Practical Viva for Sem-5

e/m by magnetron valve

1) Explain the aim of practical.
2) What is the value of charge of electron? With unit.
3) What is the value of mass of electron? With unit.
4) What is the unit of e/m in this practical?
5) What are the terminals of magnetron valve?
6) How magnetic field is produces in practical?
7) What is the effect of solenoid current in circuit?
8) What is the use of magnetron valve?
9) Explain the working of magnetron valve.
10) How many method to measure e/m? Give their name.

Phase shift oscillator

1) What is oscillator?
2) Explain time period and voltage with waveform.
3) Give the types of oscillator.
4) What is tank circuit?
5) What is the use of three R-C circuit in phase shift oscillator?
6) What is the difference between oscillator and rectifier?
7) What is the condition of oscillation in amplifier?
8) What is positive feedback?

T-C coupled amplifier

1) What is the last stage of a power amplifier?
2) What is the benefit to use transformer in circuit?
3) What is power amplifier?
4) What is amplifier?
5) How many types of amplifier?
6) How many types of transformer?
7) Why it is called T-C coupled amplifier?
8) Why the gain reduce in range of lower and heigher frequency?
9) What is voltage gain?
10) What is current gain?
11) How the input voltage measured?
12) In which device output voltage is measured?
13) What is frequency response curve?
14) What is the phase difference in input and output of C.E amplifier?

FET as voltmeter

1) What is FET?
2) Give the difference between BJT and FET.
3) Give the range of input resistance of FET.
4) What is calibration?
5) Voltmeter is always connect _____ in circuit.
6) How many type of FET?
7) What is full name of JFET and MOSFET?
8) Why FET used as a voltmeter?

Bridge Rectifier

1) Define self-inductance & mutual inductance and what is its unit?
2) What is bridge circuit?
3) What is bridge rectifier?
4) How many types of rectifier? Which are they?
5) How many diode used in all types of rectifier?
6) Which rectifier is better for conversion of A.C. into D.C.? Why?
7) Explain operation of bridge rectifier.

Own's bridge

1) Define inductor. And give its unit.
2) What is the use of own's bridge?
3) What is bridge?
4) How many types of bridge?
5) Give the name of D.C. bridges?
6) Give the name of A.C. bridges?
7) Why galvanometer is not use in A.C. Bridge?
8) Why headphone/speaker is used in A.C. Bridge for null effect?
9) Self-inductance depends on _____.
10) 1 mH = _____H
11) What is capacitor? Give its use.
12) What is capacitance? Give its unit.

Damped harmonic motion

1) What is simple harmonic motion?
2) What is relaxation time?
3) What is quality factor?
4) What is time period?
5) What is called damping?
6) What is called amplitude?
7) What is the shape of graph $\log_{10}\frac{A_0}{A_n}$ → t
8) What is called frequency? Give its three unit.
9) What is the shape of graph amplitude → time

Keter's pendulum

1) What is keter's pendulum?
2) What is use of keter's pendulum?
3) What is gravitational acceleration? Give its unit.
4) Is gravity (g) same everywhere on earth? Why?
5) How many types of pendulums for measurement of gravity?
6) Which pendulum is good to measure an accurate value of gravity?
7) What is the value of 'g' on moon?
8) What is the difference between mass & weight?
9) What is the effect of height & depth on gravity?

Voltage regulator

1) What is called regulator?
2) What is difference between Zener diode and ordinary diode?
3) Which effect is obtained in Zener diode?
4) Why we used R_s in the regulator circuit?
5) Explain working of transistor in the transistor voltage regulator.
6) Give the types of regulator.
7) What is a difference between Zener voltage regulator & transistor voltage regulator?
8) Give symbol of Zener diode?
9) Why we are using Zener diode in the reverse bias?
10) What is use of Zener diode?
11) What is called Zener effect?

H-parameter

1) What is H-parameter?
2) What is reverse voltage gain (ratio)?
3) What is forward current gain (ratio)?
4) What is called input impedance?
5) What is called output admittance?
6) How many type of h-parameter curve? Its unit?
7) What is used of h-parameter?
8) What is symbol of voltage source & current source?
9) What is equivalent circuit of transistor?