

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA, Summer 2017 – 18 Examination

Semester: 5
Subject Code: 05201301
Subject Name: Mobile Apps Development

Date: 11/06/2018
Time: 10:30 am to 1:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Answer the followings.**A. Write short notes.****(05)**

1. Write a short note on following terms: VoiceXML, WML
2. Explain following terms: android SDK
3. List DML and DDL statements using SQLite.
4. What are shared preferences? Explain significance of shared preferences.
5. What is Manifest.xml in android?

B. Do as directed.**(10)**

1. Android is licensed under which open source licensing license?
 (a) Gnu's GPL (b) Sourceforge (c) OSS (d) Apache/MIT
2. What was the first phone released that ran the Android OS?
 (a) Google gPhone (b) T-Mobile G1 (c) Motorola Droid (d) HTC Hero
3. If you want share the data across the all applications, you should go for?
 (a) Shared Preferences (b) Internal Storage (c) SQLite Databases (d) content provider
4. Which permission is required to record an audio in android application?
 (a) android.permission.RECORD_AUDIO (b) android.permission.CAPTURE_AUDIO
 (c) android.permission.WRITE_AUDIO (d) None of above
5. Which testing technique validates that each and every line of code is executed at least once?
 (a) Statement Coverage (b) Branch Coverage (c) Path Coverage (d) None of these
6. <uses-sdk> is meant to specify
 (a) Applications versioning (b) Applications Features Requirements
 (c) Applications System API Requirements (d) None of these
7. Versioning of an application should be specified in _____ tag of manifest file.
8. WML is a part of _____ standard.
9. Status data will be exposed to the rest of the Android system via:
 (a) A content provider (b) Intents (c) Altering permissions (d) Network receivers
10. An activity in a stopped state is doing nothing. [Justify True/ False]

Q.2 Answer the followings.**(15)**

1. Explain following terms: Dalvik Debug Monitor Service **(02)**
2. Draw diagram of android activity lifecycle. **(02)**
3. What is AndroidManifest.xml file? List down roles and responsibilities of AndroidManifest.xml file. **(02)**
4. List down core files and directories of android application. **(03)**
5. Explain how to obtain list of supported sensors programmatically? **(03)**
6. List down advantages and disadvantages of White box testing. **(03)**

Q.3 Answer the following. (Any three)**(15)**

1. Explain MediaRecorder and MediaPlayer class in android application with suitable example.
2. Write a short note on notifications in android application
3. Explain automation testing using JUnit in detail.
4. What is significance of wireless languages? List down names of most widely used wireless languages and explain any two of them in detail.

Q.4 Answer the following.

- A. Explain white box processing in detail. **(05)**
- B. (i) How to find location of android device programmatically? Explain with suitable example. **(05)**
 (ii) How to access native sensors of android device? Explain with suitable example. **(05)**

OR

- B. (i) Write a short note on 3-tier architecture for mobile computing. **(05)**
 (ii) Explain how to create, update and delete database records using SQLite. **(05)**