**20U476**                    (Pages: 2)                    Name: …………………….

Reg. No: ………………….

### FOURTH SEMESTER B.Voc. DEGREE EXAMINATION APRIL 2022

(Regular/Supplementary/improvement)

### CC18U SDC4 DS15 - DATA SCIENCE WITH R AND PYTHON PROGRAMMING, EMBEDDED LINUX OS AND ANDROID PROGRAMMING.

(B.Voc. – Information Technology)

(2018 Admission onwards)

Time: 3 Hours                                                    Maximum: 80 Marks

### PART A

Answer *all* questions. Each question carries 1 mark.

1.  What will be the output of the following R program?

    a <- 0:10

    print(a[2])

2.  Matrices can be created by row-binding with the help of the _____ function.

3.  _____ function is used to watch for all available packages in library.

4.  In Linux _____ command is used to remove files or directories.

5.  Chown is used to change the _____ of file.

6.  _____ started Linux first as a personal project.

7.  Cd command is used to _____

8.  The _____ file specifies the layout of your screen.

9.  _____ is the name of database used in android.

10. _____ is called only once when database is created for the first time.

**(10 × 1 = 10 Marks)**

### PART B

Answer any *eight* questions. Each question carries 2 marks.

11. What is Pandas dataframe object?

12. Define array slicing.

13. What are the indexer attributes in Pandas?

14. What are three operators that can be used to extract subsets of R objects?

15. What are the different goals of a scheduler?

16. What is the use of depmod utility?

17. What is bootloader?

18. What are the features of AMCC Powerpc 440EP?

19. What are the different storages available in android?

20. What is SQlite?

21. What is an Android manifest file?

22. What is the APK format in Android?

**(8 × 2 = 16 Marks)**

## PART C
Answer any *six* questions. Each question carries 4 marks.

23. Explain Data Indexing and Selection in Pandas.

24. What are the different control statements in R?

25. Define universal functions in Numpy.

26. What is Linux file system? Explain its architecture.

27. Explain the tool chain build process.

28. What are the three types of memory model in the Linux kernel?

29. Explain the three main components of the Android APK.

30. Explain the difference between View and ViewGroup.

31. What types of menus are available in the android SDK?

**(6 × 4 = 24 Marks)**

## PART D
Answer any *two* questions. Each question carries 15 marks.

32. What are the different ways of combining datasets in Pandas?

33. What are tool chains? Explain

34. Explain the different key components in android architecture.

35. Explain the different dialog boxes supported by Android.

**(2 × 15 = 30 Marks)**

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