B.C.A. DEGREE END SEMESTER EXAMINATION - OCTOBER 2024 SEMESTER 5 : MOBILE APPLICATIONS AND CLOUD TECHNOLOGY COURSE : 19U5CRBCA16 : ADVANCED ANDROID

(For Regular 2022 Admission and Supplementary 2021/2020 / 2019 Admissions)

Time : Three Hours

Max. Marks: 75

PART A Answer All (1 mark each)

- 1. Discuss about bounded service.
- 2. List out the callbacks for UI rendering in web view.
- 3. List the class is used to create array using java library for JSON.
- 4. List out the animation type performs transitions such as rotating, fading, moving and stretching on a graphics?
- 5. Explain about how to create a thread.
- 6. List the method in Web View provides zoom controls for view.
- 7. Describe about user interface optimization.
- 8. Describe the two levels of security for protected APIs.
- 9. How to stop a service in Android?
- 10. Describe the use of clearTaskOnLaunch attribute of the Activity.

 $(1 \times 10 = 10)$

PART B Answer any 8 (2 marks each)

- 11. Explain the role of open GL API for Android graphics.
- 12. Explain the significance of SOAP Fault.
- 13. Define SOAP Envelope.
- 14. Explain about the built in security in Android.
- 15. Explain about Protected API permissions.
- 16. Describe about Thread Looper.
- 17. When a service is started by onStart command , it will return service constants . List the different service constants returned.
- 18. Describe about the significance of DELETE method in HTTP request.
- 19. Define the elements of Interpolators.
- 20. Explain the significance of POST method in HTTP request.

(2 x 8 = 16)

PART C Answer any 5 (5 marks each)

- 21. Explain the different types of Animations in Android.
- 22. Explain about the thread life cycle.
- 23. Explain steps to create Broadcast Receiver.

- 24. Explain about the communication protocol available in Android.
- 25. Explain the methods available in android to provide protection to an app.
- 26. Explain how to convert the JSON string to JSON object.
- 27. Explain the components of XML document.

(5 x 5 = 25)

PART D Answer any 2 (12 marks each)

- 28. With a suitable example explain the use of threading in Android development.
- 29. Describe In-App billing. How it can be integrated in your app?
- 30. Illustrate how to draw with a canvas. Give suitable example.
- 31. Briefly explain the notification framework with example.

(12 x 2 = 24)