JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech I Year I Semester Examinations, May/June - 2017

COMPUTER PROGRAMMING IN C

(Common to CE, ME, MCT, MMT, MIE, CEE, MSNT)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

 $\triangle G \triangle G \triangle G \triangle A$ PART- A $\triangle G \triangle G$ (25 Marks)

,	1 0)	What is the size of the double data type? Which conversion specifier is used?	[2]
1	l.a) b)	Write program in C to interchange the two values without using third variable.	[3]
	c)	Distinguish between built – in and user – defined functions.	[2]
	ď)	How one dimensional arrays are initialized? Give example.	[3]
	_e)/\	List the dynamic memory handling functions used in 'C'.	<u>/[2](</u>
	D)	List the advantages and disadvantages of using pointers.	/ [3] \
	<u>ø)</u>	Write the syntax for enumerated data type. Give example.	[2]
	h)	Give brief information about self referential structures.	[3]
	:)	Write the syntax for opening a file. Give example.	[2]

i) Write the syntax for opening a file. Give example.
 j) List the advantages of using files.

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2.a) Write and explain the steps in writing a 'C' program.

b) Discuss about the various bitwise operators supported by Language 'C'. [5+5]

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3.a) Write 'C' program to print the Fibonacci sequence.

b) In what way a do while loop differs from while loop. Explain.

What is a function? What are its advantages? Explain various parameter passing techniques.

b) Write a 'C' program to search for an element by using Linear Search. [5+5]

5. Why we need storage classes? List and explain the various storage classes present in language 'C'.

6. With the help of syntax and example program explain the various string handling functions. [10]

OR
7.a) Write in detail about the various dynamic memory allocation functions.

b) Write a program to accept a set of names and display them by using array of pointers.

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Write a 'C' program using functions to return the sum of two complex numbers passed as 8.a) parameters. Write short notes on typedef. b) OR 9.a) Create a structure called student and the members of the structure are Stu Name, Stu Rno, MI, M2, M3. Create a pointer variable for the structure, store the values and fetch the values present in the structure student. [5+5]In what way a Union differs from structures. b) Discuss in detail about the file positions functions. Write a 'C' program to count the number of words, white spaces and tab spaces present in a file. -OR 11.a) Explain the file input and output functions with example programs. [5+5]b) Distinguish between r, r+ and w, w+ modes of files. AG AG A

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