

Roll No. ....

**24361**

**B. Tech. 6th Semester (CS & IT)  
Examination – May, 2018**

**SYSTEM PROGRAMMING AND SYSTEM  
ADMINISTRATION**

**Paper : IT-303-F**

Time : Three Hours ]

[ Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

**Note :** Question No. 1 is *compulsory* and attempts *four* more questions selecting *one* question from each Unit. All questions carry equal marks.

1. Write the short note on the followings :

- (i) System Programs
- (ii) Macro
- (iii) Macro Instructions
- (iv) Inodes
- (v) Demand Paging

- (vi) Pipe
- (vii) Vi Editor
- (viii) Scripts

### SECTION - A

- 2. What is system programming explain its evolution history in detail.
- 3. Focus on incremental compiler. Also explain general loader and absolute loader with examples.

### SECTION - B

- 4. What is Macro ? Explain features of Macro facility and Macro Instruction Arguments.
- 5. What is UNIX operating system? Explain different CPU scheduling.

### SECTION - C

- 6. Write down any ten commands of UNIX with their briefing. Also explain UNIX directories and files in UNIX environment.
- 7. Write down the basic operations on files using UNIX. Also focus on changing permission in detail.

## SECTION - D

8. Explain shell programming. Give different types of Shells. Also focus interactive shell scripts.
9. Write the short notes on the followings :
- (a) Maintaining user accounts
  - (b) Backups and restoration
  - (c) Role and functions of a system manager
  - (d) AWK utility
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