

L1B  
12/1/16 FN

Reg. No. :

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**Question Paper Code : 95337**

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Elective

Software Engineering

ESE 516 — MOBILE COMPUTING

(Regulations 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the purpose of pager?
2. Define multiplexing.
3. What is the need for handover in GSM?
4. What is Geostationary Earth Orbit?
5. Define Adhoc Network.
6. What is roaming in WLAN?
7. What is the main difference between agent discovery and agent solicitation in mobile IP?
8. What is mobility binding?
9. What are the four components of protocol framework in WAP?
10. What is card and deck in WML?

PART B — (5 × 16 = 80 marks)

11. (a) (i) What is the need for layering concept? Explain the functions of each layer in a wireless and mobile environment.  
(ii) How Time Division Multiplexing is working? Explain.  
Or  
(b) (i) How frequency hopping spread spectrum is working? Explain.  
(ii) Explain the working principles of frequency division multiple access.

12. (a) (i) What are the different mobile services provided by GSM? Explain.  
(ii) Describe about the U-TMS system architecture.

Or

- (b) (i) Explain about the possible handover scenarios in GSM.  
(ii) Describe about the GSM system architecture.
13. (a) (i) How link manager protocol manages the radio link in Bluetooth?  
(ii) Describe the system architecture of 802.11.

Or

- (b) (i) How synchronization and roaming will happen on 802.11 network?  
(ii) Explain about the reference model and configuration of hipervlan2.
14. (a) (i) Explain about the agent advertisement process in mobile IP.  
(ii) How reverse tunneling is working? Explain.

Or

- (b) (i) Describe in detail about the IP-in-IP encapsulation and minimal encapsulation.  
(ii) How a mobile node registers with a home agent?
15. (a) (i) Explain about the wireless session protocol and wireless application environment.  
(ii) Describe about the Wireless datagram protocol and wireless transport layer security.

Or

- (b) (i) Explain about the WML and WML Script.  
(ii) Describe about the different classes of wireless transaction protocol.