

G. S. Mandal's

## Maharashtra Institute of Technology, Aurangabad

(An Autonomous Institute )

END SEMESTER EXAMINATION

First Year B.Tech (All) -April/May 2022

Course Code : ESC101

Course Name : C-Programming

Duration : 2 Hrs

Max. Marks : 50

Date : 9/04/2022

Instructions :

- i) All questions are compulsory
- ii) Assume suitable data wherever necessary and clearly state it
- iii) Figures to right indicate full marks

Q. 1	Answer any five(Marks:10)			
	Questions	Marks	CO	BL
a)	What is output of following code <pre>#include&lt;stdio.h&gt; #include&lt;stdlib.h&gt; void main () {     int i;     for(i = 0; i&lt;10; i++)     {         printf("%d ",i);         if(i == 5)             break;     }     printf("came outside of loop i = %d",i); }</pre>	02	CO3	BL2
b)	What is flowchart, draw any two symbols of flowchart with name?	02	CO1	BL2
c)	Differentiate compiler and interpreter	02	CO1	BL2
d)	What will be the output of <pre>#include&lt;stdio.h&gt; struct {     int i;     float ft; } decl; int main() {     decl.i = 4;     decl.ft = 7.96623;     printf("%d %.2f", decl.i, decl.ft);     return 0; }</pre>	02	CO3	BL2

e)	<p>What is the output of following</p> <pre>#include&lt;stdio.h&gt; void printName(); void main () {     printf("Hello ");     printName(); } void printName() {     printf("MIT"); }</pre>	02	CO5	BL2
f)	<p>What do you mean by variable.</p> <p>Identify correct variable name from following. gross salary, gross_Salary</p>	02	CO1	BL2
<b>Q.2</b>	<p>Using Switch statement, write a program that displays the following menu for the food items available to take order from the customer:</p> <ul style="list-style-type: none"> <li>• B= Burger</li> <li>• F= French Fries</li> <li>• P= Pizza</li> <li>• S= Sandwiches</li> </ul> <p>The program inputs the type of food and quantity. It finally displays the total charges for the order according to following criteria:</p> <ul style="list-style-type: none"> <li>• Burger = Rs. 200</li> <li>• French Fries= Rs. 50</li> <li>• Pizza= Rs. 500</li> <li>• Sandwiches= Rs. 150</li> </ul>	08	CO3	BL3
<b>Q.3</b>	<p>Write a program in C to find greater number between three numbers. Draw flowchart for the same.</p>	08	CO2	BL3
<b>Q.4</b>	<p>Write a program using function to calculate area of circle and area of rectangle using function.</p>	08	CO5	BL4
<b>Q.5</b>	<p>Write a C program to find the sum of two matrices. Test the output for 2*2 order matrix</p> <p style="text-align: center;"><b>OR</b></p> <p>a)Write a C program to calculate the length of your name.</p> <p>b)Write a C program to store and display information of two employee using structure</p>	08 03 05	CO4	BL3
<b>Q.6</b>	<p>Write a program in C to find factorial of a number using call by reference</p> <p style="text-align: center;"><b>OR</b></p> <p>a)What do you mean by pointers</p> <p>b)Write a program in C to calculate sum of first five natural numbers using array and pointers.</p>	08 02 06	CO6	BL4