

Course Code : CST 313

CXDW/RW – 18 / 5054

**Fifth Semester B. E. (Computer Science and Engineering)
Examination**

MOBILE APPLICATION PROGRAMMING

Time : 3 Hours]

[Max. Marks : 60

Instructions to Candidates :—

- (1) All questions carry marks as indicated against them.
- (2) Due credit will be given to neatness and adequate dimensions.
- (3) Assume suitable data and illustrate answers with neat sketches wherever necessary.

1. Solve any Two :—

- (a) Compare the Generations of wireless communication based on the standards, speed and the features supported. 5 (CO 1)
- (b) How the frequency reuse concept in cellular network is used to increase the user capacity ? Justify your answer with suitable example. 5 (CO 1)
- (c) Describe with neat sketch WTLS (wireless transport layer security) hand shake protocol action. 5 (CO 1)

2. (a) What does Interactive Voice Response (IVR) mean ? Explain in detail how it is supported in mobile devices. 5 (CO 2)

OR

- (b) Explain in short the principles of mobile interface design. Why it is important ? 5 (CO 2)
- (c) What is Contextual Inquiry ? What is the need of it in mobile application design ? 5 (CO 2)

3. (a) How the directory structure of android application development is different from other types of application program ? 6 (CO 2)

CXDW/RW-18 / 5054

Contd.

OR

- (b) Design the given form using Table layout. Give the complete XML code. On Submit button click, if the username and password is correct, it goes to new activity and displays a hello message.

LOGIN

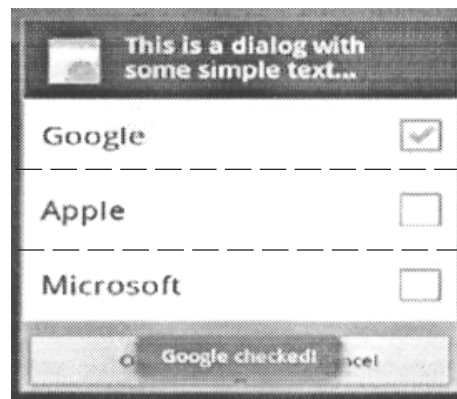
Username :	<input type="text"/>
Password :	<input type="password"/>
<input type="button" value="submit"/>	

6 (CO 2)

- (c) How the display orientation is supported in Mobile devices ? Explain the techniques used for the implementation. 4 (CO 2)
4. (a) Create simple registration form, pass and display all entered data in another activity in a text view using intent. 6 (CO 2)
- (b) Write down the components of intent object with their purpose. What is the role of intent filter ? 4 (CO 2)

OR

- (c) Create a dialog as shown in figure. Write a java code to check the item and use Toast class to display a message.



4 (CO 2)

5. Solve any **Two** :—

- (a) What is the role of editor class in shared preferences ? Which are the methods supported ? What are the pros and cons of shared preferences storage in android ? 5 (CO 3)
- (b) What is SQLite database ? Write code for adding, updating and removing data from SQLite database. Assume the data for student information having the fields Sname, Srolno, Sbranch, Saddr, Ssem. 5 (CO 3)
- (c) Write an android application for Student registration form. The data should be saved in a File. Provide a functionality to read the file and display the data. 5 (CO 3)

6. (a) What is service in Android Application ? How to create services, Executing a Service and Controlling Its Restart Behavior in Android. 6 (CO 4)

OR

- (b) How the broadcast receiver class object is used to notify the user about message sent and delivered once the SMS send successfully and what is the role of pending intent in the application ? 6 (CO 4)
- (c) Design an application to implement reverse geocoding. Give the complete Java code with two buttons to show the forward and reverse geocoding implementations. 4 (CO 4)

OR

- (d) List and explain the purpose of important classes used in the implementation of location based services with their syntax. 4 (CO 4)