Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fourth Semester MCA Degree Regular and Supplementary Examination July 2021

Course Code: RLMCA206
Course Name: MOBILE COMPUTING

Max. Marks: 60   Duration: 3 Hours

PART A
Answer all questions, each carries 3 marks.   Marks

1	Explain NFC and give its application.	(3)
2	What are the services provided by 3G?	(3)
3	List any six applications of Mobile Computing.	(3)
4	What are the special service requirements of Mobile OS?	(3)
5	Differentiate between Android OS & iOS.	(3)
6	Explain the features of C-HTML and HDML.	(3)
7	What is the use of Android SDK?	(3)
8	How View is differing from ViewGroup in Android?	(3)

PART B
Answer any one question from each module. Each question carries 6 marks.

Module I

9	Explain the functionalities of a Cellular Communication System.	(6)

OR

10	What are the components of Wireless Communication System? Explain.	(6)

Module II

11	Distinguish between Infrastructure-based networks and Infrastructure-less networks with the help of suitable schematic diagrams.	(6)

OR

12	Which subsystem forms the heart of GSM? Draw the architecture and briefly explain the different subsystems of GSM.	(6)

Module III

13	What is a Microkernel OS? What are its advantages and disadvantages in the context of the design of a Mobile OS?	(6)

<div align="center">***OR***</div>

14   Explain the constraints which influence the design of Mobile OS.   (6)

<div align="center">***Module IV***</div>

15   Differentiate between traditional web access and WAP-based web access. Illustrate WAP protocol stack.   (6)

<div align="center">***OR***</div>

16   Explain in detail about Android Software Stack Structure with diagram.   (6)

<div align="center">***Module V***</div>

17   What is JVM? How you can differentiate it from DVM? Draw necessary figures to explain the working of DVM.   (6)

<div align="center">***OR***</div>

18   Explain the use of the following in android application development: (6)

a. Emulator

b. DDMS

<div align="center">***Module VI***</div>

19   What is Service in Android? List the features and Life Cycle of Service.   (6)

<div align="center">***OR***</div>

20   Write an Android program for the below Scenario: (6)

Scenario: Need to create an application, which will create a SQLite database called "HRMS" and need to insert the values EMP001, "Reema", 36000 for the fields EmployeeCode, Name and Salary in to the table EmpDetails

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