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Reg No.:_____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Sixth Semester B.Tech Degree (Hons.) Examination June 2020

Course Code: CS364

Course Name: MOBILE COMPUTING

Max. Marks: 100 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

1 What is internet content adaptation protocol? Describe data flow in an ICAP environment. (3)

2 Define context information and mention any four types of context information. (3)

3 Differentiate mobile computing and wireless network. (3)

4 Explain Geo stationary earth orbits and mention its advantages and disadvantages. (3)

PART B

Answer any two full questions, each carries 9 marks.

5 Define mobile computing and its characteristics. Explain different mobile computing functions with suitable illustration. (9)

6 a) Explain the functional architecture of GSM system with a suitable sketch. (6)

b) Describe features of DECT system. (3)

7 a) With neat diagrams, explain Frequency hopping spread spectrum. (5)

b) Explain any 4 applications and services for mobile computing. (4)

PART C

Answer all questions, each carries 3 marks.

8 What are the advantages of wireless LAN? (3)

9 Define handoff in cellular network. Compare soft handoff and hard handoff techniques. (3)

10 Explain selective retransmission in TCP. Mention its advantages and disadvantages. (3)

11 Write short notes on implications of TCP on mobility. (3)

PART D

Answer any two full questions, each carries 9 marks.

12 Explain Destination Sequence Distance Vector (DSDV) routing algorithm with an example network and routing table. Mention its advantages. (9)

13		Explain Indirect TCP with suitable diagrams. Mention its advantages and disadvantages.	(9)
14	a)	Explain Transaction oriented TCP with suitable diagrams.	(4)
	b)	Describe IEEE 802.11 System architecture with neat diagrams.	(5)

PART E

Answer any four full questions, each carries 10 marks.

15		Explain features and architecture of Long term evolution (LTE). Mention its advantages	(10)
16		Define Bluetooth. Explain Bluetooth protocol stack with neat diagram	(10)
17		Explain Java2 Micro edition (J2ME) technology with CDC and CLDC	(10)
18		With neat diagrams explain PALM OS architecture with memory architecture. Discuss about its kernel features and system managers	(10)
19		Explain different components of information security with proper examples.	(10)
20	a)	What is LiFi? What are its applications?	(5)
	b)	Explain slow start mechanism in conventional TCP, what is the impact of high error rate and missing acknowledgements in wireless network on slow start?	(5)

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