



GMR Group Technical Test Questions

Q1. Divergence theorem is applicable for

- a) static field only
- b) time varying fields only
- c) both static and time varying fields
- d) electric fields only

ANS: c

Q2. When a step-input is given to an op-amp integrator, the output will be

- a) a ramp.
- b) a sinusoidal wave.
- c) a rectangular wave.
- d) a triangular wave with dc bias.

ANS: a

Q3. A converter which can operate in both 3-pulse and 6-pulse modes is

- a) 1-phase full converter
- b) 3-phase half wave converter
- c) 3-phase semi converter
- d) 3-phase full converter

ANS: c

Q4. Transistor is a

- a) Current controlled current device.
- b) Current controlled voltage device.
- c) Voltage controlled current device.



d) Voltage controlled voltage device.

ANS: a

Q5. The synchronous speed of a motor with 6 poles and operating at 50 Hz frequency is ____.

- a) 1500
- b) 1000
- c) 3000
- d) 750

ANS: b

Q6. What determines the thermal loading on the motor?

- a) Duty/Load cycle
- b) Temperature of the winding
- c) Age of the motor
- d) Ambient conditions

ANS: a

Q7. In a transmission line terminated by characteristic impedance, Z_0

- a) There is no reflection of the incident wave.
- b) The reflection is maximum due to termination.
- c) There are a large number of maximum and minimum on the line.
- d) The incident current is zero for any applied signal.

ANS: a



Q8. The power consumption, in case of centrifugal loads (like pump, fan, blower etc.), proportional to ____.

- a) speed
- b) square of speed
- c) cube of speed
- d) not applicable

ANS: c

Q9. The maximum power will be transferred from a voltage source to a load when

- a) the source impedance is half that of the load impedance
- b) the source impedance is equal to that of the load impedance
- c) the source impedance is twice that of the load impedance
- d) both source and load impedances must be zero

ANS: b

Q10. By using feedback in control systems, the sensitivity to parameter variation is improved. This is achieved at the cost of

- a) stability
- b) loss of system gain
- c) transient response
- d) reliability

ANS: b

Q11. In dielectric heating, the rate of heating cannot be increased by increasing the potential gradient because

- a) Coupling problems become highly pronounced
- b) Very high voltages are not easily available
- c) Heating becomes non-uniform



d) Corona takes place

ANS: d

Q12. A highly stable resonance characteristic is the property of a ____ oscillator.

- a) Hartley
- b) Colpitts
- c) Crystal
- d) Weinbridge

ANS: c

Q13. Bulk power transmission over long HVDC lines are preferred, on account of

- a) low cost of HVDC terminals
- b) no harmonic problems
- c) minimum line power losses
- d) simple protection

ANS: c

Q14. When an amplifier is provided with current series feedback, its

- a) input impedance increases and output impedance decreases
- b) input and output impedances both decrease
- c) input impedance decreases and output impedance increases
- d) input and output impedances both increase

ANS: d

Q15. The measurement of frequency can be carried out with



- a) Owens bridge
- b) Wiens bridge
- c) Maxwells inductance-capacitance bridge
- d) Scherings bridge

ANS: b