## PARUL UNIVERSITY FACULTY OF IT & COMPUTER SCIENCE MCA winter 2018–19 Examination

Enrollment No:

Semester: 5 Date: 24/10/2018 Subject Code: 05201301 Time: 10:30 am to 01:30 pm **Subject Name:** Mobile Apps Development **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. Explain following terms: android SDK and AVD manager. 2. Explain Activity. 3. Explain DDMS. 4. What is AndroidManifest.xml file? 5. Explain Intent. B. Multiple choice type questions/ Give the sentence true or false. (Each of 01 marks) (10)1. Intents A. are messages that are sent among major building blocks B. trigger activities to being, services to start or stop, or broadcast C. are asynchronous D. all of these 2. What does AVD stand for? A. Android Virtual Display **B.** Android Virtual Device C. Active Virtual Device D. Application Virtual Display 3. What built-in database is Android shipped with? A. SOLite B. Apache C. MySQL D. Oracle 4. When contents changes from frame to frame then animation should be implemented. A. Tweened Animation B. Frame-by- frame animation C. Both of above D. None of above 5. 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 6. Which testing technique validates that each and every line of code is executed at least once? A. Branch Coverage B. Statement Coverage C. Path Coverage D. None of above 7. How to get a response from an activity in Android? A.startActivityToResult() B.startActivityForResult() D. None of the above C. Bundle() 8. During an Activity life-cycle, what is the first callback method invoked by the system? A. onStop() B. onStart() C. onCreate() D. onRestore() 9. Which is not included in the Android application framework? A. WindowManager B. NotificationManager C. DialerManager D. PackageManager 10. How many threads are there in asyncTask in android? C. Three A. Only one B. Two D. None of above Q.2 Answer the followings. (15) 1. List out UI design layouts supported by android SDK. (02)2. Write down code to send an SMS. (02)3. List down four methods of AsyncTask. (02)4. What are shared preferences? Explain significance of shared preferences. (03)

	5. Write a short note on tweened animations.	(03)
	6. Draw life cycle of a service.	(03)
Q.3	Answer the following. (Any three)	(15)
	1. Write a short note on main techniques of White-box testing for mobile apps.	
	2. Write a short note on 3-tier architecture for mobile computing.	
	3. What is SQLite? Explain significance of SQLite database for mobile application development.	
	4. Draw underlying architecture of android operating system.	
Q.4	Answer the following.	
A.	Explain MediaPlayer and MediRecorder class along with all methods.	(05)
	Explain android activity life cycle in detail	(10)
	OR	
B.	Answer following.	(10)
	1. What is Black-box testing? Explain black-box testing techniques in brief for mobile apps.	(05)
	2. How to set version of an android application? Explain in brief.	(05)