Reg. No._____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER MCA DEGREE EXAMINATION, DEC 2018

Course Code: RLMCA206
Course Name: MOBILE COMPUTING

Max. Marks: 60   Duration: 3 Hours

PART A

Answer all questions.

1. What are the components of a wireless communication system?   (3)

2. What is mobile computing? Write down at least 4 characteristics of a mobile computing environment.   (3)

3. GSM offers more services than just voice telephony. What are the basic services provided by GSM?   (3)

4. Explain the special features that an operating system for a mobile device needs to support compared to the features provided by a traditional operating system   (3)

5. What is a microkernel operating system? Why microkernel based design being preferred for developing a mobile OS?   (3)

6. Using a suitable schematic diagram, explain how a traditional web access differs from that done using WAP   (3)

7. 'An AVD is an emulator instance that enables you to model an actual device'. Is it true? Justify your answer.   (3)

8. If you want to navigate from one activity to another, android provides you which class?

   Suppose that there are two activities in an application named FirstActivity and SecondActivity. You want to send a student roll number from FirstActivity to SecondActivity. What code you will write? Suppose that roll number is 1.

   Write the code to get the data in secondActivity.   (3)

PART B

Answer six questions, one full question from each module.

9. What is Bluetooth? Explain its protocol stack structure with a neat diagram   (6)

OR

10. With the help of a neat diagram explain how mobile telecommunication system works.   (6)

11. Explain GSM architecture and role of it components with diagram. (6)

OR

12. Discuss the network elements in GPRS that are different from GSM with a suitable diagram. Also discuss the advantages of GPRS. (6)

13. With a suitable diagram, explain the software stack of the Android operating system. (6)

OR

14. Explain the features provided by Android OS, iOS, and Windows mobile (6)

15. Explain WAP 2.0 protocol and its architecture. Explain why WAP is called a network-centric protocol (6)

OR

16. What is J2ME? Explain the architecture of J2ME? (6)

17. What is DVM? Compare the features of JVM and DVM (6)

OR

18. What are the points to be noted while selecting an image for AVD? What is the use of emulator? (6)

19. What you meant by an Activity in android. Explain its life cycle with a neat diagram. (6)

OR

20. What are the major functions provided by SQLiteOpenHelper class and SQLiteDatabase class to create a database application in android (6)

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