

Global Group of Institutions
Demo Question Paper – Set – IV
Subject - Programming for Problem Solving

Group – A		30 x 1 = 30
Sl. No.	Questions Lists	Correct Option
1.	Which one of the following is known as the —language of computer? (a) Programming language (b) High-level language (c) Machine language (d) Assembly language	C
2.	_____ translates high level language into machine language (a) Compiler (b) Translator (c) Processor (d) Loader	A
3.	Which of the following is not a valid variable declaration? (a) int 2class; (b) int class2; (c) int class_2; (d) int ELSE;	A
4.	The size of “long double” data type in 16-bit machine is _____ (a) 8 bytes (b) 10 bytes (c) 2 bytes (d) 4bytes	B
5.	The range of “char” data type is _____ (a) -128 to 127 (b) 0 to 255 (c) -32768 to 32767 (d) None	A
6.	The size of —char data type is _____ (a) 1 byte (b) 2 bytes (c) 4 bytes (d) 10 bytes	A
7.	The _____ statement is used to skip the remaining part of the statements in a loop and continue with next iteration. (a) break (b) goto (c) continue (d) exit	C
8.	_____ should be avoided as part of structured programming approach (a) break (b) goto (c) continue (d) exit	B
9.	The minimum number of times —for loop executes (a) 2 (b) can't be predicted (c) 0 (d) 1	C
10.	Which one among the following is the correct syntax of for loop? (a) for(i=0 ; i<n ; i++) ; (b) for(i<n ; i=0 ; i++); (c) for(i=0 ; i<n : i++); (d) None	A
11.	‘for’ loop in C program, if the condition is missing - (a) assumed to be present and taken to be false (b) assumed to be present and taken to be true (c) syntax error (d) execution will be terminated abruptly	B
12.	If c is initialized to 1, how many times following loop is executed - while((c>0) && (c<60)) { c++; } (a) 60 (b) 59 (c) 61 (d) 1	B
13.	The library function exit () causes an exit from – (a) loop (b) block (c) function (d) None	D
14.	Which among the following is not checked in switch case - (a) character (b) integer (c) float (d) None	C

15.	<p>What is the output of this C code?</p> <pre>int main() { while () printf("In while loop "); printf("After loop\n"); }</pre> <p>(a) In while loop after loop (b) After loop (c) Compile time error (d) Infinite loop</p>	C
16.	<p>What is the output of the following program-?</p> <pre>main () { int i; for(i=1;i<5;i++) { if(i==3) break; printf("%d",i); } }</pre> <p>(a) 12345 (b)124 (c)1245 (d)12</p>	D
17.	<p>What are the entry controlled loops among the following-?</p> <p>i. while ii. Do-while iii. For</p> <p>(a) only i (b) only ii,iii (c) only iii (d) only i, iii</p>	D
18.	<p>for(;;) can be terminated by</p> <p>(a) break (b) exit(0) (c) return (d) All the above</p>	D
19.	<p>Which of the following special symbol allowed in a variable name?</p> <p>A. * (asterisk) B. (pipeline) C. - (hyphen) D. _ (underscore)</p>	D
20.	<p>Is there any difference between following declarations?</p> <p>1: extern int fun(); 2: int fun();</p> <p>A. Both are identical B. No difference, except extern int fun(); is probably in another file C. int fun(); is overridden with extern int fun(); D. None of these</p>	B
21.	<p>How would you round off a value from 1.66 to 2.0?</p> <p>A. ceil(1.66) B. floor(1.66) C. roundup(1.66) D. roundto(1.66)</p>	A
22.	<p>By default, a real number is treated as a -</p> <p>A. float B. double C. long double D. far double</p>	B
23.	<p>Is the following statement a declaration or definition?</p> <pre>extern int i;</pre> <p>A. Declaration B. Definition C. Function D. Error</p>	A

24.	<p>Identify which of the following are declarations</p> <p>1: extern int x; 2: float square (float x) { ... } 3: double pow(double, double);</p> <p>A. 1 B. 2 C. 1 and 3 D. 3</p>	C
25.	<p>In the following program where is the variable a getting defined and where it is getting declared?</p> <pre>#include<stdio.h> int main() { extern int a; printf("%d\n", a); return 0; } int a=20;</pre> <p>A. extern int a is declaration, int a = 20 is the definition B. int a = 20 is declaration, extern int a is the definition C. int a = 20 is definition, a is not defined D. a is declared, a is not defined</p>	A
26.	<p>When we mention the prototype of a function?</p> <p>A. Defining B. Declaring C. Prototyping D. Calling</p>	B
27.	<p>Which of the following is the correct order of evaluation for the below expression?</p> <p>$z = x + y * z / 4 \% 2 - 1$</p> <p>A. $* / \% + - =$ B. $= * / \% + -$ C. $/ * \% - + =$ D. $* \% / - + =$</p>	A
28.	<p>Which of the following correctly shows the hierarchy of arithmetic operations in C?</p> <p>A. $/ + * -$ B. $* - / +$ C. $+ - / *$ D. $/ * + -$</p>	D
29.	<p>Which of the following is the correct usage of conditional operators used in C?</p> <p>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. $\text{return } (a > b) ? (a : b)$</p>	C
30.	<p>Which of the following is the correct order if calling functions in the below code?</p> <p style="text-align: center;">$a = f1(23, 14) * f2(12/4) + f3();$</p> <p>A. f1, f2, f3 B. f3, f2, f1 C. Order may vary from compiler to compiler D. None of above</p>	C

Group – B		20 x 2 = 40
Sl. No.	Questions Lists	Correct Option
1.	Which of the following are unary operators in C? 1. ! 2. Sizeof 3. ~ 4. && A. 1, 2 B. 1, 3 C. 2, 4 D. 1, 2, 3	D
2.	In which order do the following gets evaluated 1. Relational 2. Arithmetic 3. Logical 4. Assignment A. 2134 B. 1234 C. 4321 D. 3214	A
3.	Which header file should be included to use functions like malloc() and calloc()? A. memory.h B. stdlib.h C. string.h D. dos.h	B
4.	What function should be used to free the memory allocated by calloc() ? A. dealloc(); B. malloc(variable_name, 0) C. free(); D. memalloc(variable_name, 0)	C
5.	How will you free the memory allocated by the following program? #include<stdio.h> #include<stdlib.h> #define MAXROW 3 #define MAXCOL 4 int main() { int **p, i, j; p = (int **) malloc(MAXROW * sizeof(int*)); return 0; } A. memfree(int p); B. dealloc(p); C. malloc(p, 0); D. free(p);	D
6.	Specify the 2 library functions to dynamically allocate memory? A. malloc() and memalloc() B. alloc() and memalloc() C. malloc() and calloc() D. memalloc() and faralloc()	C
7.	In the following code, the P2 is Integer Pointer or Integer? typedef int *ptr; ptr p1, p2; A. Integer B. Integer pointer C. Error in declaration D. None of above	B
8.	In the following code what is 'P'? typedef char *charp; const charp P; A. P is a constant B. P is a character constant C. P is character type D. None of above	A

9.	<p>What is x in the following program?</p> <pre>#include<stdio.h> int main() { typedef char (*(arrfptr[3]))[10]; arrfptr x; return 0; }</pre> <p>A. x is a pointer B. x is an array of three pointer C. x is an array of three function pointers D. Error in x declaration</p>	C
10.	<p>What will be the output of the program?</p> <pre>#include<stdio.h> int main() { int y=128; const int x=y; printf("%d\n", x); return 0; }</pre> <p>A. 128 B. Garbage value C. Error D. 0</p>	A
11.	<p>What will be the output of the program?</p> <pre>#include<stdio.h> #include<stdlib.h> union employee { char name[15]; int age; float salary; }; const union employee e1; int main() { strcpy(e1.name, "K"); printf("%s %d %f", e1.name, e1.age, e1.salary); return 0; }</pre> <p>A. Error: RValue required B. Error: cannot convert from 'const int *' to 'int *const' C. Error: LValue required in strcpy D. No error</p>	D

12.	<p>What will be the output of the program?</p> <pre>#include<stdio.h> int fun(int **ptr); int main() { int i=10; const int *ptr = &i; fun(&ptr); return 0; } int fun(int **ptr) { int j = 223; int *temp = &j; printf("Before changing ptr = %5x\n", *ptr); const *ptr = temp; printf("After changing ptr = %5x\n", *ptr); return 0; }</pre> <p>A. Address of i and Address of j B. 10 and 223 C. Error: cannot convert parameter 1 from 'const int **' to 'int **' D. Garbage value</p>	C
13.	<p>What will be the output of the program?</p> <pre>#include<stdio.h> int main() { const int x=5; const int *ptrx; ptrx = &x; *ptrx = 10; printf("%d\n", x); return 0; }</pre> <p>A. 5 B. 10 C. Error D. Garbage value</p>	C
14.	<p>How many times "IndiaBIX" is get printed?</p> <pre>#include<stdio.h> int main() { int x; for(x=-1; x<=10; x++) { if(x < 5) continue; } }</pre>	C

	<pre> else break; printf("IndiaBIX"); } return 0; } </pre> <p>A. Infinite times B. 11 times C. 0 times D. 10 times</p>	
15.	<p>In mathematics and computer programming, which is the correct order of mathematical operators?</p> <p>A. Addition, Subtraction, Multiplication, Division B. Division, Multiplication, Addition, Subtraction C. Multiplication, Addition, Division, Subtraction D. Addition, Division, Modulus, Subtraction</p>	B
16.	<p>Which of the following is not logical operator?</p> <p>A. & B. && C. D. !</p>	A
17.	<p>Which of the following cannot be checked in a switch-case statement?</p> <p>A. Character B. Integer C. Float D. enum</p>	C
18.	<p>What do the following declaration signify? int *ptr[30];</p> <p>A. ptr is a pointer to an array of 30 integer pointers. B. ptr is a array of 30 pointers to integers. C. ptr is a array of 30 integer pointers. D. ptr is a array 30 pointers.</p>	B
19.	<p>What do the following declaration signify? int (*pf)();</p> <p>A. pf is a pointer to function. B. pf is a function pointer. C. pf is a pointer to a function which return int D. pf is a function of pointer variable.</p>	C
20.	<p>What do the following declaration signify? void *cmp();</p> <p>A. cmp is a pointer to an void type. B. cmp is a void type pointer variable. C. cmp is a function that return a void pointer. D. cmp function returns nothing.</p>	C

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