

BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY

QUESTION BANK

Unit Test-I (Shift:-I & II)

Program: - EJ

Semester: - V

Course: MWC(315339)

Unit- I Wireless Communication Systems (12 M)

2 Marks Questions

1. List various wireless networks generation with example .
2. Define 1. Cell 2. Cluster
- 3.define 1. Base station 2.forward channel.

4 Marks Questions

4. Draw and explain block diagram of mobile phone unit.
5. Draw the block diagram of frequency synthesizer and explain it.
6. Draw the block diagram of receiver unit of mobile handset and explain it..
7. Draw the block diagram of Transmitter unit of mobile handset and explain it.
8. Define frequency reuse concept and draw frequency reuse pattern for cluster size 4,7.
9. Compare between fixed channel assignment and dynamic channel assignment.
- 10.List two types of sensors used in mobile phone and state their functions .

Unit -II Basics of Mobile communication systems (18 M)

2 Marks Questions

- 11 .Define co-channel interference and adjacent channel interference.
12. State capacity improvement methods for cellular system .
13. State function of HLR,VLR

4 Marks Questions

14. Describe cell splitting with its disadvantages .

15. **Describe cell sectoring with its advantages**

16. Justify "Micro cell zone concept is used to increase coverage and cell capacity", with diagram

17. **State the features of GSM.**

18. **State air interface of GSM.**

19. **Draw GSM architecture. state function of MSC, BSC.**

20. **Describe mobile terminated call procedure with block diagram**

21. **Give classification of GSM channels and state function of broadcast control channel**

Unit- III Fundamentals of 4G Communication (5M)

2 Marks Questions

22. State limitations of 3G.

4 Marks Questions.

23. **Compare 2G, 3G, 4G**