St. Vincent Pallotti College of Engineering & Technology

NAAC Accredited with 'A' Grade, Managed by Nagpur Pallottine Society, Affiliated to RTM Nagpur University
(An Autonomous Institute)

Academic Year: 2023-24

CAT II - B.Tech

Course: -	**Logic building with C**	**Course Code: -**	**AS104T**
Semester: -	**I**	**Max. Marks: -**	20
Program : -	**B.Tech (Group-1)**	**Duration: -**	1 hr
		Date of Paper	19/12/2023

Instructions to Candidate – 1) Question No. 1 is compulsory.
2) Solve Que. No. 02 OR Que. No. 03
3) Solve Que. No. 04 OR Que. No. 05
4) All Questions carry marks as indicated
5) Use of Non Programmable calculator is allowed.

Que. No.	Description of Question	Marks	[CO]	[BTL]
Que.1(a)	Define Symbolic Constant.	01	3	1
Que.1(b)	Explain Conditional Operator.	01	3	1
Que.1(c)	What are various Input and Output Library Functions?	01	4	1
Que.1(d)	Explain Break statement with example.	01	5	1
Que.1(e)	Write syntax of For loop.	01	5	1
Que.2(a)	Explain different Data Types in C.	02	3	1
Que.2(b)	Write a program to find grade of a student according to the marks obtained in an examination using if..else…if ladder.	06	4	3

Grade	Marks
Distinction	Marks >= 75
1st Division	60 >= Marks <75
2nd Division	50 >= Marks < 60
3rd Division	40 >= Marks <50
Fail	Marks < 40

OR

Que.3(a)	What is Hierarchy of Operators in C?	02	3	1
Que.3(b)	Write down syntax of Swich statement and write a program to check whether entered character is vovel or consonant using Switch Case.	06	4	3

Que.4(a)	Explain Continue statement with the help of suitable program.	03	5	
Que.4(b)	Differentiate between While and Do..While loop statement.	04	5	4
	OR			
Que.5	Write a program to print the following output. * * * * * * * * * * * * * * *	07	5	3

Course Outcomes - After Completion of this course student will -

CO1	Devlop problem solving logic.
CO2	Analyse and design problems.
CO3	Understand the fundamentals of C programs.
CO4	Implement decision making control structures.
CO5	Implement loop control structures.

Academic Year: 2023-24

CAT I - B.Tech

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		Max. Marks: -	20
Semester: -	**I**	**Duration: -**	1 hr
Program : -	**B.Tech (Group-1)**	**Date of Paper**	30/10/2023

Instructions to Candidate – 1) Question No. 1 is compulsory.
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3) Solve Que. No. 04 OR Que. No. 05
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Que. No.	Description of Question	Marks	[CO]	[BTL]
Que.1(a)	Explain Number System.	01	1	2
Que.1(b)	Convert $(1100110)_2$ into octal.	01	1	3
Que.1(c)	What is Algorithm?	01	2	1
Que.1(d)	Define Pseudo code.	01	2	1
Que.1(e)	Define Keywords. How many keywords are there in C?	01	3	1
Que.2	Explain different problem solving techniques with suitable diagram.	08	1	2
	OR			
Que.3(a)	Write the steps to calculate factorial of a number and Fibonacci series.	04	1	3
Que.3(b)	Define following Information structures: I. Array II. Linked List III. Tree IV. Graph	04	1	1
Que.4	Write algorithm, pseudocode and draw flowchart to check entered number is even or odd.	07	2	3
	OR			
Que.5(a)	Explain advantages and disadvantages of flowchart.	03	2	2
Que.5(b)	Write pseudocode and draw flowchart to find largest of three numbers.	04	2	3

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