

D 92040

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER B.TECH. (ENGINEERING) DEGREE [2014 SCHEME]
EXAMINATION, NOVEMBER 2020**

EN 14 302—COMPUTER PROGRAMMING IN C

Time : Three Hours

Maximum : 100 Marks

Part A

I. Answer any *eight* questions out of ten :

- 1 Explain various input output devices.
- 2 Write short notes on Wi-Fi.
- 3 Draw the flowchart for computing the roots of the quadratic equation.
- 4 Write a program to accept a character and print whether the given character is a "Vowel" or "Consonant".
- 5 Enunciate about various string functions.
- 6 Write a program to add the given matrices.
- 7 Write a recursive function to find the factorial of a given number.
- 8 State the difference between pointer to an array and array of pointers with an example.
- 9 Create a structure called "Patient" with member's patientid, name, doctor_id and diagnosis. Print all patients treated by doctor with id "444".
- 10 Write a program to read the contents of input file character by character and count the number of characters.

(8 × 5 = 40 marks)

Part B

II. Answer *all* questions :

- 11 Write short notes on computer networks.

Or

- 12 Explain in detail the components of a computer.

- 13 Ram's basic salary is input through the keyboard. His dearness allowance is 40% of basic pay and house rent allowance is 20% of basic pay. Write a program to calculate his gross salary.

Or

Turn over

- 14 Write a C program to find a peculiar two digit number which is three times the sum of digit.
- 15 Create a function perimeter() to find the perimeter of the rectangle.

Or

- 16 Write a program to find the sum of squares of the diagonal elements of the given matrix.
- 17 Create structure for storing the details of postal address (Eg. Doorno, Street, City, State and Pincode). Create a structure for student which consists of name, roll no and address. Use the structure definitions to store the details of 10 students and print all the student details from a particular state.

Or

- 18 Write a program to read the contents of a file and copy only the numerals to another file.

(4 × 15 = 60 marks)