  
**OR**
11. (A) Explain call by value and call by reference with example. 6  
(B) Explain pointer to functions with example. 6
12. (A) Explain :  
(i) fputs ( )  
(ii) fread ( )  
(iii) fwrite ( ). 6  
(B) Write a program to display the contents of file on monitor. 6  
**OR**
13. (A) Explain the following file operations :  
(i) fgets ( )  
(ii) fscanf ( )  
(iii) fprintf ( ). 6  
(B) Explain :  
(i) feof ( )  
(ii) ferror ( ). 6