

**HS/XI/V/CT/Paper-II/19****2019**

**COMPUTER PROGRAMMING IN C**  
**COMPUTER TECHNIQUE ( Paper - II )**  
**( Vocational Stream : Theory )**

Full Marks : 100

Time : 3 hours

*The figures in the margin indicate full marks for the questions*

*General Instructions :*

- (i) Write all the answers in the Answer Script
- (ii) Attempt Part — A Objective Questions serially
- (iii) Attempt all parts of a question together at one place

( PART : A — OBJECTIVE )

( Marks : 50 )

**SECTION – I**

- 1.** Fill in the blanks from the list of words/phrases given at the end: 1×20 = 20

- (a) A \_\_\_\_\_ is a data name that may be used to store a data value.
- (b) The ANSI C language support \_\_\_\_\_ different types of operator.

- (c) The step-by-step solving of any problem are known as \_\_\_\_\_.
- (d) The logical operator “= =” checks for \_\_\_\_\_ of two value.
- (e) The ‘goto’ requires a \_\_\_\_\_ in order to identify the place where the branch is to be made.
- (f) Every program must have a \_\_\_\_\_ function.
- (g) A Global variable is also known as \_\_\_\_\_ variable.
- (h) The \_\_\_\_\_ operator is true only when both the operands are true.
- (i) The expression 11%4 evaluates to \_\_\_\_\_.
- (j) \_\_\_\_\_ is a post-test loop statement.
- (k) When we need to choose one, among number of alternatives, a \_\_\_\_\_ statement is used.
- (l) Usually while using a string in a program \_\_\_\_\_ header file is used.

( 3 )

- (m) The operator \_\_\_\_\_ is usually used as a increment operator in C.
- (n) A set of instruction arrange in a sequential manner is known as \_\_\_\_\_.
- (o) The function \_\_\_\_\_ is used to determine the length of a string.
- (p) Local variable which exists and retains its value even after the control is transferred to the calling function is \_\_\_\_\_, storage class.
- (q) A/An \_\_\_\_\_ storage class can be used to declare global variable known to all the functions in the file.
- (r) The \_\_\_\_\_ is equivalent to  $a = a + 1$ .
- (s) \_\_\_\_\_ returns the exponential of x.
- (t) The standard mathematical function are included in the \_\_\_\_\_ header file.

**Lists of words/phrase :**

external	3	internal	strlen( )	main ( )
label	++a	equality	extern	++
eight	exp(x)	math.h	algorithm	OR
static	a-	do..while	ctype.h	variable
dynamic	switch( )	default	AND	program

( 4 )

2. State whether the following statements are *True* or *False*:  $1 \times 10 = 10$
- (a) In C upper and lower case letters are same.
- (b) **stdio.h** refers to standard I/O header file.
- (c) Every C program ends with an 'END' word.
- (d) The underscore character is allowed in identifiers.
- (e) In C, comma's are allowed in between digits of an integers.
- (f) A double data type number uses 64 bits giving a precision of 14 digits.
- (g)  $X+=3$  is equivalent to  $x=x+3$ .
- (h) An assignment statement includes  $=$  symbol.
- (i) The scanf ( ) function can be used without variable list.
- (j) isprint ( ) function checks whether C is a printable character or not.
3. Choose and write the correct option:  $1 \times 5 = 5$
- (a) Which of the following operator takes only integer operands?
- (i) +

( 5 )

- (ii) \*
  - (iii) /
  - (iv) %
- (b) Any C program–
- (i) Must contain at least one function
  - (ii) Need not contain any function
  - (iii) Needs input data
  - (iv) None of the above
- (c) What is a function–
- (i) Function is a block of statements that perform some specific task
  - (ii) Function is the fundamental modular unit. A function is usually designed to perform a specific task
  - (iii) Function is a block of code that perform a specific task. It has a name and is reusable
  - (iv) All of the above

( 6 )

- (d) The C program are converted into machine language with the help of–
- (i) An interpreter
  - (ii) A compiler
  - (iii) An operating system
  - (iv) None of the above
- (e) Which of the following is the special operator in C–
- (i) Comma operator
  - (ii) Bitwise operator
  - (iii) Both (i) and (ii)
  - (iv) None of the above

4. Write short notes on the following (*Any five*) :  $3 \times 5 = 15$

- (a) Application software
- (b) Flowchart
- (c) Bitwise operator
- (d) Interpreter
- (e) 'Data types' with example
- (f) 'goto' statement
- (g) Modulus Operator

( 7 )

SECTION – II

( PART : B – DESCRIPTIVE )

( Marks : 50 )

Answer ANY TWO questions from *each* UNIT

UNIT– I

5. (a) What is a constants? What are the types of constants? Explain with example. 4
- (b) What is C character set. 2
6. (a) What is meant by Associativity? 4
- (b) What are the precedence of Arithmetic operator? Explain 2
7. Distinguish between the following pairs: 3 + 3 = 6
- (a) 'getchar' and 'scanf' function
- (b) '%c' and '%s' specifications for reading

UNIT– II

8. (a) What is escape sequence? 3
- (b) Explain, by mentioning commonly used escape sequences. 3

( 8 )

9. Distinguish between the following pairs: 3 + 3 = 6
- (a) Global variable and Local variable.
- (b) Actual argument and Formal arguments.
10. Write the purpose of the following: 3 + 3 = 6
- (a) Pre-test loop
- (b) Post-test loop

UNIT– III

11. What is a structure? Explain with the help of suitable example. 3 + 4 = 7
12. What is the 'switch' statement in C? Explain with the help of suitable example. 3 + 4 = 7
13. (a) What is one dimensional array? Explain with example. 3
- (b) Write the purpose of the following functions: 2+2 = 4
- (i) 'fseek ( )'
- (ii) 'fopen ( )'

UNIT – IV

- 14.** (a) Write the purpose of feof ( ) function? 3  
(b) What is the function of APPEND ( ) function. 3

- 15.** Write short note on the following: 3 + 3 = 6

(a) 'fprintf ( ) function

(b) 'fscanf ( ) function

- 16.** Write the function of the following header file:  
(any two) 3 + 3 = 6

(a) string.h

(b) stdio.h

(c) stdarg.h

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