

Master of Computer Application (MCA-II)(CBCS Pattern) Third Semester  
**PMCAT304.2 - Elective-II - Wireless & Mobile Computing Paper-IV**

P. Pages : 2

Time : Three Hours



**GUG/W/18/11106**

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labeled diagram and use supporting data wherever necessary.
  3. Avoid vague answers and write specific answers related to Questions.

- 1.** Either:-
- a) What do you mean by Wireless communication? Explain following: **8**
- 1) Antenna
  - 2) Variation pattern.
- b) Explain about model for wireless digital communication in detail. **8**
- OR**
- c) What is Cellular network organization? Explain operations of cellular system. **8**
- d) Explain following in detail: **8**
- 1) Traffic Engineering
  - 2) Grade of service.
- 2.** Either:-
- a) What is GSM? Explain it's system architecture and services in detail. **8**
- b) Explain following: **8**
- 1) Radio Interface
  - 2) Logical channels.
- OR**
- c) Explain GPRS interface and architecture in detail. **8**
- d) Explain in detail about mobility management DECT. **8**
- 3.** Either:-
- a) What is LAN? Explain LAN architecture in detail. **8**
- b) Explain following in detail: **8**
- 1) Physical Layer
  - 2) MAC Layer.

**OR**

- c) Explain about the physical layer of HIPERLAN protocol. **8**
- d) Explain about: **8**
  - 1) Access control sub layer
  - 2) MAC sub layer

**4.** Either:-

- a) What do you mean by Mobile communication? Explain about SMS and Mobile IP. **8**
- b) Explain the characteristics and performance issue of Ad-hoc Network. **8**

**OR**

- c) Explain following about mobile transport layer: **8**
  - 1) Indirect TCP
  - 2) Snooping TCP
- d) What is transaction oriented TCP? Explain about selective retransmission. **8**

**5.** Solve all the questions.

- a) Write a note on mobile radio propagation effects. **4**
- b) Write note on Handover and protocols. **4**
- c) Discuss in short about 802.11 a,b and g. **4**
- d) Write note on Wireless sensor network. **4**

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