

Time allowed: 3 Hrs

Computer Science (Part – II)

Marks &gt; 75

Fresh / Reappear

Note: There are three sections of the paper, A, B & C. Attempt Section – A on the same paper and return it to the Superintendent within the given time. No marks will be awarded for cutting, erasing or over writing. Mobile phone etc. are not allowed in the examination hall.

Time: 20 Mins

Section "A"

Marks: 15

Q.1 Write the correct option i.e. A, B, C or D in the empty box provided opposite each part.

- i. In which type of operating system, several programs are running in RAM at same time? A  
A. Multiprocessing    B. Multiprogramming    C. Real time system    D. Batch processing
- ii. In .....state of a process, the process waits for some event to happen. C  
A. Ready    B. Running    C. Blocked    D. New
- iii. Which of the following phase of SDLC, determines whether a project should go forward or not? D  
A. Designing    B. Testing    C. Implementation    D. Feasibility
- iv. Every C++ program has/have the following component(s). D  
A. Preprocessor directives    B. Main function    C. Constants    D. Both A & B
- v. In C++ comments are written between ..... A  
A. /\* \*/    B. ( )    C. < >    D. [ ]
- vi. If z is an integer variable, then the statement  $z = (3 > 4) ? (3 + 4) : (3 * 4);$  will return..... C  
A. 6    B. 7    C. 12    D. 16
- vii. User define functions in C++ consist of ..... D  
A. Function declaration    B. Function definition    C. Function call    D. All of them
- viii. Which of the following class member is available to everyone? A  
A. Public    B. Private    C. Protected    D. Global
- ix. Which of the following is a valid declaration of one dimensional array? A  
A. `int x[3];`    B. `int x(3);`    C. `int x3;`    D. `int x{3};`
- x. The address of a memory location is accessed by .....symbol. D  
A. @    B. \*    C. \$    D. &
- xi. In if statement, true condition is represented by ..... B  
A. 0    B. 1    C. 2    D. 3
- xii. Which of the following is not a valid case in switch statement? C  
A. case 1:    B. case 'a';    C. case '\*';    D. case a+b;
- xiii. A for statement contains three expressions, initialization, condition and ..... D  
A. Increment    B. Decrement    C. Testing    D. Both A & B
- xiv. Which one of the following operators works with only integer values? D  
A. +    B. \*    C. /    D. %
- xv. The number of bytes used by double data type in C++ is ..... B  
A. 2    B. 8    C. 12    D. 16

Section "B"

Marks: 36

Q.2 Attempt any NINE parts. Each part carries equal marks.

- i. Define parallel processing operating system.
- ii. What is the role of project manager in system development life cycle?
- iii. What is the difference between hard real time and soft real time operating systems?
- iv. What is the purpose of \n, \t, \a and \r escape sequences?
- v. Write a program to display the area of a rectangle using formula  $\text{area} = \text{length} * \text{width}$ .
- vi. Define the size of operator.
- vii. What is meant by a string constant? Give an example.
- viii. Why break statement is used in a switch statement?
- ix. Define endl and setw manipulators.
- x. What is the difference between actual parameter and formal parameter?
- xi. Write a program in C++ that displays product of odd number from 1 to 9.
- xii. Define object oriented programming.

Section "C"

Marks: 24

Note: Answer any THREE questions. Each question carries 8 marks.

- Q.3 Explain the prefix and postfix forms of increment and decrement operators. Give example of each one.
- Q.4 i. What is the difference between local function and global function?  
ii. Write a program that display the sum of three numbers using user define function.
- Q.5 Explain different conditional statements that are used in C++, with examples.
- Q.6 Explain the following.
- i. Software deployment
  - ii. Integer data type in C++