CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY

Fifth Semester of B. Tech (CE) Examination
December 2018
CE373 Mobile Application Development (Elective-I)

Date: 29.11.2018, Thursday   Time: 10.00 a.m. To 1.00 p.m.   Maximum Marks: 70

Instructions:
1. The question paper comprises two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.

SECTION – I

Q - 1   Answer the following questions.

A	State the benefits of Swift over Objective-C?	**[01]**
B	Relate the difference between the frame, bound and center for defining the geometry of UIView class.	**[02]**
C	How to pass data between view controllers while developing iOS mobile application?	**[01]**
D	Which of the following frameworks is/are used in iOS?	**[01]**

    I.   UIKit Framework   II.   AppKit Framework

    III.   Foundation Framework   IV.   CoreMotion Framework

E	Explain the Responder Chain with example.	**[02]**

OR

E	Distinguish between using a delegate and notification?	**[02]**

Q – 2   Answer the following questions.

A	Explain iPhone operating system architecture with example. Enlist the main features of iOS 9 or above.	**[05]**

OR

A	Why Alamo fire is used in iOS application development? Give main features of Alamo fire.	**[05]**
B	Explain the life cycle of an iOS application and view controller life cycle.	**[07]**
C	Explain the following syntax	**[02]**

    i.   UIButton* b = [UIButton
             buttonWithType:UIButtonTypeSystem];
             UIView* v = b

    ii.   @interface XYZObject : NSObject
             @property (copy) void (^blockProperty)(void);
             @end

Q – 3   Answer the following questions.

A	Explain UIDynamicAnimator & UINavigationController in detail.	**[04]**

B How to achieve memory management in iOS? Explain with example in detail. **[04]**

C Write an iOS code to create an actionsheet in swift and generate the alert box after selecting the action from the actionsheet. **[06]**

OR

C Write an iOS code to develop an application for counting the button click and display the message on screen of number of count. Moreover add the function of button click if reaches the count of 20 then button should get disable. **[06]**

SECTION – II

Q - 4 Answer the following questions.

A List out the difference between JVM and DVM? **[01]**

B What is AVD? Explain the process of creating AVD in Android application development. **[02]**

C What is widget in android application? **[01]**

D What does the following line of code achieve? **[01]**

Intent intent = new Intent(FirstActivity.this, SecondActivity.class);
I.	Creates an hidden Intent	II.	Creates an implicit Intent
III.	Create an explicit Intent	IV.	Starts an activity

E List out the pros and cons of using cross platform mobile application development? **[02]**

OR

E What is the significance of android manifest file? **[02]**

Q - 5 Answer the following questions.

A What is Service? Explain each state of service and differentiate between Activity and Service. **[05]**

OR

A Explain web, native and hybrid mobile application development along with its advantages and disadvantages. **[05]**

B What is android activity lifecycle? Explain the role of each method in detail. **[07]**

C What is intent? Explain explicit vs. implicit intents. **[02]**

Q - 6 Answer the following questions.

A Write a code to send data from one activity to another activity using implicit intent. **[04]**

B List down the advantages and disadvantages of SQLite Database. **[04]**

C Write a code for android application to insert EmployeeDetails (eID, eName, eJoiningDate, eSalary) in SQLite database using Android App. **[06]**

OR

C What is ScrollView and ListView? Explain anyone with suitable example. **[06]**