

GIST ONLINE MOCK TEST BEE QUESTION FOR 2<sup>ND</sup> SEM-2015

Answer all the following questions, each carries one mark.

- How many types of electrical voltage and current sources are there?
 

[a] 1 [b] 2 [c] 3 [d] 4
- What is the mathematical expression of Ohm's Law?
 

[a]  $V=IR$  [b]  $V\propto R$  [c]  $V=I$  [d]  $V\propto IR$
- How much resistance is required to limit the current to 1.5mA if the potential drop across the resistance is 6V?
 

[a]  $4\Omega$  [b]  $4K\Omega$  [c]  $40\Omega$  [d]  $40K\Omega$
- What is the formula of Law of resistance?
 

[a]  $R=\rho l/A$  [b]  $R\propto l/A$  [c]  $R=\rho l/A$  [d] both b & c
- Calculate the total resistance when resistances of 6ohm,9ohm and 6ohm are in parallel?
 

[a]  $2.27\Omega$  [b]  $2.277\Omega$  [c]  $2.72\Omega$  [d]  $2.722\Omega$
- In delta to star formation  $R_A = [ \quad ]$ 

[a]  $R_{AB}R_{CA}/R_{AB}+R_{BC}+R_{CA}$  [b]  $R_{AB}R_{CA}/R_{AB}*R_{BC}*R_{CA}$  [c]  $R_{BC}R_{CA}/R_{AB}+R_{BC}+R_{CA}$  [d]  $R_{AB}R_{CA}/R_{AB}*R_{BC}*R_{CA}$
- In Thevenin's Theorem if  $R_L$  is given then  $I_{th} = \underline{\hspace{2cm}}$ ?
 

[a]  $V_{TH}/R_{TH}$  [b]  $V_{TH}/[R_{TH}+R_L]$  [c]  $[V_{TH}/R_{TH}]+R_L$  [d] None
- The middle finger of Fleming's Right Hand rule says the direction of \_\_\_\_\_?
 

[a] motion of conductor [b] magnetic field [c] generated EMF [d] Applied current
- Fleming's Left hand rule applicable for \_\_\_\_\_?
 

[a] Motor [b] Generator [c] Transformer [d] None
- What is the unit of Flux?
 

[a] ampere [b] weber [c] weber/m<sup>2</sup> [d] Ohm
- What is the unit of Reluctance?
 

[a] AT/web [b] AT/web<sup>2</sup> [c] AT<sup>2</sup>/web [d] A<sup>2</sup>T/web
- Permeability of Air = \_\_\_\_\_?
 

[a] 0 [b] 1 [c] .01 [d] 1.1

13. Absolute permeability in a free space = \_\_\_\_\_ H/m?

- [a]  $4\pi \times 10^{-7}$  [b]  $4\pi \times 10^{-5}$  [c]  $4\pi \times 10^{-9}$  [d] None

14. What is the unit of time period?

- [a] second [b] minute [c] Hour [d] All

15. What is RMS value of current?

- [a] 0.707 [b]  $0.707I_m$  [c] 0.770 [d]  $0.770I_m$

16. What is the maximum value of voltage?

- [a] 0.637v [b]  $0.637V_m$  [c] 0.763v [d]  $0.763V_m$

17. What is the formula of angular velocity?

- [a]  $\omega = \theta/t$  [b]  $\omega = \theta * t$  [c]  $\theta = \omega/t$  [d]  $\theta = \omega * t$

18. What is the unit of current?

- [a] Ampere [b] Volt [c] Watt [d] Ohm

19. What is the formula of Reluctance?

- [a]  $NI/\phi$  [b]  $NI\phi$  [c]  $\phi/NI$  [d]  $N/I\phi$

20. What is the formula of power?

- [a] VI [b] IR [c] VR [d] All

**ANSWER:-**

- 1.d 2.a 3.b 4.c 5.a 6.a 7.b 8.c 9.a 10.b 11.a 12.b 13.a 14.a**  
**15.b 16.b 17.a 18.a 19.a 20.a**