



B.E DEGREE EXAMINATIONS: NOV/DEC 2022

(Regulation 2018)

Seventh/Fifth Semester

INFORMATION SCIENCE AND ENGINEERING

U18ISE0017: Mobile Application Development

COURSE OUTCOMES

- CO1:** The evolution of Android mobile applications development and technologies
CO2: Practice and experience Android mobile applications technologies
CO3: Design and develop Android mobile applications for utility
CO4: Practice and experience of mobile applications using database connectivity
CO5: Present a Story of Networking and location-based services

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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|--|-----|-------------------|
| 1. Classify the characteristic variation between the <i>android:versionCode</i> and <i>android:versionName</i> attributes in the AndroidManifest.xml file? | CO1 | [K ₂] |
| 2. Explain the purpose of Android manifest file. | CO1 | [K ₂] |
| 3. Write the code to invoke the built-in Browser application. | CO2 | [K ₂] |
| 4. Summarize the key difference between a fragment and an activity. | CO2 | [K ₂] |
| 5. Why is the <i>AbsoluteLayout</i> not recommended for use? | CO3 | [K ₁] |
| 6. How do you programmatically determine whether a RadioButton is checked? | CO3 | [K ₁] |
| 7. What is the permission you need to declare when writing files to external storage? | CO4 | [K ₁] |
| 8. Write the query to retrieve all contacts from the Contacts application that contain the word "jack." | CO4 | [K ₂] |
| 9. If you have embedded the Google Maps API into your Android application but it does not show the map when the application is loaded, what could be the likely reasons? | CO5 | [K ₂] |
| 10. How do you notify an activity from a BroadcastReceiver? | CO5 | [K ₁] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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|--|----|-----|-------------------|
| 11. a) Demonstrate the architecture of Android with a neat sketch. | 10 | CO1 | [K ₂] |
| b) Explain in detail about the required tools and SDKs required for developing Android Apps. | 6 | CO1 | [K ₂] |

12.	a)	Illustrate the life cycle of an activity and the various stages it goes through to ensure that an Android application works correctly. Cite examples.	8	CO2	[K ₂]
	b)	Explain how the following tasks are performed while developing an Android application (i) Applying Styles and Themes to an Activity (ii)Hiding the Activity Title (iii) Displaying a Progress Dialog Window	8	CO2	[K ₂]
13.	a)	Develop the code for demonstrating how android applications adapt to display orientation	8	CO3	[K ₃]
	b)	Construct a mobile application to select and display the date and time from its hosting device	8	CO3	[K ₃]
14.	a)	Model the key features and working of the <i>SharedPreferences</i> object which enables internal and external data storage in Android applications	8	CO4	[K ₃]
	b)	With the DBAdapter helper class, demonstrate how the regular CRUD (create, read, update and delete) operations are performed on CONTACTS	8	CO4	[K ₃]
15.	a)	Illustrate the significance and concept of <i>content providers</i> in Android applications	8	CO4	[K ₂]
	b)	Outline the steps required to download text and image from a server so that it can be displayed in your Android application.	8	CO5	[K ₂]
16.	a)	Develop a mobile application such that the user can send e-mail messages from his/her app	8	CO5	[K ₃]
	b)	Build a location tracker application for women safety	8	CO5	[K ₃]
