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**E Reg. No. :**

**Question Paper Code: 57P21**

Ph.D. COURSE WORK EXAMINATION, NOV 2017

Elective

Communication Systems

15PCM511 - MOBILE COMMUNICATION NETWORKS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. | (a) | Discuss about the Performance of the PCS Network by the way of Network manages the movement of the mobile users. | CO1- U | (20) |
|  |  | Or |  |  |
|  | (b) | Explain Roaming management in detail. | CO1- U | (20) |
|  |  |  |  |  |
| 2. | (a) | Explain SMS architecture and SMS Protocol Hierarchy in GSM. | CO2- U | (20) |
|  |  | Or |  |  |
|  | (b) | Explain various types of network signaling protocols used in GSM. | CO2- U | (20) |
|  |  |  |  |  |
| 3. | (a) | Explain MS,BSS,SGSN,CGSN,HLR,VLR in GPRS system. | CO3- Ana | (20) |
|  |  | Or |  |  |
|  | (b) | Discuss about the IEEE 802.11 standard | CO3- Ana | (20) |
|  |  |  |  |  |
| 4. | (a) | Explain the technologies implemented in 3G systems. | CO4- U | (20) |
|  |  | Or |  |  |
|  | (b) | (i) Describe the WAP Protocol stack.In which situation in WWTP  not in use? | CO4- U | (10) |
|  |  | (ii) What is the user agent profile? What happens if the user  agent profile is not used in the WAP? | CO4- U | (10) |
|  |  |  |  |  |
| 5. | (a) | Explain D-PRMA and HRMA | CO5- U | (20) |
|  |  | Or |  |  |
|  | (b) | Explain contention based protocols in detail. | CO5- U | (20) |
|  |  |  |  |  |