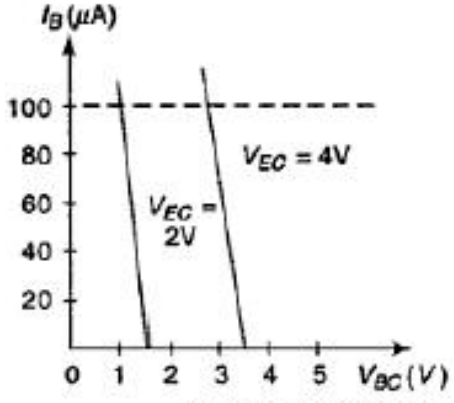
S. E. Computer Engineering (Semester-III)
Choice Based Credit and Grading System (CBCGS)
Electronic Circuits and Communication Fundamentals (CSC304)
Question Bank

1) In _____ the operation depends upon the flow of both majority & minority carriers. It is called Bipolar device.
   a) BJT
   b) FET
   c) MOSFET
   d) SCR

2) In Saturation mode of operation of transistor, the emitter-base junction is _____
   a) Reverse
   b) Forward
   c) Inverse
   d) Counter

3) Figure shows the input characteristics of common _____ configuration



   a) Base
   b) Emitter
   c) Collector
   d) Aerial

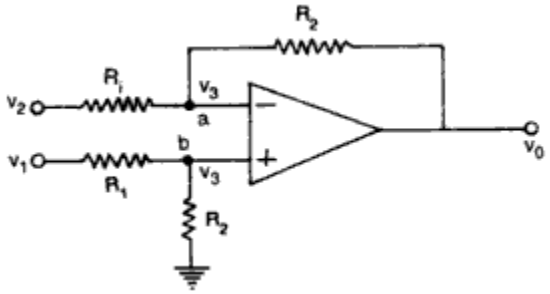
4) BJT based Crystal Oscillator provides high _____
   a) Stability
   b) Impedance
   c) Capacitance
   d) Oscillations

5) The power gain in single stage amplifier is achieved by _____
   a) Darlington Transistor
   b) Pair Transistor
   c) Quad Transistor
   d) Single Transistor

6) Flat frequency response is achieved by _____ coupling
   a) RC
   b) LC
   c) RL
   d) Transformer

7) Op-amp is said to be ideal if _____
   a) Open Loop Voltage Gain is Zero
   b) Input Impedance is Zero
   c) Output Impedance is Zero
   d) Bandwidth is Zero

8) The circuit shown in the figure is _____



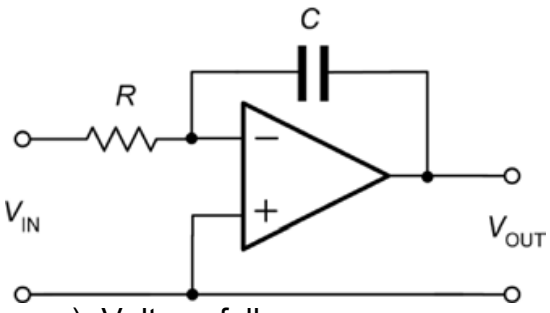
   a) An Inverting Amplifier
   b) A Non Inverting Amplifier
   c) A Differential Amplifier
   d) A Summing Amplifier

9) To achieve high value of Common Mode Rejection Ratio (CMRR) for ideal Op-amp, the common mode gain should be _____
   a) Large
   b) Small
   c) Zero
   d) Non-zero

10) In an inverting amplifier using op-amp, if input resistor is replaced by capacitor then the circuit is called as _____
   a) Infinite gain amplifier
   b) Unity gain amplifier
   c) Integrator amplifier

d) Differentiator amplifier

11) The circuit shown in the figure is _____



a) Voltage follower
b) Differentiator
c) An integrator
d) Comparator

12) Slew-rate of ideal Op-amp is _____
a) Infinite
b) Zero
c) Cannot measured
d) Can estimate

13) A _____ converts the electrical signal back to a form understandable by humans.
a) Transmitter
b) Receiver
c) Channel
d) Noise

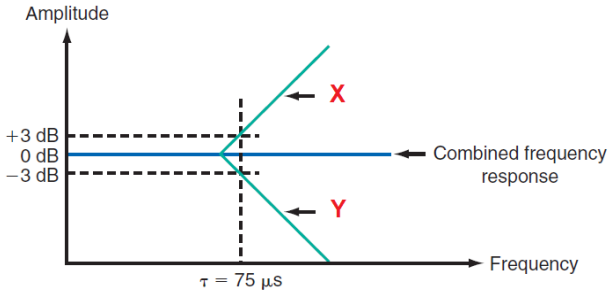
14) In _____, the amount of phase shift of a constant-frequency carrier is varied in accordance with a modulating signal.
a) Amplitude Modulation (AM)
b) Frequency Modulation (FM)
c) Phase Modulation (PM)
d) Digital Modulation (DM)

15) AM generates _____ number of sidebands
a) 1
b) 2
c) 3
d) More than 3

16) In FM, the amount of change in carrier frequency produced by the modulating signal is known as the _____

a) Frequency deviation
b) Modulating factor
c) Coefficient of modulation
d) The degree of modulation

17) Frequency response marked with 'X' is a response of _____

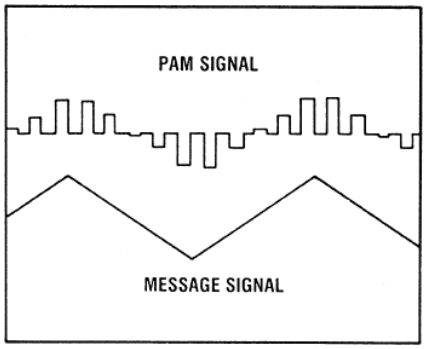


a) Pre-emphasis Circuit
b) De-emphasis circuit
c) Modulator circuit
d) De-modulator circuit

18) RF amplifier in a superhetrodyne receiver is also called a _____
a) Low-noise amplifier (LNA)
b) High noise amplifier (HNA)
c) High power amplifier (HPA)
d) Low power amplifier (LPA)

19) When Sampling frequency is equal to twice of the incoming signal frequency is called _____
a) Sampling Theorem
b) Sampling Technique
c) Nyquist Rate
d) Interpolation

20) The PAM signal shown in the figure is a _____



a) Flat-top sampling

b) Natural sampling
c) Pulse Sampling
d) Width Sampling

21) PPM has a similar noise performance as _____
a) AM
b) FM
c) PM
d) DM

22) The fact that information can be measured, was one of the earliest and most important results of _____ theory
a) Information
b) Sampling
c) Communication
d) Digital

23) According to Shannon, the capacity of a link is measured in _____
a) Bits per second (bps)
b) Decibels (dB)
c) Watt (W)
d) Joule (J)

24) As per Shannon, _____ can be defined axiomatically, as a function satisfying several natural conditions.
a) Entropy
b) Joint entropy
c) Conditional entropy
d) Un-Conditional entropy

25) According to Shannon's Theorem, if the information rate is _____ the channel capacity then transmission may be accomplished without error in the presence of noise.
a) Greater
b) Less
c) Equal
d) Not equal