Code No. BTS 116 (A)

B.TECH. DEGREE III SEMESTER (SUPPLEMENTARY) EXAMINATION IN INFORMATION TECHNOLOGY
JUNE 2001

IT 302 COMPUTER PROGRAMMING
(1998 admissions)

Time: 3 Hours   Maximum Marks: 100

(Answer *all* questions)

I.	(a)	What do you meant by 'constants and variables' in Fortran? Illustrate with a suitable example.	(12)
	(b)	Illustrate the various steps involved in preparing and running a Fortran program.	(8)

OR

II.	(a)	What do you meant by 'control statement' in Fortran? Illustrate by taking atleast one example in each case.	(15)
	(b)	Bring out the importance of arrays in Fortran with an example.	(5)

III.	(a)	What are Subroutines? Illustrate its importance in program development.	(10)
	(b)	Write a subroutine in Fortran to evaluate the square of any number.	(10)

OR

IV.	Write a program in Fortran to find the first n Fibonacci numbers.	(20)

V.	(a)	What are the commonly used input/output functions in C? How are they accessed?	(10)
	(b)	Summarize the syntactic rules associated with the 'for' statement.	(10)

OR

VI.	What is the purpose of the 'if-else' statement? In what way is this statement differ from the 'while', the 'do-while' and the 'for' statements?	(8+4+4+4)

VII.	(a)	What is a function? Is the use of functions required when writing a C program?	(10)
	(b)	Discuss the rules for writing a one-dimensional array definition.	(10)

OR

VIII.	(a)	Explain the concept of recursive function through an example.	(10)
	(b)	Write a program in C to add matrix B and matrix A.	(10)

IX.	(a)	Explain the concept of opening and closing of a data file in C.	(10)
	(b)	Write a program in C to sort 10 numbers. Use pointers to sort the elements.	(10)

OR

X.	(a)	Discuss the importance of C graphics.	(8)
	(b)	Write a program in C to draw a full ellipse with centre at (50, 50), x radius as 75 and y radius as 50 pixels in red color.	(12)

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