```
((MARKS)) (1/2/3...)
                         What will be the output of the program?
((QUESTION))
                         #include<stdio.h>
                         int main()
                           int a[5] = \{5, 1, 15, 20, 25\};
                           int i, j, m;
                           i = ++a[1];
                           j = a[1]++;
                           m = a[i++];
                           printf("%d, %d, %d", i, j, m);
                           return 0;
                         2,1,15
((OPTION A))
                         1,2,5
((OPTION B))
                         3,2,15
((OPTION C))
                         2,3,20
((OPTION_D))
((CORRECT CHOICE) C
) (A/B/C/D)
((EXPLANATION))
                         Step 1: int a[5] = \{5, 1, 15, 20, 25\}; The variable arr is declared as an
(OPTIONAL)
                         integer array with a size of 5 and it is initialized to
                         a[0] = 5, a[1] = 1, a[2] = 15, a[3] = 20, a[4] = 25.
                         Step 2: int i, j, m; The variable i,j,m are declared as an integer type.
                         Step 3: i = ++a[1]; becomes i = ++1; Hence i = 2 and a[1] = 2
                         Step 4: j = a[1]++; becomes j = 2++; Hence j = 2 and a[1] = 3.
                         Step 5: m = a[i++]; becomes m = a[2]; Hence m = 15 and i is
                         incremented by 1(i++ means 2++ so i=3)
                         Step 6: printf("%d, %d, %d", i, j, m); It prints the value of the
                         variables i, j, m
                         Hence the output of the program is 3, 2, 15
```

((MARKS)) (1/2/3)	1
//	In C, if you pass an array as an argument to a function, what actually gets passed?
((OPTION_A))	Value of elements in array

((OPTION_B))	First element of the array
((OPTION_C))	Base address of the array
((OPTION_D))	Address of the last element of array
((CORRECT_CHOICE)) (A/B/C/D)	С
((EXPLANATION)) (OPTIONAL)	The statement 'C' is correct. When we pass an array as a funtion argument, the base address of the array will be passed.

((MARKS)) (1/2/3)	1
((QUESTION))	Which of the following statements are correct about 6 used in the program? int num[6]; num[6]=21;
((OPTION_A))	In the first statement 6 specifies a particular element, whereas in the second statement it specifies a type.
((OPTION_B))	In the first statement 6 specifies a array size, whereas in the second statement it specifies a particular element of array.
((OPTION_C))	In the first statement 6 specifies a particular element, whereas in the second statement it specifies a array size.
((OPTION_D))	In both the statement 6 specifies array size.
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	The statement 'B' is correct, because int num[6]; specifies the size of array and num[6]=21; designates the particular element(7 th element) of the array.

((MARKS)) (1/2/3)	1
//	What does the following declaration mean? int (*ptr)[10];
((OPTION_A))	ptr is array of pointers to 10 integers
((OPTION_B))	ptr is a pointer to an array of 10 integers
((OPTION_C))	ptr is an array of 10 integers

((OPTION_D))	ptr is an pointer to array
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	

1
 Which of the following statements are correct about an array? The array int num[26]; can store 26 elements. The expression num[1] designates the very first element in the array. It is necessary to initialize the array at the time of declaration. The declaration num[SIZE] is allowed if SIZE is a macro.
1
1,4
2,3
2,4
В
1. The array int num[26]; can store 26 elements. This statement is true.
2. The expression num[1] designates the very first element in the array. This statement is false, because it designates the second element of the array.
3. It is necessary to initialize the array at the time of declaration. This statement is false.
4. The declaration num[SIZE] is allowed if SIZE is a macro. This statement is true, because the MACRO just replaces the symbol SIZE with given value.
Hence the statements '1' and '4' are correct statements.

((MARKS)) (1/2/3)	1
((QUESTION))	If the two strings are identical, then strcmp() function returns
((OPTION_A))	-1
((OPTION_B))	1
((OPTION_C))	0
((OPTION_D))	Yes
((CORRECT_CHOICE)) (A/B/C/D)	С
	strcmp(const char *s1, const char*s2); The strcmp return an int value that is if s1 < s2 returns a value < 0 if s1 == s2 returns 0 if s1 > s2 returns a value > 0

((MARKS)) (1/2/3)	1
((QUESTION))	Which of the following function is used to find the first occurrence of a given string in another string?
((OPTION_A))	strchr()
((OPTION_B))	strrchr()
((OPTION_C))	strstr()
((OPTION_D))	strnset()
((CORRECT_CHOICE)) (A/B/C/D)	С
((EXPLANATION)) (OPTIONAL)	char *strstr(const char *s1, const char *s2); Return Value: On success, strstr returns a pointer to the element in s1 where s2 begins (points to s2 in s1). On error (if s2 does not occur in s1), strstr returns null.

```
Example:

#include <stdio.h>

#include <string.h>

int main(void)

{

    char *str1 = "IndiaBIX", *str2 = "ia", *ptr;

    ptr = strstr(str1, str2);

    printf("The substring is: %s\n", ptr);

    return 0;

}

Output: The substring is: iaBIX
```

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((MARKS)) (1/2/3...)
((QUESTION))
                         The library function used to find the last occurrence of a character in a
                         string is
((OPTION A))
                         strnstr()
                         laststr()
((OPTION_B))
((OPTION_C))
                         strrchr()
((OPTION_D))
                         strstr()
((CORRECT_CHOICE) C
(A/B/C/D)
((EXPLANATION))
                         Declaration: char *strrchr(const char *s, int c);
(OPTIONAL)
                         It scans a string s in the reverse direction, looking for a specific
                         character c.
                         Example:
                                    #include <string.h>
                                    #include <stdio.h>
                                    int main(void)
                                      char text[] = "I learn through IndiaBIX.com";
                                      char *ptr, c = 'i';
```

```
ptr = strrchr(text, c);
if (ptr)
    printf("The position of '%c' is: %d\n", c, ptr-text);
else
    printf("The character was not found\n");
    return 0;
}
Output:
The position of 'i' is: 19
```

((MARKS)) (1/2/3)	1
((QUESTION))	How will you print \n on the screen?
((OPTION_A))	printf("\n");
((OPTION_B))	echo "\\n";
((OPTION_C))	printf('\n');
((OPTION_D))	printf("\\n");
((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL)	The statement printf("\\n"); prints '\n' on the screen.

((MARKS)) (1/2/3)	1
((QUESTION))	Which of the following data structures cannot store non-homogeneous elements?
((OPTION_A))	Arrays
((OPTION_B))	Structure
((OPTION_C))	Linked List

((OPTION_D))	File
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	In arrays and are costly but is easy operation
((OPTION_A))	Searching, insertion, deletion
((OPTION_B))	Insertion, deletion, searching
((OPTION_C))	Deletion, searching, insertion
((OPTION_D))	None of these
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	

((OPTION_B))	2 1 1
((OPTION_C))	0 0 0
((OPTION_D))	Garbage Value
((CORRECT_CHOICE)) (A/B/C/D)	С
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
	Find the output: void main() { int i=0,a[3]; a[i]=i++; printf("%d",a[i]);
((OPTION_A))	0
((OPTION_B))	1
((OPTION_C))	Garbage value
((OPTION_D))	Syntax error
((CORRECT_CHOICE)) (A/B/C/D)	С
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	While passing the array as actual argument, the function call must have
	array name
((OPTION_A))	alone

((OPTION_B))	With empty braces
((OPTION_C))	With its size
((OPTION_D))	None of these
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	Which code will run faster? 1. for(i=0;i<100;i++)
((OPTION_A))	Code 1
((OPTION_B))	Code 2
((OPTION_C))	Both run equally
((OPTION_D))	None of these
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	Consider an integer array int arr[4][5]. If base address is 1020, find the esentation. Size of int is 2 bytes.
((OPTION_A))	1020
((OPTION_B))	1038
((OPTION_C))	1039

((OPTION_D))	1058
((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	Consider the statement int Val[2][4]={1,2,3,4,5,6,7,8}. The element 4 will
	be at
((OPTION_A))	Val[0][3]
((OPTION_B))	Val[0][4]
((OPTION_C))	Val[1][1]
((OPTION_D))	None of these
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	void main() { int a[2][3]={2,3}; printf("\n%d%d%d%d",a[0][0],a[0][1],a[1][0],a[1][1]); } What will be the output?
((OPTION_A))	0 0 2 3
((OPTION_B))	2 3 0 0
((OPTION_C))	2 0 3 0
((OPTION_D))	2 0 0 3
((CORRECT_CHOICE)) (A/B/C/D)	В

((EXPLANATION)) (OPTIONAL)	
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((MARKS)) (1/2/3)	1
((QUESTION))	The getchar() library function returns
((OPTION_A))	Character when any key is pressed
((OPTION_B))	Character when enter key is pressed
((OPTION_C))	Display character on the screen when any key is pressed
((OPTION_D))	None of these
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
//	Find the output: void main() { printf("%c",100); }
((OPTION_A))	Prints 100
((OPTION_B))	Prints ASCII equivalent of 100
((OPTION_C))	Prints garbage value
((OPTION_D))	Syntax error
((CORRECT_CHOICE)) (A/B/C/D)	В
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	Which of the foolowing is more appropriate for reading a multi-word string?
((OPTION_A))	printf
((OPTION_B))	scanf
((OPTION_C))	put
((OPTION_D))	gets
((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	Find the output:
	int main()
	{
	char p[]="%c\n";
	p[1]='d';
	printf(p,65);
	return 0;
	}
((OPTION_A))	a
((OPTION_B))	A
((OPTION_C))	С
((OPTION_D))	65
((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
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((QUESTION))	Sparse matrix have
((OPTION_A))	Many zero entries
((OPTION_B))	Many non zero entries
((OPTION_C))	High dimension
((OPTION_D))	Many negative entries
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	The sequential representation of sparse matrix is given by
((OPTION_A))	stack
((OPTION_B))	Queues
((OPTION_C))	Arrays
((OPTION_D))	Linked List
((CORRECT_CHOICE)) (A/B/C/D)	С
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3)	1
((QUESTION))	If polynomial is 5x^3+3x^2+10x+2, the degree is
((OPTION_A))	3
((OPTION_B))	2
((OPTION_C))	1
((OPTION_D))	0
((CORRECT_CHOICE)) (A/B/C/D)	A