First Semester B.C.A. Degree Examination, November/December 2019

(CBCS Scheme)

Computer Science

PROBLEM SOLVING TECHNIQUES USING C

Time: 3 Hours]

[Max. Marks: 70

Instructions to Candidates: Answer ALL Sections.

SECTION - A

Answer any TEN questions. Each question carries 2 marks:

 $(10 \times 2 = 20)$

- 1. What is flow chart? Give its advantages.
- 2. What are escape sequence characters?
- 3. What are the format specifiers used to input functions?
- 4. Differentiate between break and continue.
- 5. What is a function prototype declaration?
- 6. What is a two-dimensional array?
- 7. What is the purpose of strcmp () function?
- 8. What is enumerated data type in C? How is it declared?
- 9. What is a pointer? How to declare pointer variable in C?
- 10. What is the purpose of ftell ()?
- 11. Explain command line arguments.
- 12. Define macro. Give an example.

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SECTION - B

	Ansv	wer any FIVE questions. Each question carries 10 marks : (5×10)	= 50)
13.	(a)	Explain the structure of 'C' program.	(5)
	(b)	Write an algorithm to find largest of 3 nos.	(5)
14.	(a)	Explain the formatted I/O function in C.	(5) (5)
1-	(b)	What is an operator? Explain any three types of operators.	
15.	(a)	Compare while () and do-while () loops. Illustrate with example.	(5)
	(b)	Write a C program to generate N Fibonacci numbers using recufunction.	rsive (5)
16.	Writ	te a C program to find product of two N × M matrices.	(10)
17.	(a)	Explain the storage class with example.	(5)
	(b)	Explain the difference between call by value and call by reference suitable example.	with (5)
18.	(a)	What is an array of structure? Explain.	(5)
	(b)	Explain the following:	(5)
		(i) malloc (ii) calloc KGF . 563 122	
		(iii) realloc.	
19.	(a)	Explain various file opening modes.	(5)
	(b)	Differentiate between text and binary files.	(5)
20.	(a)	What are pre processor directives? Explain.	(5)
	(b)	Write a C program to copy the contents of one file to another.	(5)