## **Question Paper Code: 42221**

M.E. DEGREE EXAMINATION, NOVEMBER 2015.

Second Semester

**Communication Systems** 

## 14PCM201-MOBILE COMMUNICATION NETWORKS

(Regulation 2014)

Duration: Three hours

Answer ALL Questions.

Maximum: 100 Marks

PART A -  $(5 \times 1 = 5 \text{ Marks})$ 

1.	Operations involved in roaming are				
	(a) Registration	(b) Location tracking	(c) Both	(d) None	
2.	GPRS support application based on				
	(a) WSP	(b) WAP	(c) IP	(d) None	
3.	is used to fetch extra information to enhance the distilled object				
	(a) Refinement	(b) Cards	(c) Filter	(d) None	
4.	Ratio of the bandwidth used for actual data transmission to the total available bandwidth				
	(a) Bandwidth efficiency		(b) QOS		
	(c) Synchronization		(d) None		
5.	specifies how routers communicates with each other				
	(a) MAC	(b) Routing protocol	(c) WML	(d) IEEE802.11	

## PART - B (5 x 3 = 15 Marks)

- 6. Describe the major functionalities of MSC.
- 7. How are channels allocated for voice and data in GRPS network?
- 8. Write short note on WML.
- 9. How is partial collision avoided in slotted ALOHA?
- 10. Explain the need for routing in MANET.

PART - C ( $5 \times 16 = 80$  Marks)

11. (a) Explain in detail the location management in mobile networks. (16)

## Or

(b) Explain in detail about the GSM architecture.	(16)				
12. (a) Explain in detail about the registration and tunneling process in mobile IP.	(16)				
Or					
(b) Discuss about the ETSI Hiper LAN standard.	(16)				
13. (a) Discuss in detail about WAP gateway architecture and protocols.	(16)				
Or					
(b) Explain the CDMA2000 QoS architecture.	(16)				
14. (a) Discuss in detail the reservation based protocols.	(16)				
Or					
(b) Explain in detail the Carrier Sense Multiple Access scheme with collision dete	ection. (16)				
15. (a) Explain the broadcasting protocols in MANET.	(16)				
Or					
(b) Discuss the unicast routing protocols in MANET.	(16)				