

2017**MCA****3rd Semester Examination****OPERATING SYSTEM LAB.****PAPER—MCA 307****Subject Code—32****(Practical)****Full Marks : 50****Time : 2 Hours**

The figures in the right hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary

Answer any *one* question (on lottery basis).

1×35

1. Write a shell script which asks the user to enter a character and then determines whether the user entered a small case letter, a capital case letter, a digit or a special symbol.
2. Write a shell script to find all the prime numbers within a given range.
3. Write a shell script to compute x^y where the values of x and y are provided as arguments.
4. Write a shell script to display the list of all files in the current directory to which any user has read and execute permissions.
5. Write a shell script to reverse an integer.
6. Write a shell script to check whether an integer is Armstrong or not.

(Turn Over)

7. Veena's basic salary is input as argument. Her dearness allowance is 68% of basic salary and house rent is 30% of basic salary. Write a shell program to calculate her gross salary.
8. If a five digit number is input through the keyboard, write a program to calculate the sum of its digits.
9. Write a shell script which gets executed the moment the user logs in. It should display the message "Good Morning" / "Good Afternoon" / "Good Evening" depending on the time at which the user logs in.
10. Write a shell script which deletes all lines containing the word Unix in the file supplied as argument to the shell script.
11. Write a shell script to find simple interest.
12. Write a shell script to find the greatest number among a set of 10 numbers.
13. Write a shell script which receives two filenames as arguments. The script replaces the content of the first file to the second file.
14. Write a shell script which accepts marks obtained by a student in four different subjects and finds the percentage of marks. The script also determines the grade : A/B/C/D if the percentage obtained by the student is in range of : >80 / ≥ 60 to <80 / ≥ 40 to <60 / <40 respectively.
15. Write a shell script to sort five integers provided as arguments.

Viva-voce — 10Marks

Practical Note Book — 5Marks
