



12. (a) Discuss how the automatic, worldwide localization of users is provided in GSM.

Or

- (b) (i) Describe the UMTS core network together with respect to a 3G RNS and a 2G BSS. (6)
- (ii) Explain in detail about generic routing encapsulation. (7)

13. (a) (i) Explain the AODV protocol with a neat graph and list the advantages. (7)
- (ii) Explain the Dynamic host configuration protocol. (6)

Or

- (b) (i) Differentiate MANET with NANET and explain. (7)
- (ii) Discuss mobile security. (6)

14. (a) Explain the various classes in wireless transaction protocol, how does it improve the higher layer performance.

Or

- (b) What is the fundamental difference of WML compared to HTML? Write a WML script to design a page for online food ordering system.

15. (a) Compare Monolithic design versus microkernel design of an operating system.

Or

- (b) Explain any three popular mobile operating systems with its software protocol stack.

PART C — (1 × 15 = 15 marks)

16. (a) Explain the principal functions of the mobile operating system. Discuss how an example application can be implemented on a mobile device and write the effectiveness of system services.

Or

- (b) Discuss the architecture of Android operating system. Briefly identify the possible reasons to improve its market share compared to its peers.