**18U469** (Pages: 2) Name: ……

Reg. No. ……

**FOURTH SEMESTER B.Voc. DEGREE EXAMINATION, APRIL 2021**

(Regular/Supplementary/Improvement)

**SDC4 DS15 – DATA SCIENCE WITH R AND PYTHON PROGRAMMING, EMBEDDED LINUX OS AND ANDROID PROGRAMMING**

(Information Technology)

(2018 Admission onwards)

Time: Three Hours Maximum: 80 Marks

## PART A

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

1. Function used for linear regression in R is _____
2. _____ suspends the execution of a function wherever it is called and puts the function in debug mode.
3. If we want to explicitly set the data type of the resulting array, we can use the _____ keyword.
4. The primary tool for debugging is _____
5. 855GM is an example of _____
6. RISC stands for _____
7. 855GM is an example of _____
8. _____ is used to invoke the system components.
9. _____ is a component that runs in the background.
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. List all aggregate functions in Pandas.
12. How to create series from a dictionary?
13. What are the indexer attributes in Pandas?
14. Define functions in R.
15. What are the features of AMCC Powerpc 440EP?
16. What is Linux Kernel?
17. What is proc command in Linux?
18. What is Shortest Job First (SJF) policy?
19. What is view Group in android?

20. What are the different storages available in android?
21. What is fragment in android?
22. What are the types of flags to run an application in android?

**(8 × 2 = 16 Marks)**

## PART C

Answer any ***six*** questions. Each question carries 4 marks

23. What are the functions used for reading and writing data from or to files in R?
24. Explain about the hierarchical indexing.
25. Define the different ways a DataFrame can be created in pandas?
26. What are the different types of shell commands?
27. Explain the architecture of a Linux system. Draw the architecture.
28. What are the advantages and disadvantages of Yocto project?
29. Explain the different android libraries.
30. What types of menus are available in the android SDK?
31. Explain the different layouts supported by android.

**(6 × 4 = 24 Marks)**

## PART D

Answer any ***two*** questions. Each question carries 15 marks

32. Explain Android Application Lifecycle.
33. What is the difference between a fragment and an activity? Explain the relationship between the two with an example.
34. Explain
    a) Standalone processors
    b) Integrated processors
35. a) Explain Aggregation and Grouping in Pandas.
    b) Explain about working with time series data in pandas.

**(2 × 15 = 30 Marks)**

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