K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

End Semester Exam
May –June 2023
B.Tech-Program
Examination: TY Semester VI
Course Code:　CEC603 and Course Name: Mobile Computing
Duration:03Hours　　17|5|2023　　Max.Marks:60

Instructions:
(1) All questions are compulsory.
(2) Draw neat diagrams wherever applicable
(3) Assume suitable data, if necessary.

Q.No.	Question	Max.Marks	CO	BTLevel
Q.1	Solve any six questions out of eight:	12		
i)	Explain cell splitting & sectoring.	2	CO1	U
ii)	Explain Handover in GSM.	2	CO2	U
iii)	Explain the concept of Mobile TCP with example.	2	CO3	U
iv)	Describe hidden terminal and Exposed terminal problem problems.	2	CO4	U
v)	Explain Micro-Mobility with example.	2	CO5	U
vi)	Explain MIMO in LTE.	2	CO6	U
vii)	Explain Relay Nodes in LTE.	2	CO6	U
viii)	Explain the applications of GPRS and GSM	2	CO2	U
Q.2	Solve any four questions out of six.	16		
i)	Write short note on 1. Signal Propagation 2. Multiplexing	4	CO1	U
ii)	Explain GSM with A3 security algorithm.	4	C02	U
iii)	Explain Transmission/Timeout Freezing in Mobile TCP.	4	CO3	U
iv)	Explain Wi-Fi- security algorithms :WEP,WPA.	4	CO4	U
v)	Explain Cellular IP with neat diagram.	4	CO5	U
vi)	Differentiate between 4G and 5G.	4	CO6	U
Q.3	Solve any two questions out of three.	16		
i)	Explain Mobile computing with functions. What are the security issues in mobile computing?	8	CO1	U
ii)	Explain Mobile IP with following terms: IP Packet Delivery, Agent Advertisement, Discovery, Registration, Tunneling and Encapsulation, Reverse Tunneling.	8	CO3	U
iii)	Explain mobile IP mobility with IPV6.	8	CO5	U
Q. 4	Solve any two questions out of three.	16		
i)	Explain GPRS system with protocol architecture.	8	CO2	U
ii)	Explain power management in IEEE 802.11 Infrastructure and ad-hoc network.	8	CO4	U
iii)	Explain 5G architecture with neat diagram.	8	CO6	U

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