

Total No. of Questions : 8]

SEAT No. :

P3223

[Total No. of Pages : 2

[4737]-3002

M.Sc. (Computer Science) (Semester - III)

CS-302: MOBILE COMPUTING

(2013 Pattern)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *Attempt any five of the following :*
- 2) *Neat diagrams must be drawn whenever necessary.*
- 3) *Figures to the right indicate full marks.*

Q1) Attempt all of the following :

- a) Explain any five fragments of Android UI design with example. **[4]**
- b) How mobile communication is useful in **[4]**
 - i) Vehicle
 - ii) Stock information
- c) How does registration of mobile node occurs? **[2]**

Q2) Attempt all of the following:

- a) Explain cellular JP with its advantages & disadvantages. **[4]**
- b) Explain GPRS architecture reference model. **[4]**
- c) Define the functionality of node B used in UTRA. **[2]**

Q3) Attempt all of the following :

- a) Compare FDMA & TDMA. **[4]**
- b) Explain WAP gateway in details. **[4]**
- c) Give any two requirements of mobile J.P. **[2]**

P.T.O.

Q4) Attempt all of the following :

- a) “CDMA-CA” used in wireless LAN instead of “CDMA-CD” comment & justify. [4]
- b) Explain UMTS architecture in detail. [4]
- c) Define short term fading. [2]

Q5) Attempt all of the following :

- a) Explain UMTS Handover in detail. [4]
- b) What are the features of wireless session protocol/browsing (WSP/B). [4]
- c) What is variable timing advance in GSM. [2]

Q6) Attempt all of the following :

- a) Write short note on : [5]
 - i) Indirect TCP.
 - ii) Mobile TCP.
- b) What are supplementary services supported in GSM. [3]
- c) What disadvantages does OVSA have with respect to flexible data rates. [2]

Q7) Attempt all of the following:

- a) What is triangular routing behaviours? How it is avoided in mobile IP? [5]
- b) Describe protocol architecture of GSM. [5]

Q8) Attempt all of the following :

- a) Explain in detail working of M.TCP. [5]
- b) Which additional messages are required in optimized mobile IP? [5]

