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Name Reg. No. 2007

## EIGHTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE EXAMINATION, APRIL 2016

EC/PTEC 09 803 L20—MOBILE COMPUTING

Time: Three Hours

Maximum: 70 Marks

## Part A

- 1. What are the limitations of a GSM cell in terms of diameter and capacity?
- 2. Discuss the advantages and disadvantages of WLAN.
- 3. Define agent advertisement.
- 4. What is the basic purpose of DHCP?
- 5. Name the advantages and disadvantages of user acknowledgements in WTP.

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

- 6. Why a new infrastructure is needed for GPRS, but not for HSCSD? Which components are new and what is their purpose?
- 7. How do IEEE802.11, HyperLAN2 and Bluetooth respectively, solve the hidden and terminal problem?
- 8. How can DHCP be used for mobility and support of mobile IP?
- 9. Explain the operation on WAP gateway.
- 10. Explain the principles of UMTS.
- 11. Explain about mobile number portability.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

12. Draw the basic architecture of the UTRAN and explain its working.

Or

- 13. Compare the features of GSM, GPRS and DECT.
- 14. Why is the PHY layer in IEEE802.11 subdivided? What about hyperLAN2 and Bluetooth?

Or

15. Explain WiMax in detail.

Turn over

16. Explain dynamic source routing algorithm in detail with an example.

Or

- 17. Explain the working of DHCP in detail.
- 18. Write a note on WML and WAP2.0 in detail.

Or

19. Draw the logical model of WAE and explain in detail.

 $(4 \times 10 = 40 \text{ marks})$