22U470	(Pages: 2)	Name:
		Reg.No:

### FOURTH SEMESTER B.Voc. DEGREE EXAMINATION, APRIL 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

## CC21U SDC4 LS12 - EMBEDDED LINUX OS AND ANDROID PROGRAMMING

(Information Technology - Skill Component Course)

(2021 Admission onwards)

Time: 2.5 Hours Maximum: 80 Marks

Credit: 4

#### Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

- 1. What is GRUB?
- 2. What is Bootloader?
- 3. List all the devices supported by MTD subsystem?
- 4. Breifly explain flat memory model.
- 5. Define posix thread library.
- 6. List any five signals.
- 7. Describe DVM.
- 8. What is the use of R class in Android?
- 9. Analyze the use of cursor.
- 10. Design a checkbox button having two options.
- 11. Analyse what is a back stack used for?
- 12. Explain how advanced layout managers like ConstraintLayout can help improve the responsiveness and maintainability of complex UI layouts in your Android app.
- 13. Analyse the role of a menu inflater class.
- 14. What are some best practices for implementing drag and drop functionalities in Android apps?
- 15. Make a short note on SQLIte database classes in Android.

(Ceiling: 25 Marks)

## Part B (Paragraph questions)

Answer all questions. Each question carries 5 marks.

- 16. What is SBMCS? Describe with the help of block diagram?
- 17. What are the two modes of working in Linux os?
- 18. Compare embedded Linux and RTOS based on size, scheduler,CPU resource and their iot implementation
- 19. Explain the fundamental components of Android.
- 20. Analyze different Resources used in Android (Any Five).
- 21. Make a short note on spinner control.
- 22. Describe Dalvik Machine.
- 23. Explain the three main components of the Android APK.

(Ceiling: 35 Marks)

# Part C (Essay questions)

Answer any two questions. Each question carries 10 marks.

- 24. Explain tool chains.
- 25. Explain the different components of an Android application.
- 26. Discuss the Application life cycle with neat diagram.
- 27. Analyze fragments in Android and its life cycle.

 $(2 \times 10 = 20 \text{ Marks})$ 

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