Reg.						AR 22
No						& AR 21



QP Code: RD22MTECH169

GIET UNIVERSITY, GUNUPUR – 765022

M. Tech. (Third Semester) Examinations, December - 2023

MPECS3011 - Mobile Applications and Services (Computer Science & Engineering)

Time: 3 hrs		Maximum: 70 Marks			
PA	(The figures in the right hand margin indicate marks.) $RT-A \label{eq:total_continuous}$	$(2 \times 10 = 20 \text{ Marks})$			
Q1. A	Answer ALL questions	C	CO#	Blooms Level	
a.	What are two different kinds of mobility?	C	CO1	K1	
b.	Give the difference between the network 1G,2G,3G mobile communication.	C	CO1	K2	
c.	What are components of Android Architecture?	CO2		K1	
d.	What is open-source operating system?	CO2		K2	
e.	What is Persisting data in SQLite?	CO2		K2	
f.	What is Handoff?	CO3		K1	
g.	What is Roaming?	CO3		K2	
h.	How is the satellite orbits classified?	CO4		K1	
i.	Compare MANET vs. VANET.		CO4	K1	
j.	What is mean by Arduino?	C	CO4	K2	
PART – B			$(10 \times 5 = 50 \text{ Marks})$		
Answ	er ANY FIVE questions	Marks	CO#	Blooms Level	
2. a.	List some characteristics of mobile applications.	5	CO1	K2	
b.	Illustrate the structure of mobile computing applications.	5	CO1	K2	
3.a.	Describe android application architecture in detail.	5	CO1	K2	
b.	What is a web service? Why it is required?	5	CO1	K1	
4. a.	Describe the challenges of mobile operating system.	5	CO2	K2	
b.	Explain the mobile application testing.	5	CO2	K2	
5.a.	Describe Home Location Register (HLR) and Visitor Location Register (VLR).	5	CO3	K1	
b.	Describe the main steps of inter-BS handoff procedure.	5	CO3	K1	
6. a.	What is Wireless LAN?	5	CO3	K2	
b.	How do you solve hidden terminal problem ?	5	CO3	K2	
7.a.	Describe Foreign agent and Home agent.	5	CO4	K2	
b.	Explain hidden terminal problem.	5	CO4	K1	
8. a.	How might Internet Address (IPv6) affect the development and implementation of the Internet of Things?	5	CO4	K1	
b.	What is meant by a smart city regarding the Internet of Things?	5	CO4	K2	