

Subject Code: R13205/R13

Set No - 1

I B. Tech II Semester Regular/Supplementary Examinations May - 2016

**COMPUTER PROGRAMMING**

(Common to ECE, EEE, EIE, Bio-Tech., E Com E, Agri E)

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**

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**PART-A**

1. (a) Define high level language and low level language.
- (b) Explain about the break and continue with example.
- (c) Define function.
- (d) What is dangling memory?
- (e) What are the applications of structures?
- (f) Differentiate between binary file and text file.

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

**PART-B**

2. (a) What is the difference between the post increment and pre increment operators? What is the output of the following if k=5,  
i=++k, j=k++, k++, ++k;
- (b) What are variables and constants? What are the rules for declaring the variables?

[8+8]

3. (a) Explain about different string functions which can be performed on strings.
- (b) Write an algorithm to find whether the given string is palindrome or not.
- (c) Write a program for adding two matrix's.

[3+8+5]

4. Explain about different parameter passing mechanisms with examples.

[16]

5. (a) What is pointer and indirect pointer? Explain with examples.
- (b) Write a program to swap two numbers using pointers.

[8+8]

6. (a) Explain about the logical and shift operators with examples.
- (b) Write a program to sort the elements in a linked list.

[8+8]

7. (a) Explain about different file operations that can be performed on files.
- (b) Write a program to copy one file into another file.

[8+8]

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Set No - 2

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Question Paper Consists of **Part-A** and **Part-B**  
Answering the question in **Part-A** is Compulsory,  
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**PART-A**

1. (a) Differentiate between compiler and interpreter.
- (b) What is nested if? Give examples.
- (c) Write short notes on standard library functions.
- (d) What are command line arguments?
- (e) Define nested structures.
- (f) How to read data from and write data to a file?

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

**PART-B**

2. (a) Explain about relational and logical operators with examples.
  - (b) Write a program for the printing the following pattern on the screen
- ```
1
1 2
1 2 3
1 2 3 4
```
3. (a) Differentiate between switch and else-if.
  - (b) Write a program to find smallest and largest numbers in a given array.
  - (c) Write a program to multiply two matrix's.

[8+8]

[3+8+5]

4. Explain about different storage classes with examples.

[16]

5. (a) Discuss about character pointers with examples.
- (b) Write a program to print command line arguments on the screen.

[8+8]

6. (a) How to declare a structure and initialize values for structure members?
- (b) Write a program to insert an element into a linked list at front.

[8+8]

7. (a) Explain about the input and output operations of a file.
- (b) Write a program to open a file and to print it's contents on screen.

[8+8]

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Set No - 3

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**COMPUTER PROGRAMMING**

(Common to ECE, EEE, EIE, Bio-Tech., E Com E, Agri E)

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**

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**PART-A**

- (a) Differentiate between compiling and linking.  
(b) Write a program to find the  $2^n$  value.  
(c) What is preprocessor?  
(d) How to pass pointer variables to functions?  
(e) What is the importance of typedef? Explain.  
(f) What are different types of files? Explain.

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

**PART-B**

- (a) Explain about arithmetic and relational operators with examples.  
(b) Draw the flowchart for finding whether the given no is Armstrong no or not.

[8+8]

- (a) What is matrix? How arrays are used for declaring the matrix?  
(b) What is multi-dimensional array? How to access multi-dimensional arrays?  
(c) Write a program to print the following matrix

```
[ A B C D
  E F G H
  I J K L
  M N O P ]
```

[3+8+5]

- (a) How to declare a function and differentiate calling and called function? Explain with an example program.  
(b) Write a recursive program for finding the  $n^{\text{th}}$  Fibonacci value, using functions.

[8+8]

- What is dynamic memory allocation? Explain with example.

[16]

- (a) Explain the differences between structure and union and write a program to find sum of marks in three subjects for a student using structures.  
(b) Explain in short different bit-wise operators with example.

[8+8]

- (a) Write short notes on formatted I/O.  
(b) Write a program to merge two files into one file.

[8+8]

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Subject Code: R13205/R13

Set No - 4

I B. Tech II Semester Regular/Supplementary Examinations May - 2016

**COMPUTER PROGRAMMING**

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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**

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**PART-A**

1. (a) Define algorithm and flowchart.
- (b) How to store data in arrays? Give examples.
- (c) What is recursion?
- (d) What are the applications of pointers?
- (e) Define self-referential structures.
- (f) What is file? How to open a file?

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

**PART-B**

2. (a) What is data type? What is the size and range of each data type? Explain with examples.
- (b) Write an algorithm for the finding biggest of three numbers.

[8+8]

3. (a) What is character array? Give examples.
- (b) Write a program to print pascal triangle
- (c) Write an algorithm for finding whether the given no is strong no or not.

[3+8+5]

4. (a) Differentiate user defined and predefined function. Explain with one example.
- (b) How to pass array variables to functions? Explain with examples.

[8+8]

5. (a) What is pointer? What are the advantages and disadvantages of pointers?
- (b) What is formal and actual parameter? How to pass variables by their address?

[8+8]

6. (a) Differentiate between structures and unions, and write the syntax for nested structures.
- (b) Write a program to create a linked list.

[8+8]

7. (a) Explain the system calls fread and fwrite with examples.
- (b) Write a program to count no of words and lines in a file.

[8+8]

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