

Code :RR320401

RR**III B.Tech II Semester(RR) Supplementary Examinations, April/May 2011
COMMUNICATION SYSTEMS****(Electronics & Communication Engineering)****Time: 3 hours****Max Marks: 80****Answer any FIVE questions
All questions carry equal marks**

1. (a) Why frequency drift & scintillation should be very small in radio transmitter.
(b) Give & explain radio frequency spectrum used for various communications.
(c) Draw the block diagram of a filter type SSB-SC transmitter with 20 KHZ oscillator & emission frequency in the range of 6 MHZ. Explain the function of each stage.
2. Write short notes on:
(a) Image frequency and its reduction.
(b) Fading and diversity reception.
(c) Squelch circuit.
3. (a) Differentiate between simple, delayed and amplified AGC and explain their action with the help of simple circuits blocks.
(b) Discuss briefly similarities and differences between FM and AM receivers.
(c) Write in detail about the limiter used in FM receiver.
4. (a) How different telecommunication networks can be integrated?
(b) Explain about the elements of switching systems.
5. (a) Obtain blocking probability for a time space time switch.
(b) Draw the block diagram for memory controlled time division space Switch.
6. Define the following terms
(a) Party lines.
(b) Concentrators.
(c) Carrier System.
7. (a) Write the differences between the code - division multiple access and frequency division multiple access.
(b) Explain the protocol architecture of ISDN.
8. (a) Write about the modeling of propagation channel in mobile radio environment.
(b) Discuss about multiple accessing techniques.
