CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

Fifth Semester of B. Tech (CE) Examination
January 2022
CE373 Mobile Application Development

Date: 28.01.2022, Friday

Time: 10.00 a.m. To 01.00 p.m. **Maximum Marks: 70**

Instructions:
1. The question paper comprises two sections.
2. Make suitable assumptions and draw neat figures wherever required.

SECTION – I

Q.1 Answer the following questions. [20]

1. Which method is called when called to do final cleanup of the fragment's state but Not guaranteed to be called by the Android platform? [1]
    a. onDestroyView
    b. onPause
    c. onDestroy
    d. onCreateView
2. _____ specifies how much of the extra space in the layout should be allocated to the view. [1]
    a. android:layout_margin
    b. android:layout_weight
    c. android:layout_gravity
    d. android: gravity
3. Which of the following layout is preferred for blocking the area for a single item on the screen? [1]
    a. Linear Layout
    b. Frame Layout
    c. Constraint Layout
    d. Grid Layout
4. A _____ is a simple building block of a user interface. [1]
    a. Fragment
    b. Layout
    c. View
    d. View Group
5. Which method is used to launch a new activity or get an existing activity to do something new? [1]
    a. Context.startActivity()
    b. Context.startService()
    c. Context.sendBroadcast()
    d. All of the above

6. An Android _____ is an abstract description of an operation to be performed. It can be used with startActivity to launch an Activity. [1]
    a. Filters
    b. Intent
    c. Service
    d. Broadcast Receiver

7. There are two activities in an application named ActivityA and ActivityB. Youwant to pass data ("Moblie Application Development") from ActivityA toActivityB. What code you will write? [1]
    a. Intent intent=new Intent (this, ActivityB.class); intent.putExtra("name", "MoblieApplication Development"); startActivity(intent);
    b. Intent intent=new Intent (this, ActivityB.java); intent.putExtra("Moblie ApplicationDevelopment"); startActivity(intent);
    c. Intent intent=new Intent (); intent.putExtra("name", "Moblie Application Development");startActivity(intent);
    d. None of the above

8. What is the sequence of compilation for android Runtime? [1]
    a. dev2oat -> ART Runtime -> Native COde -> DEX
    b. DEX -> Native Code -> dex2oat -> ART Runtime
    c. Native Code -> dex2oat -> ART Runtime -> DEX
    d. DEX -> dex2oat -> Native Code -> ART Runtime

9. Which of the following is not a valid Android resource type? [1]
    a. Drawable
    b. Mipmap
    c. Style
    d. Manifest

10. which of the following XML file is used to define custom themes and looks for the UI of application? [1]
    a. looks.xml
    b. colors.xml
    c. themes.xml
    d. styles.xml

11. By default, orientation of Linear Layout is? [1]
    A. Vertical
    B. Horizontal

12. _____ is used to show notification for a particular interval of time. [1]
    a. View
    b. Context
    c. TextView
    d. Toast

13. A _____ is a piece of an activity which enable more modular activity design. [1]
    a. Fragment
    b. sub-activity
    c. Intents
    d. Filters

14. Superview is having more space (area) compare to safe area in IOS. [1]
    a. True
    b. False
15. We can't use "where" with switch case in swift. [1]
    a. True
    b. False
16. In Activity life-cycle, what is the first callback method invoked by the system? [1]
    a. onStop()
    b. onStart()
    c. onCreate()
    d. onRestore()
17. Which configuration file holds the permission to use the internet? [1]
    a. Layout file
    b. Property file
    c. Java source file
    d. Manifest file
18. What does the Layout xml file contain? [1]
    a. Orientations and layouts that specify what the display looks like
    b. The permissions required by the app
    c. The strings used in the app
    d. The code which is compiled to run the app
19. What following IOS code will do? [2]

```swift
class ViewController: UIViewController {
@IBOutlet weak var card: UIImageView!
    override func viewDidLoad()
    {
        super.viewDidLoad()
        card.image = UIImage(named: "abc")
    }
}
```

    a. Change label text with "abc"
    b. Change label text with image name "abc"
    c. Change image of imageview with image name "abc"
    d. Will change imageview name with "abc"

SECTION – II

Q.1 Attempt any three. [15]

1. What is type casting in swift? Explain with example. [5]
2. What is the difference between onCreate() and onStart()? [5]
3. Draw and explain Fragment lifecycle in android. [5]
4. What is android activity lifecycle? Explain the role of any two methods in detail. [5]

Q.2 Attempt any five questions. [35]

1. Create an Android app, in which create three fragments: Red, Green and Blue. In the main activity, create three buttons, for each fragment. by clicking on the button, respective fragment should be displayed. [7]
2. Create an Android app, in which create a spinner with food names (at least 5) and display the image of the food. (GUI, XML file & Java file only)
3. Write android application to create three buttons in main activity which calls different activity when button is pressed. (GUI, XML & Java file only) [7]
4. What is Parsing? explain XML parsing and JSON parsing with example. [7]
5. What is the difference between a Fragment and an Activity? Explain the relationship between the two [7]
6. What is an intent? Differentiate between implicit and explicit intent? How to start activity using intent, Explain with implicit and explicit intent example. [7]
7. Explain iPhone operating system architecture. Enlist the main features of latest iOS. [7]