

1. If sampling frequency doubles then
 - a) Quantization noise decreases
 - b) Quantization density decreases
 - c) Quantization noise increases
 - d) Quantization density increases

2. Two signals of 2GHz and 4GHz are frequency modulated on same carrier 10 GHz. Find the ratio of frequency deviation if band widths of both are equal.
 - a) 1:2 b)2:1 c) 1:1 d) 1:4

3. Gray code of 111 is

4. $3 \times 5^{12} + 7 \times 6^4 + 5 \times 8 + 3$ then value in binary form contains _____ number of 1's.
 - a) 7 b) 6 c) 9 d) none

5. The 2's compliment of decimal number 19 in 8-bit system is
 - a) 11101101

- 6) The high gain codes are
 - a) Turbo codes b) BCH codes c) R-S codes

- 7) BCH codes are of the type_____
 - a) Convolutional type b) c)

- 8) Time constant of LC circuit is
 - a) L/R b) L/R² c) RL

- 9) If R is doubled and C is halved then frequency of series RLC circuit is

- 10) The solution for the equation $(D^2+4) y = \sin 2x$ is

- 11) Laplace Transform of $\sin 3x$ is

- 12) The Z-transform for the series is

$$X[n] = \begin{cases} 7; & n = -1 \\ 5 & n = 0 \\ 1 & n = 1 \\ 0 & \text{else} \end{cases}$$

- 13) The magic Tee is a
 - a) 4 port tee b) c)

- 14) The register which holds the address of the next instruction is
 - a) Program counter b) c)

15) The antenna gain is given by.....?

A

16) The satellite is in 630km orbit and transmitting at a frequency 5 MHz, when satellite is on your head the Doppler shift is——

a) b) c) 0 d)

17) The impedance of a lossless transmission line is

a) $\sqrt{L/C}$

18) A 50Ω line with load impedance 100Ω the VSWR is

19) In a waveguide measurement, the forward power is 10mW, the reverse power is 1mW then VSWR is _____

20) Transmitted power is 100W, gain of the transmitter antenna is 30 dB and the path loss is 50 dB then received power is

21) When transmitted power is 100mW and the path loss 100 dBm then received power is

a) -80 dBm

22) When a em wave is incident normally on a perfect conductor then

a) Totally reflected b) partially reflected

c) Totally transmitted d) none.

23) $Z_{sc} = 100\Omega$ $Z_{oc} = 1\Omega$ then Z_o is

a) 1Ω b) 10Ω c) ___ d) ___