# **Question Paper**



#### MANIPAL UNIVERSITY

#### **SCHOOL OF INFORMATION SCIENCES (SOIS)** SECOND SEMESTER MASTER OF ENGINEERING - ME (MEDICAL SOFTWARE/ **EMBEDDED SYSTEMS)**

#### **DEGREE EXAMINATION - APRIL/MAY 2017** Monday, 24, 2017

Time: 10:00 AM - 1:00 PM

### **Mobile Application Development using Android**

Marks: 100 **Duration: 180 mins.** 

## .II +L

Answer	all the questions.	
1)	a) Explain DVM. How is it different from JVM (5 marks)	(10)
	<ul><li>b) What are the advantages of android?</li><li>(5 marks)</li></ul>	
2)	List and explain the different activity states of an android application	(10)
3)	With an example explain the implicit intent in android	(10)
4)	Explain the two categories of android service lifecycle	(10)
5)	What is a layout? Give different types of layout available in android. Explain briefly each of them	(10)
	(2+8=10  marks)	
6)	With an example explain the spinner View	(10)
7)	a. What are Content Providers? (5 marks)	(10)
	b. Why does Android system need Content Providers? (5 marks)	
3)	How data insertion and update operation can be performed in SQLite database? Provide proper example for both the operations (5+5=10 marks)	(10)
9)	How to develop an android application in order to download binary data from a web server?	(10)

Explain with an example

What is shared preference in android? explain  $^{(10)}$  the concept with a help of example (4+6=10 marks)