

Seat No. : _____

JB-108

January-2016

B.C.A., Sem.-I

CC-102 : Problem Solving and C Programming

Time : 3 Hours

Max. Marks : 70

1. (a) (1) Explain machine level language with all its limitations. **4**
(2) Differentiate procedural language and non procedural language. **3**

OR

- (1) Explain higher level language with all its benefits and limitations. **4**
(2) Differentiate machine level language and assembly language. **3**
(b) (1) Write an algorithm to find X!. **4**
(2) Draw a flowchart to find odd numbers between 200 to 400. **3**

OR

- (1) Write an algorithm to find sum of digits of a given number from user. **4**
(2) Draw a flowchart to find generate series: 0, 1, 1, 2, 3, 5, 8. **3**

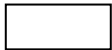


2. (a) (1) Explain Typecasting in details. **4**
(2) Define Terms : Keyword, Variable and Identifier. **3**

OR

- (1) Explain C program Structure. **4**
(2) Differentiate constant and variable. **3**
(b) (1) Explain Assignment operators in depth. **4**
(2) Explain printf(), getchar() and getch() functions. **3**

OR

- (1) Explain relational operators in depth. **4**
(2) Explain #define with its benefits. **3**

3. (a) Explain different types of if...else statements in depth. 7
- OR**
- Explain switch statement in depth.
- (b) (1) Explain nested loop. 4
- (2) Differentiate While and Do...While. 3
- OR**
- (1) Explain goto statement. 4
- (2) Differentiate break and continue. 3
4. (a) Define array. Explain different options to initialize one dimensional and two dimensional arrays. 7
- OR**
- Differentiate character array and integer array. Explain different options to initialize character array.
- (b) Explain strcmp() and strlen() functions in depth. 7
- OR**
- Explain strcat() and strcpy() functions in depth.
5. Attempt following questions : 14
- (1) In flowchart for decision making ___symbol is used.
- (a) 
- (b) 
- (c) 
- (d) None of the above
- (2) Mnemonic code is used in _____ language.
- (a) Assembly language
- (b) Higher level language
- (c) Machine level language
- (d) None of the above language

- (3) The execution of machine level language is _____ than higher level language.
- (a) Faster
 - (b) Slower
 - (c) (a) and (b) both
 - (d) None of the above
- (4) _____ is incorrect variable name.
- (a) float
 - (b) Hi
 - (c) l_am
 - (d) No 1
- (5) The word int is a
- (a) Password
 - (b) keyword
 - (c) Header file
 - (d) None of the above
- (6) In ANSI C _____ keywords are available.
- (a) 23
 - (b) 24
 - (c) 32
 - (d) 44
- (7) _____ is default storage class.
- (a) Static
 - (b) Automatic
 - (c) Register
 - (d) None of the above
- (8) A header file is _____
- (a) a file that contains standard library functions.
 - (b) a file that contains definitions and macros.
 - (c) a file that contains user defined functions.
 - (d) a file that is present in current working directory.
- (9) The keyword _____ is used to terminate the loop.
- (a) break
 - (b) goto
 - (c) quit
 - (d) short
- (10) Which looping process checks the test condition at the end of the loop ?
- (a) for
 - (b) while
 - (c) do... .while
 - (d) no looping process checks the test condition at the end

- (11) Minimum number of times the do...while loop will be executed ?
- (a) 0 (b) 1
(c) Cannot be predicted (d) None of the above
- (12) The size of the array, can be defined by _____ .
- (a) [] (b) ()
(c) { } (d) < >
- (13) If the base address is 100 and we store 5 integer elements in the array, what is the address of the last location ?
- (a) 108 (b) 110
(c) 112 (d) 120
- (14) The array elements can be initialised at_____.
- (a) Compile time (b) run time
(c) both a and b (d) None of the above
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