UNIT IV

MULTIPATH MITIGATION TECHNIQUES

PART A

1. Define adaptive equalizer.
2. What is diversity?
3. Define spatial diversity.
4. Why is an adaptive equalizer required?
5. What is meant by diversity? Why it is employed?
6. What are linear equalizers and non linear equalizers?
7. What is macro diversity?
8. Define adaptive equalization.
9. What are the benefits of RAKE receiver?
10. Draw the structure of a linear transversal equalizer.
11. What do you mean by transmit diversity?
12. Write about MMSE decision feedback equalizer.
13. Differentiate between macro diversity and micro diversity.
14.What are the applications of non linear equalizers?
15. What is equalization?
16. Define coding gain.
17. State the significance of linear and decision feedback equalizer.
18. Mention any four common methods of micro-diversity.
19. What is the need for diversity in multipath propagation?
20. What are the techniques used to improve the received signal quality?
21. What is training mode in an adaptive equalizer?
22. What is tracking mode in an adaptive equalizer?
23. Why non-linear equalizers are preferred?
24. What are the factors used in adaptive algorithm?
25. What is the need for diversity and equalization techniques?
26. Differentiate selection diversity and combining diversity.
27. List the different types of diversity schemes.
28. What are the methods to increase the capacity of wireless system without increasing required spectrum?

PART B

1. Explain
          i) Linear Equalizers
          ii) Non- Linear Equalizers
2. Explain types of Diversity techniques.
3. Explain (DFE) Decision Feedback Equalizer.
4. Explain in detail about Equalizer algorithm.
5. RAKE Receiver also discuss how time diversity is achieved in a CDMA technique using RAKE receiver.