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**Question Paper Code : 51767**

**B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016**

**Seventh Semester**

**Information Technology**

**IT 2402/IT 72/10144 IT 702 – MOBILE COMMUNICATION**

**(Regulations 2008/2010)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. What are the fundamental propagation behaviour for radio waves ?
2. How do you handle the hidden terminal problem ?
3. What are the design goals for wireless LANs ?
4. What are the characteristics of Mobile Adhoc Networks ?
5. What are the security services offered by GSM ?
6. What is the attachment procedure for GPRS ?
7. What are the advantages of Mobile-TCP ?
8. State the function of DHCP.
9. Write a WML script for a login procedure.
10. What are the services offered by iMode ?

**PART – B (5 × 16 = 80 Marks)**

11. (a) Compare SDMA, TDMA, FDMA and CDMA. (16)

**OR**

(b) (i) Give reasons for handoff and the problems associated with it. (6)

(ii) Give an overview of Cellular wireless networks. (10)

12. (a) Explain the following with relevant examples :

(i) Frequency hopping spread spectrum. (8)

(ii) Direct sequence spread spectrum. (8)

**OR**

(b) How does the mobile adhoc network differ from IEEE 802.11 Standard ? With an example, explain DSDV algorithm. (16)

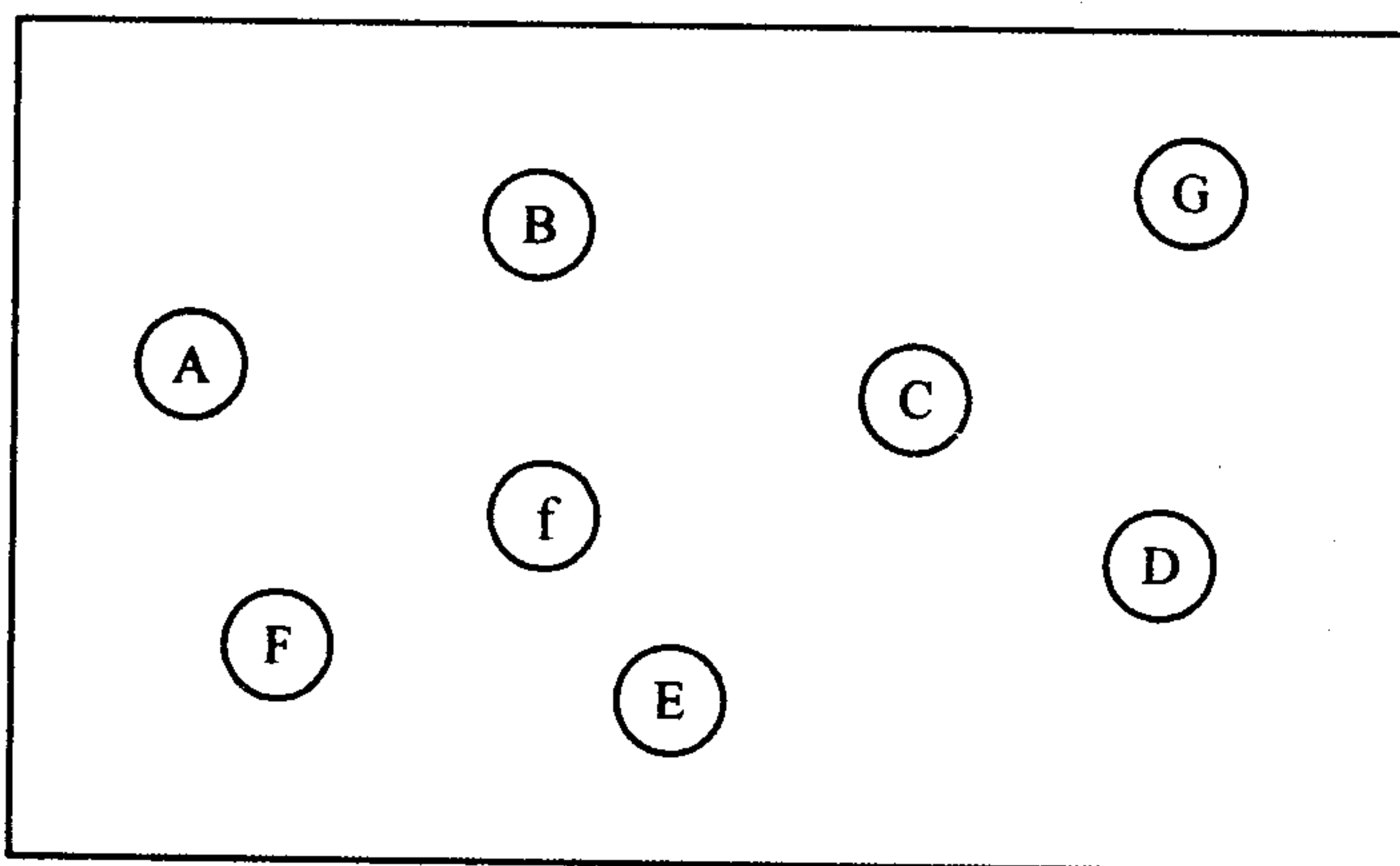
13. (a) Explain the GSM architecture. (16)

**OR**

(b) With a neat diagram explain MOC and MTC with its corresponding logical channels. (16)

14. (a) For the following given graph, apply the dynamic source routing protocol and explain with routing table for the given scenario :

(i) When the node G move between A and B, give the routing table of node C and D. (10)



**Fig. 1 Adhoc Network Environment**

(ii) How do you handle the count to infinity problem ? (6)

**OR**

(b) Write short notes on the following :

(i) Indirect TCP (8)

(ii) Snooping TCP (8)

15. (a) Explain in detail WAP architecture, comparing with the internet layered architecture. (16)

**OR**

(b) What is the need of the syncml ? How does this language supports synchronization between the devices ? Explain with examples. (16)