Q.P. Code – 68432

Fourth Semester B.C.A. Degree Examination, April/May 2019

(CBCS Scheme)

Computer Science

UNIX OPERATING SYSTEM

Time : 3 Hours] *[Max. Marks : 90*

Instructions to Candidates : Answers ALL the Sections.

SECTION – A

Answer any **TEN** of the following. **(10 × 1 = 10)**

1. Who developed LINUX?
2. What is boot strap program?
3. Why cut filter is used?
4. What do you mean by absolute path?
5. Write usage of tr command.
6. When wall command is used in UNIX?
7. What is PID?
8. Define Zombic process.
9. Why ftp command is used?
10. What is spawning?
11. Which shell supports aliasing feature?
12. What is IFS?

SECTION – B

Answer any **FIVE** of the following. **(5 × 3 = 15)**

13. Explain bc command with options.
14. Explain head and tail command with suitable examples.
15. Write the usage of nice command in detail.

16. Why ch mode is used? Explain with an example.

17. Explain different modes in vi editor.

18. Write a note on different context of a process.

19. Write a shell script to check whether given year is leap year or not.

SECTION – C

Answer any **SIX** of the following. **(6 × 5 = 30)**

20. Explain features of UNIX.

21. Why tput command is used? Explain with options.

22. Explain states of process with neat diagram.

23. Write difference between user and kernel mode.

24. Why test command is used? Explain string test command.

25. Explain different types of process.

26. Write cursor movement commands in vi editor.

27. Explain while and until loop with an example

SECTION – D

Answer any **FIVE** of the following. **(5 × 7 = 35)**

28. (a) Explain architecture of UNIX system.

    (b) Write features of Kernel. **(4 + 3)**

29. (a) Explain the components of UNIX file system.

    (b) Explain different types of files in UNIX. **(4 + 3)**

30. (a) Explain steps in process creation in UNIX.

    (b) Write a data structure of a process. **(4 + 3)**

31. (a) What are signals in UNIX? How process is killed using signals?

    (b) Explain sort command with options. **(3 + 4)**

32. (a) Explain edit commands with options in vi editor.

(b) Write the usage of given commands :

(i) send

(ii) mesg

(iii) grep

(4 + 3)

33. (a) Write a shell script to check given string is palindrome or not.

(b) Explain types of shell variables. **(4 + 3)**

34. (a) Explain If-Else-Elif with an example.

(b) Write a shell script for basic arithmetic operations. **(3 + 4)**
