

2019

BCA

4th Semester Examination  
OS & Computer Network Lab

Paper – 2297

(Practical)

(Set – I)

Full Marks – 100

Time : 3 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers in their  
own words as far as practicable.*

**GROUP – A**  
**(O. S. LAB)**

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

25×1

1. Write a shell script to check if a number is prime or not.
2. Write a shell script to display first n Fibonacci numbers where n is read from key board.

3. Write a shell script to check if a string is palindrome or not.
4. Write a shell script to convert a decimal number to its equivalent binary number.
5. Write a program to sort n elements.
6. Write a shell program to check if a number is armstrong or not.
7. Write a program to create a process in Unix.
8. Write a program to create a child process.
9. Write a shell program to search an element from 'n' number of element.
10. Write a shell program to evaluate the arithmetic expression  $M = [(a - b) + (c + d) * e \% f]$  where a, b, c, d, e are integer numbers.

### **Group – B**

#### **(Network Lab)**

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

25×1

1. Write a 'C' program that implements both client and server which exchange strings using TCP.

2. Write a socket program to send a data from server to client as user like to input using TCP.
3. Write a socket program to send data from client to server when connected using TCP.
4. Write a program that receives an IP address (in IPV4 format) and determines the class of this IP address.
5. Write a socket program in TCP method for bidirectional data transfer between client & server.
6. Write a socket program to send a data from server to client as user like to input using UDP protocol.
7. Write a TCP server program that receives character from client.
8. Write a program to detect IP address.
9. Write a program to implement MAC address.
10. Write a program to implement modified server.

PNB – 05 Marks

Viva voce – 15 Marks

[Internal Assessment – 30 marks]

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