OXFORD COLLEGE OF ENGINEERING AND MANAGEMENT Level: Bachelor Programme: BCA Semester - Spring Course: Mobile Application Development Year : 2020 Full Marks: 100 Pass Marks: 45 Time : 3hrs. Candidates are required to give their answers in their own words as far as Set - B The figures in the margin indicate full marks. Attempt all the questions. a) What is Mobile Application Development? Explain types of mobile application development environments. b) Explain DVM and android runtime in detail? Describe the kernel 8 used in Android OS. a) What is JVM and why is Java called a platform independent language? b) Describe the Android Manifest file. Write importance of manifest 8 file with example. 3 What is an Activity? Explain the activity lifecycle of android with a suitable diagram? Explain the permission mechanism in Android. What is the importance of Fragment in Android? a) What is Toast Notification and Snackbar? Write differences between them. b) Describe the AsyncTask class in android? Explain with an example. a) Explain types of layout in android? Write an xml file for 8 5 registration screen using relative layout. b) What is multimedia? Describe the lifecycle of a media player. a) Describe a multitouch gesture in android? List and explain some 7

of the events generated during multitouch.

b) Write an application as follows:
 i. Create a database name "BankDB"
 ii. Create a table "Customer" which have column "name" and "contact"
 iii. Insert a row with the following details:
 (Ramesh, 992900019)

Write short notes. (any two)
a) Content provider class.

b) Shared Preferences

c) Android App Monetization

OXFORD COLLEGE OF ENGINEERING AND MANAGEMENT Level: Bachelor Semester – Spring : 2020 Year Programme: BCA Full Marks: 100 Course: Mobile Application Development Pass Marks: 45 Time : 3hrs. Set - A Candidates are required to give their answers in their own words as far as practicable. The figures in the margin indicate full marks. Attempt all the questions. a) Explain the Mobile Operating System with its Structure. b) Define android run-time and difference between JIT and AOT. 8 2 a) What do you mean by Object and Class in Java? Explain the inheritance with its types. b) Explain Android manifest file. How is an activity set as default activity? 3 a) What do you mean by Intent? Explain its type with a suitable program for each. b) Explain Intent. Write a code for button click listener to switch to another activity. What is View and Viewgroup in android explain with examples. 4 b). What do you mean by Density Independent Pixel? How can you achieve multiple screen support in our Android application? Explain. a) Explain different techniques to work with graphics in android? 5 How do you implement a media player in an android application? b) Write an application that demonstrates how to perform operations using Asynctask on a background thread. What is multimedia? Describe the life cycle of a media player. 6 Explain an inbuilt database available in android and procedure to

implement in an android app.

- Write short notes. (any two)
 - a) Android App Monetization
 - b) Broadcast Receiver
 - c) Debug APK vs Release APK