Set No - 1

# I B. Tech I Semester Regular/Supple. Examinations Nov./Dec. - 2015 COMPUTER PROGRAMMING

(Common to CE, ME, CSE, PCE, IT, Chem. E, Aero E, AME, Min E, PE, Metal E, Textile Engg.)
Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**\*\*\*\*\*

### **PART-A**

- 1. (a) C is a structured language? Justify the statement.
  - (b) Differentiate between while-do and do while.
  - (c) What is the importance of #include? explain
  - (d) What is pointer? Is \*p is similar to &p? explain.
  - (e) Discuss about the masks.
  - (f) Differentiate between text file and binary file.

[3+4+3+4+4+4]

#### **PART-B**

- 2. (a) Is there any difference between the pre decrement and post decrement operators? Explain.
  - (b) Write a program for performing the arithmetic calculation.

[8+8]

- 3. (a) Explain about the switch statement? What is the importance of the break and continue? Give examples.
  - (b) Write a program to sum the digits in a given number.

[8+8]

4. Explain about different storage classes with examples.

[16]

- 5. (a) How to initialize and access pointer variables? Discuss.
  - (b) Write a program to swap two numbers using pass by address.

[8+8]

- 6. (a) How to pass structure variable to functions? Explain with example.
  - (b) Write a program to add two complex numbers.

[8+8]

- 7. (a) Explain about the functions for reading and writing data from a file.
  - (b) Write a program to print command line arguments on screen.

[8+8]

\*\*\*\*

## Page 1 of 1

**Set No - 2** 

# I B. Tech I Semester Regular/Supple. Examinations Nov./Dec. - 2015 COMPUTER PROGRAMMING

(Common to CE, ME, CSE, PCE, IT, Chem. E, Aero E, AME, Min. E, PE, Metal E, Textile Engg.)

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**\*\*\*\*\*

### **PART-A**

- 1. (a) C is a Middle-Level Language. Justify the statement.
  - (b) How to access array elements? Explain.
  - (c) What is the importance of auto and register?
  - (d) Differentiate between direct and indirect pointers with examples.
  - (e) Explain about shift keyword.
  - (f) Discuss about the formatted I/O.

[3+4+4+4+3+4]

### PART-B

- 2. (a) What is flow chart? How it is useful in writing the programs? Explain about different symbols in flow chart?
  - (b) Draw the flow chart for the Armstrong number and write the program.

[6+10]

- 3. (a) Explain about different iterative statements with examples.
  - (b) Write a program to calculate the ncr value.

[8+8]

- 4. (a) Explain about the static keyword.
  - (b) Discuss about user defined functions.
  - (c) Write a recursion program for the towers of hanoi

[4+6+6]

- 5. (a) How pointers are used to declare single and multi dimension arrays with examples.
  - (b) Write a program for printing the command line arguments.

[8+8]

- 6. (a) Is it possible to nest the structures? Explain with example.
  - (b) Write a program for reversing a linked list.

[8+8]

7. What is file? Explain about different file operations with example.

[16]

\*\*\*\*

#### Page 1 of 1

Set No - 3

# I B. Tech I Semester Regular/Supple. Examinations Nov./Dec. - 2015 COMPUTER PROGRAMMING

(Common to CE, ME, CSE, PCE, IT, Chem E, Aero E, AME, Min E, PE, Metal E, Textile Engg.)
Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**\*\*\*\*\*

## **PART-A**

- 1. (a) What is compilation? Is it different from the compiler?
  - (b) What is the importance of break in switch statement? If break is not given what happens? Explain with example.
  - (c) What is the importance of #define? explain
  - (d) What is pointer? Is \*p is similar to \*\*p? explain.
  - (e) Discuss about bit fields.
  - (f) What are different types of files? Explain.

[3+4+3+4+4+4]

#### **PART-B**

- 2. (a) What is algorithm? What are the criteria's for an algorithm?
  - (b) Explain about relational operators.
  - (c) Write an algorithm for sum of digits in a given number.

[5+5+6]

- 3. (a) Explain about the selection statements with examples.
  - (b) Write a program for sum of series.

[8+8]

- 4. (a) What is recursion? How it is different from the normal function.
  - (b) What are the importance of the extern and register storage classes.
  - (c) Write a recursion program for the factorial function

[4+6+6]

- 5. (a) How variables are passed to functions using pointers? Discuss.
  - (b) Write a program for matrix multiplication.

[8+8]

6. Explain about different bit wise operators with examples.

[16]

- 7. (a) Explain about the fprintf and fscanf functions with examples.
  - (b) Write a program to copy one file contents into another file.

[8+8]

\*\*\*\*

#### Page 1 of 1

Set No - 4

# I B. Tech I Semester Regular/Supple. Examinations Nov./Dec. - 2015 COMPUTER PROGRAMMING

(Common to CE, ME, CSE, PCE, IT, Chem E, Aero E, AME, Min E, PE, Metal E, Textile Engg.)
Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**Answering the question in **Part-A** is Compulsory,
Three Questions should be answered from **Part-B**\*\*\*\*\*

## **PART-A**

- 1. (a) What is interpreter? How to compile a C program?
  - (b) Discuss about conditional operator.
  - (c) What is the importance of #typedef? explain
  - (d) Discuss about character pointer.
  - (e) Explain the importance of the bit-wise operators.
  - (f) Explain about the functions for reading data from a file.

[3+4+3+4+4+4]

### PART- B

- 2. (a) Explain about the program development steps.
  - (b) Write an algorithm for generating Fibonacci series.

[8+8]

- 3. (a) How strings are represented using strings? Explain about different string manipulations.
  - (b) Write a program to calculate the following series:  $1+\frac{1}{2}+\frac{1}{3}+\frac{1}{4}+\frac{1}{5}+\dots$

[8+8]

4. Explain about different parameter passing algorithms with examples.

[16]

- 5. (a) Explain about the functions which are used for allocating memory dynamically.
  - (b) Write a program for calculating the sum of values in a given array using pointers.

[8+8]

- 6. (a) What is meant by self-referential structures? Give examples.
  - (b) Write a program for creating a linked list.

[8+8]

- 7. (a) Explain about the fopen and fclose functions with examples.
  - (b) Write a program to merge two files into single file.

[8+8]

\*\*\*\*