Name:	\&/
Roll No. :	The same of the sa
Invigilator's Signature :	

CS/M.Tech(MCSE)/SEM-3/PGCS-301/2012-13 2012 MOBILE COMPUTING

Time Allotted: 3 Hours Full Marks: 70

The figures in the margin indicate full marks.

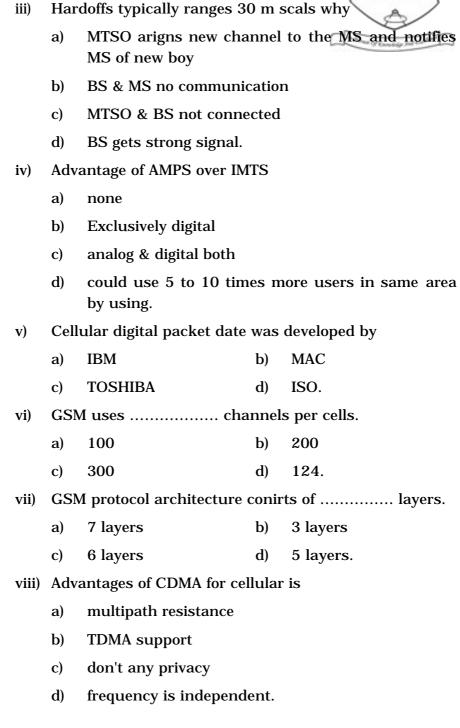
Candidates are required to give their answers in their own words as far as practicable.

GROUP - A (Multiple Choice Type Questions)

- 1. Choose the correct alternatives of the following: $10 \times 1 = 10$
 - i) Issues vital to cellular
 - a) frequency allocation
 - b) location management
 - c) multiple acuss
 - d) all of these.
 - ii) Mobile Telecommunications Switching Office (MTSO)
 - a) essentially an end office to connect calls between mobile units
 - b) BS not connected to MTSO
 - c) ATM can be without MTSO
 - d) control channels & traffic channel are same.

40393 Turn over

CS/M.Tech(MCSE)/SEM-3/PGCS-301/2012-13





- ix) Draw back of CDMA
 - a) soft hand off
- b) no problem
- c) no jamming
- d) no attemation.
- x) Mobile wireless CDMA design considers
 - a) soft handoff
- b) none of these

c) TDMA

d) FDMA.

GROUP - B

(Short Answer Type Questions)

Answer any three of the following.

 $3 \times 5 = 15$

- 2. Show the frequency allocation chart of wavelength & frequency.
- 3. Show the cell design.
- 4. Show the CPDP operation.
- 5. Difference between mobile station and base statia subsystem.
- 6. GSM protocol architecture.
- 7. Show a traditional routing protocol.

GROUP - C

(Long Answer Type Questions)

Answer any three of the following.

 $3 \times 15 = 45$

- 8. a) Give the issues vital to cellular.
 - b) How to allocate users in multiple access technique?
 - c) Show a cellular network.

5 + 5 + 5

40393

CS/M.Tech(MCSE)/SEM-3/PGCS-301/2012-13



- 9. a) Elaborate location services.
 - b) Handoffs rages typically 30 m seconds explain in brief.

10 + 5

- 10. a) What is reactive routing?
 - b) How to increase the capacity designing cell?
 - c) What is DSR?

5 + 5 + 5

- 11. a) Explain AMPS operation.
 - b) Advantages of digital communication for wireless.
 - c) Requirement analysis of a wireless LAN.
- 12. a) Difference between first and 2nd generation systems.
 - b) Explain MAC collision avoidance.
 - c) Show the effect of mobility on the protocol stack.

$$5 + 5 + 5$$

- 13. a) What are the challenges in mobile environments.
 - b) What is Ad-hoc network?
 - c) What is unicast routing?

5 + 5 + 5

40393