

MOBILE COMM<sup>N</sup> & COMPUTING

Q.P. Code : 581800

(3 Hours)

| Total Marks : 80

- N.B. :** (1) Question No.1 is Compulsory.  
 (2) Attempt any Three questions out of remaining questions.  
 (3) Make suitable assumptions whenever necessary.

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|  | <b>10</b> |
| 1. a) Explain in short how Hidden Station Problem is Avoided in WLAN.  |           |
| b) What are the Deployment issues of WLL?  | <b>10</b> |
| c) What are the general problems of satellite signals travelling from a satellite to a receiver ?  | <b>10</b> |
| d) Explain how Mobile originated call (MOC) work.  |           |
| e) What are the characteristics of SIM ?   | <b>10</b> |
| 2. a) Why is Mobile IP packet required to be forwarded through a tunnel<br>Explain IP-in-IP Techniques of encapsulation of mobile IP packet. | <b>10</b> |
| b) What are the modifications require to an existing GSM network to be upgraded to GPRS, Explain with the help of diagram.                   | <b>10</b> |
| 3. a) Explain in detail HIPERLAN/1 physical layer.   |           |
| b) Explain in detail 4G architecture.  | <b>10</b> |
| 4. a) Explain in detail Bluetooth Protocol Architecture.   | <b>10</b> |
| b) What are the security issues in mobile Computing.   | <b>10</b> |
| 5. a) Compare HIPERLAN 2, BLUETOOTH, IEEE 802.11.  |           |
| b) What are the different types of Handover in GSM ? Explain in Detail Intra-MSK handover.   | <b>10</b> |
| 6. Write short notes on the following.   | <b>20</b> |
| a) Role of SUMR register in satellite roaming.   |           |
| b) Android components.   |           |
| c) Location management HLR-VLR scheme.   |           |
| d) Digital Signature.  |           |