GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATION & IT
DEPTT OF TELECOM

ASOC GRADE- RESTRICTED / GENERAL - **PART I**   Max marks - 100 (50)
Warning : Donot write anything on question paper.
Write your choice on answer sheet provided.   SAMPLE PRACTICE PAPER - THANE/RAIGAD – Feb 2011

SECTION –A (Radio theory & Practice)

1. Referring to Ohm's Law Current flowing in a conductor is

(a) Inversely proportional to voltage	(b) Directly proportional to voltage	(c) Infinite	(d) Directly proportional to resistance

2. The Unit of capacitance is

(a) Henry	(b) Ohm	(c) Farad	(d) Jules

3. If the inductors L1, L2 & L3 are in parallel, the resultant inductance would be :

(a) 1/L1+L2+L3	(b) L1/L2+L2/L3	(c) 1/L1+1/L2+1/L3	(d) L1+L2+L3

4. Which one is a Passive device?

(a) Modulator	(b) Transistor	(c) Resistor	(d) Diode

5. On What principal Transformers are based?

(a) Mutual Induction	(b) Ionization	(c) Self Induction	(d) Resonance

6. The semiconductor materials are basically :

(a) Three types	(b) Ten types	(c) Two types	(d) Four types

7. The transistors are made up from :

(a) Semi conductors	(b) Conductors	(c) Non conductors	(d) Transformers

8. Referring to Kirchoff's Law Current flowing through a closed circuit is equal to :

(a) Infinite	(b) Zero	(c) Sum of all the currents	(d) Subtraction of Input and Out put

9. When the electron is completely removed from the atom, the atom is said to be :

(a) Neutral	(b) Excited	(c) Ionized	(d) destroyed

10. Radio waves received at the Radio after reflection from the ionosphere are called as :

(a) Ground wave	(b) surface wave	(c) space wave	(d) Sky wave

11. N type semiconductor has :

(a) More holes than electrons	(b) More electrons than holes	(c) No electrons at all	(d) No holes at all

12. The emitter follower is an amplifier having common :

(a) Emitter	(b) Base	(c) None	(d) collector

13. In class A amplifier amplification takes place for :

(a) < half cycle	(b) > half cycle	(c) Half cycle	(d) Full cycle

14. The common amplifier used to obtain :

(a) Decrease voltage, current & Power	(b) Increase voltage, current & power	(c) decrease frequency	(d) Increase frequency

15. In R C phase shift oscillation the frequency of oscillation is :

(a) $f = \frac{1}{2\pi}\sqrt{RC}$	(b) $f = \frac{1}{2}\pi RC$	(c) $f = 1/RC$	(d) $f = Rc/2\pi$

16. Modulation is the process to vary

(a) Higher carrier frequency by the signal to be transmitted	(b) Power of the signal	(c) RX Frequency	(d) TX frequency

17. What is the modulation index in FM ?

(a) 75/deviation in kHz	(b) 75 x frequency	(c) 7500/deviation in MHz	(d) 100/frequency

18. What is the meaning of IF in a radio receiver?

(a) Internal frequency	(b) modulating frquency	(c) Intermediate frequency	(d) ionization frequency

19. If the receiver produces an accurate reproduction of the modulating signal , then it has a good

(a) fidelity	(b) sensitivity	(c) Selectivity	(d) productivity

20. The wave length of 144 Mhz is

(a) 3 mtr	(b) 144 mtr	(c) 1 mtr	(d) 2 mtr

21. What is the function of AVC in a radio receiver ?

(a) To make output level independent of signal strength	(b) to decrease volume automatically	(c) to stabilize the local oscillator	(d) to increase volume automatically

22. What type of amplifier is used in SSB transmitter?:

(a) Class B – RF Amplifier	(b) Class C – audio amplifier	(c) Class A – RF amplifier	(d) None

23. What do you understand by IF in a Radio receiver ?

(a) Internal frequency	(b) ionization frequency	(c) modulating frequency	(d) Intermediate frequency

24. The image frequency in **Fm** is related to signal frequency **Fs** & intermediate frequency **Fi** as :

(a) Fm =Fs + Fi	(b) Fm = Fs +2Fi	(c) Fs/Fi	(d) Fm = 2Fs + Fi

25. When the sky wave is received at receiver the resultant signal intensity varies randomly. It is called :

(a) Ionization	(b) polarization	(c) fading	(d) distortion

26. The line of sight propagation is mainly associated with :

(a) VHF/UHF	(b) VHF	(c) HF	(d) MF