

B.E DEGREE EXAMINATIONS OCT/NOV 2009
EEE
UO7EC509 COMMUNICATION ENGINEERING

TIME: 3HRS

MAX. MARKS: 100

ANSWER ALL QUESTIONS
PART – A (10x1=10Marks)

1. An FM radio receiver is tuned to a 90.6 MHz broadcast station. It will receive an image frequency of
(A) 110 MHz (B) 112 MHz (C) 114 MHz (D) 120 MHz
2. The radiated power of AM transmitter is 10KW. The power of the unmodulated carrier for a modulation index is
(A) 8.24 KW (B) 8.47 KW (C) 9.24 KW (D) 9.46 KW
3. For a carrier frequency of 6GHz and a distance of 50Km, the free space path loss is
(A) 142 dB (B) 180dB (C) 100 dB (D) 120 dB
4. Which layer is the lowest layer of the ionosphere?
(A) D (B) E (C) F (D) F1
5. For a PCM system with a maximum audio frequency of 4KHz, the minimum sampling rate is
(A) 8KHz (B) 16 KHz (C) 2 KHz (D) 1 KHz
6. The line speed of DS-0 channel PCM system is
(A) 64Kbps (B) 128Kbps (C) 24Kbps (D) 16Kbps
7. The first layer of OSI layer is
(A) Physical (B) Network (C) Data link (D) Application
8. UART is used for which of the following data transmissions/
(A) synchronous and parallel
(B) asynchronous and parallel
(C) synchronous and serial
(D) asynchronous and serial
9. The equivalent noise temperature corresponding to a noise figure of 4.1 dB is
(A) 471 K (B) 453 K (C) 420 K (D) 410 K
10. The process of maneuvering a satellite within a preassigned window is called
(A) reusing (B) stabilization (C) monitoring (D) station keeping

PART-B (10x2=20Marks)

11. Write the difference between low level and high level modulation.
12. What is phase modulation?
13. Define the term reflection coefficient.
14. Define the term maximum usable frequency.
15. Draw the BPSK waveform for the binary data 1101101
16. Define the term bandwidth efficiency.
17. What is B-ISDN?
18. What are CRCs?

