

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination, May 2024
BCA, Semester II, 2023-24

Roll No.....

CS1135: Programming II

Time: 2¹/₂ hours

Max. Marks: 30

Instructions to students:

1. Do not write anything other than your roll number on question paper.
2. Mention all the assumptions for your answers clearly.

Q. 1.1 What is the output of the following code snippets?

1.0 x 4 = 4.0
(CO3, 4)

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| <p>(a) <code>#include<stdio.h></code>
<code>#include<string.h></code>
<code>int main()</code>
<code>{</code>
<code> char str[] = "Hello\0\World\0";</code>
<code> printf("%d\n", strlen(str));</code>
<code> return 0;</code>
<code>}</code></p> <p>(b) <code>#include <stdio.h></code>
<code>void fun (int *, int *);</code>
<code>int main()</code>
<code>{</code>
<code> int i = 5, j = 2 ;</code>
<code> fun (&i, &j) ;</code>
<code> printf ("%d %d\n", i, j) ;</code>
<code> return 0 ;</code>
<code>}</code>
<code>void fun (int *i, int *j)</code>
<code>{</code>
<code> *i = *i * *i ;</code>
<code> *j = *j * *j ;</code>
<code>}</code></p> | <p>(c) <code>#include <stdio.h></code>
<code>int main()</code>
<code>{</code>
<code> int a[2][2] = { 1, 2, 3, 4 };</code>
<code> int *p;</code>
<code> p= &a[1][1];</code>
<code> printf("%d\n",*p);</code>
<code> return 0;</code>
<code>}</code></p> <p>(d) <code>#include<stdio.h></code>
<code>int main()</code>
<code>{</code>
<code> int a = 0, i = 0, b;</code>
<code> for (i = 0;i < 5; i++)</code>
<code> {</code>
<code> a++;</code>
<code> if (i == 3)</code>
<code> break;</code>
<code> }</code>
<code> printf("%d",a);</code>
<code> return 0;</code>
<code>}</code></p> |
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Q. 1.2 What is dynamic memory allocation in C? Explain the difference between malloc() and calloc().

3.0
(CO1)

Q. 1.3 Write a program to read data from a file and display it on the screen.

3.0
(CO2)

Q. 2.1	Write a program to search for an element in an array using pointers. Take the array and element to be searched as input from the user.	2.0 (CO3)
Q. 2.2	Explain the difference between while and do-while loops in C. Write a C program that prompts the user to enter a positive integer n. Then, create a function called <i>print_pattern</i> that takes the integer n as a parameter and prints the following pattern:	4.0 (CO4)
	<pre> * * * * * * * * * * * * * * *</pre>	
Q. 2.3	While using the statement, fp = fopen ("myfile.c", "r"); what happens if, (a) 'myfile.c' does not exist on the disk? (b) 'myfile.c' exists on the disk?	2.0 (CO2)
Q. 3.1	Explain the concept of nested structures with an example.	3.0 (CO2)
Q. 3.2	Write a function named <i>printPerfect</i> which prints all the perfect numbers lying within a given range.	3.0 (CO1)
Q. 4.1	Write short note on: (a) gets() (b) strcpy() (c) free()	3.0 (CO2)
Q. 4.2	Write a program to count the total number of alphabets, digits and special characters in a string.	3.0 (CO1, 5)

All the best!