

## SSC JE 2019-20

Electrical Engineering
Mini Mock Challenge (June 13- June 14 2020)

## Questions \&

 Solutions1. Select the option which has the same relationship between word-pair as the relationship in the given word-pair.

Uttarakhand : Dehradun
A. Bihar : Buxar
B. Madhya Pradesh : Indore
C. Delhi : New Delhi
D. Rajasthan : Udaipur

Ans. C
Sol. The Relationship is- Indian State : its capital. Hence, option C is the correct answer.
2. Three of the following four letter- clusters are alike in a certain way and one is different. Find the odd one out.
A. LQVA
B. HMRW
C. BEHK
D. KPUZ

Ans. C
Sol.


Option(b)- $\mathrm{H} \xrightarrow{+5} M \xrightarrow{+5} \mathrm{R} \xrightarrow{+5} \mathrm{~W}$


Option(d) $-\mathrm{K} \xrightarrow{+5} \mathrm{P} \xrightarrow{+5} \mathrm{U} \xrightarrow{+5} \mathrm{Z}$
Hence, option C is the correct answer.
3. Arrange the given words in the sequence in which they occur in the dictionary.

1) Objectivity,
2) Obsolete,
3) Omnifarious,
4) Omnipotent
A. $2,1,4,3$
B. 2, 1, 3, 4
C. $1,2,4,3$
D. $1,2,3,4$

Ans. D
Sol. After arranging all the word arranged alphabetically order as in a dictionary,

1. Objectivity,
2. Obsolete,
3. Omnifarious,
4. Omnipotent.

So the correct sequence is $1,2,3,4$.
Hence, option D is the correct answer.

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4. If TIE = $\mathbf{1 4}$ and $\mathbf{B Y E}=\mathbf{1 2}$, then how will you code PRO ?
A. 25
B. 23
C. 29
D. 35

Ans. C
Sol. As,
TIE $=\mathrm{T}+\mathrm{I}+\mathrm{E}=20+9+5=34 ; 34-20=14$, and
$B Y E=B+Y+E=2+25+5=32 ; 32-20=12$
Similarly,
$\mathrm{PRO}=\mathrm{P}+\mathrm{R}+\mathrm{O}=16+18+15=49 ; 49-20=29$
Hence, option C is the correct answer.
5. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
Q, V, S, X, U, Z, ?
A. $T$
B. W
C. G
D. K

Ans. B
Sol. Pattern is-

$$
\mathrm{Q} \xrightarrow{+5} \mathrm{~V} \xrightarrow{-3} \mathrm{~s} \xrightarrow{+5} \mathrm{x} \xrightarrow{-3} \mathrm{U} \xrightarrow{+5} \mathrm{z} \xrightarrow{-3} \mathrm{~W}
$$

Hence, option $B$ is the correct answer.
6. Pointing to a portrait Sudhir said, her Grandmother's only son is married to Lalita who is my mother. How's the woman in the portrait related to Sudhir?
A. Aunty
B. Mother
C. Sister
D. Grandmother

Ans. C
Sol.


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Its given that her(woman in the portrait) Grandmother's son is married to Lalita who is my(Sudhir) mother. It means Sudhir is looking at his own sister.

Hence, option C is the correct answer.
7. Select the option in which the given figure is embedded. (Rotation is not allowed)

A.

B.

C.

D.


Ans. A
Sol. After carefully observing the figures given in the question, it is very clear that the question figure is embedded in answer figure (B). It is shown as given below:


Hence, Option A is the correct answer.
8. In the following question, select the word which cannot be formed using the letters of the given word.
JURISDICTION
A. CONDUITS
B. JUNCTION
C. DISCOUNT
D. INDUCTOR

Ans. B
Sol. The word JURISDICTION has only one N whereas JUNCTION has 2 N 's. Hence, option $B$ is the correct answer.
9. If ' + ' means ' - ', ' - ' means ' $x^{\prime}$, ' $\times$ ' means $' ~ \div$ ', and $' \div$ ' means ${ }^{\prime}+$ ', then what is the value of $7+12 \div 16 \times 4+6-11+3$
A. 70
B. 54
C. 23
D. -70

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Ans. D
Sol. $7+12 \div 16 \times 4+6-11+3$
After placing the actual sign in each place -
$\Rightarrow 7-12+16 \div 4-6 \times 11-3$
$\Rightarrow-5+(16 \div 4)-(6 \times 11)-3$
$\Rightarrow-5+4-66-3$
$\Rightarrow-70$
Hence, option D is the correct answer.
10. In the question given below which of the option figures will come after the problem figures, if the sequence were continued?

## Question Figure:



Answer figure:

(a)

(b)

(c)

(d)
A. (a)
B. (b)
C. (c)
D. (d)

Ans. D
Sol. Both the elements are moving one step forward in the clockwise direction.
According to the sequence, the next figure in the series will be -


Hence, option D is the correct answer.
11. Subhas Chandra Bose was elected President of the Haripura Congress Session in $\qquad$ -.
A. 1938
B. 1942
C. 1936
D. 1940

Ans. A
Sol. - Subhas Chandra Bose was elected President of the Haripura Congress Session in 1938. The session was held at Haripura, Gujarat, which was selected by Sardar Vallabh Bhai Patel.

- A resolution was passed in this session according to which, a six months ultimatum was given to the British Government demanding independence for India.


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12. Hiuen Tsang, hailed as the pilgrims, visited India during the reign of king $\qquad$ _.
A. Ashoka
B. Vishnugupta
C. Harsha
D. Samudragupta

Ans. C
Sol.

- The Chinese traveller Hiuen Tsang visited India during the reign of emperor Harsha Vardhana.
- He returned to China and wrote a detailed description of India during the rule of Harsha in his book 'Si-yu-ki'.

13. The temperature at which relative humidity becomes $100 \%$ is known as $\qquad$ .
A. Critical Temperature
B. Crystal Point
C. Dew Point
D. Dwarf Point

Ans. C
Sol. - The temperature at which Relative Humidity becomes $100 \%$ is known as Dew point. A higher dew point means there is more moisture in the air.

- The relation between Relative Humidity and Temperature is inversely proportional.
- When the temperature is below the freezing point of water, the dew point is called the frost point.

14. Which of the following parliamentary committee consists only of Lok Sabha members?
A. Public Undertaking Committee
B. Estimates Committee
C. Departmental committees
D. Public Account Committee

Ans. B
Sol. Estimate committee of parliament consist members only from Lok Sabha.

- Estimate committee has $\mathbf{3 0}$ members from Lok Sabha.
- Its term is one year, and a minister cannot be elected to this.
- Main function of EC is to examine the estimates included in the budget presented in the parliament and suggests economies in public expenditure.

15. Sex Hormones are secreted by which of the following gland?
A. Pancreas
B. Pituitary gland
C. Pineal gland
D. Adrenal gland

Ans. B
Sol. • Sex hormones are secreted by Pitutary gland.

- It releases hormones that signal the reproductive organs to make sex hormones and also controls ovulation and the menstrual cycle in women.
- It is an endocrine gland about the size of a pea.


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16. What is the name of Jupiter Mission of NASA?
A. Juno
B. Main Job
C. Project Apollo
D. Parker Solar Probe

Ans. A
Sol. - Juno - Jupiter Mission of NASA

- Main Job - Mars Mission of NASA
- Project Apollo - Moon Mission of NASA
- Parker Solar Probe - Sun Mission of NASA

17. Kharchi Puja Festival is celebrated in which state?
A. West Bengal
B. Assam
C. Manipur
D. Tripura

Ans. D
Sol. Kharchi Puja festival is celebrated in Tripura state.

* It takes place in July month every year.
* The festival is dedicated to lord Shiva and other associated 14 deities.
* These fourteen deities are situated in Puran Haveli, Agartala.
* Cultural events, fairs, competitions, rituals etc are performed during the festival?

18. India became member of SCO in which year?
A. 2015
B. 2016
C. 2017
D. 2018

Ans. C
Sol. India becomes member of Shanghai Cooperation Organisation in 2017. Along with India, Pakistan also became it's member in same year.

- Presently it has eight member states, four observer states, six dialogue partners and four guest attendances. Chinese and Russian are selected as official language of SCO.
- Presently Vlamdir Norov is it's Secretary General.
- SCO works on cooperation in Security, Military activities and exercises, Economics and Culture. It also aims to restrict Terrorism in the region and terror funding in the region.

19. "All roads lead to Ganga" is written by $\qquad$ -.
A. RK Narayan
B. Kiran Desai
C. Jhumpa Lahiri
D. Ruskin Bond

Ans. D
Sol. 'All roads lead to Ganga' is written by Ruskin Bond.

- Ruskin Bond, resident of Mussoorie, is a well-known writer of fiction and a poet also. He was awarded the Sahitya Academy Award in 1992 and Padam Bhushna in 2014.
- Some of his major works are- His Tales and Legends from India, Angry River, Strange Men, Strange Places, The Blue Umbrella, A Long Walk for Bina and Hanuman to the Rescue.


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20. The Fourth Global Ayurveda Festival (GAF) will be held at $\qquad$ from 16-20 May, 2020.
A. Lucknow
B. Dehradun
C. Bhopal
D. Kochi

Ans. D
Sol. * The Fourth Global Ayurveda Festival (GAF) will be held at Kochi in Kerala from 1620 May, 2020.

* Prime Minister Narendra Modi will participate in the summit.
* The festival will be organized under the Ministry of AYUSH.
* The theme for the five-day event is "Ayurveda Medical Tourism: Actualizing India's credibility".

21. The magnetic field is represented by:
$B(t)=2 x^{2} \hat{a}_{x}+3 K x y \hat{a}_{y}+5 x z \hat{a}_{z}$
The value of $K$ will be
A. 3
B. -3
C. 2
D. -2

Ans. B
Sol. As we known, magnetic field is divergence less
$\vec{\nabla} \cdot \vec{B}=0$
$\frac{d}{d x} 2 x^{2}+\frac{d}{d y}(3 K x y)+\frac{d}{d z}(5 x z)=0$
$4 x+3 K x+5 x=0$
$K=-3$
22. The signal is represented by:
$x(t)=4+2 \sqrt{2} \sin \omega t+\sqrt{10} \sin 3 \omega t$
the form factor will be:
A. 0.8
B. 1.25
C. 5
D. 4

Ans. B
Sol. Form factor, $\mathrm{FF}=\mathrm{X}_{\mathrm{RMS}} / \mathrm{X}_{\text {Avg }}$
$X_{\text {avg }}=4$
$X_{\text {RMS }}=\sqrt{4^{2}+\frac{(2 \sqrt{2})^{2}}{2}+\frac{(\sqrt{10})^{2}}{2}}=5$
$\mathrm{FF}=\frac{5}{4}=1.25$

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23. A power station has a maximum demand of 10000 kW . The annual load factor is $60 \%$ and plant capacity factor is $50 \%$. What is the reserve capacity of the plant?
A. 8333.34 kW
B. 1666.67 kW
C. 12000 kW
D. 2000 kW

Ans. D
Sol. As we known,
PLF $=\frac{\text { Average load }}{\text { Maximum dem and }}=0.6$
Plant capacity factor $=\frac{\text { Average load }}{\text { Plant capacity }}=0.5$
$\frac{\text { PLF }}{\text { PCF }}=\frac{\text { Plant capacity }}{\text { Maximum dem and }}=\frac{0.6}{0.5}$
Plant capacity $=\frac{0.6}{0.5} \times 10000=12000 \mathrm{~kW}$
Reserve capacity $=12000-10000$
$=2000 \mathrm{~kW}$
24. From the point of safety, the resistance of earthing electrode should be
A. Low
B. High
C. Medium
D. The value of resistance of electrode does not effect the safety.

Ans. A
Sol. The value of earthing electrodes should be low to allow on easy flow of fault current for the protection of equipment.
25. When we increase the reverse voltage on a diode what will be its effect on depletion region.
A. Increases
B. Decreases
C. Vanishes completely
D. Remains same

## Ans. A

Sol.


Depletion layer will increase when we increase the voltage.
26. The voltage and current equation can be expanded as

$$
\begin{aligned}
& v(t)=4+5 \sin (\omega t)+10 \sin \left(3 \omega t-30^{\circ}\right) V \\
& i(t)=3+6 \sin \left(\omega t+60^{\circ}\right)+12 \sin \left(3 \omega t+30^{\circ}\right) A
\end{aligned}
$$

The average power will be:
A. 12 W
B. 30 W
C. 37.5 W
D. 49.5 W

Ans. D
Sol. Phase difference between fundamental wave, $\theta_{1}=\left(60^{\circ}-0^{\circ}\right)=60^{\circ}$
Phase difference in $3^{\text {rd }}$ harmonic wave, $\theta_{3}=\left(30^{\circ}-\left(-30^{\circ}\right)\right)=60^{\circ}$
$\therefore P_{a v g}=V_{0} I_{0}+\frac{V_{m 1} I_{m 1}}{2} \cos \theta_{1}+\frac{V_{m 3} I_{m 3}}{2} \cos \theta_{3}$
$=4 \times 3+\frac{5 \times 6}{2} \cos 60^{\circ}+\frac{10 \times 12}{2} \cos 60^{\circ}$
$=12+7.5+30$
Pavg $=49.5 \mathrm{~W}$
27. Which of the following method is used to measure high value of resistance?
A. Wheatstone bridge
B. Substitution method
C. Loss of charge method
D. Potentiometer

## Ans. C

Sol. Loss of charge method is used to measure high resistance.
Wheatstone bridge and substitution method is used to measure medium resistance.
Potentiometer is used to measure low resistance.
28. A transmission line with inductance of 4 mH and shunt capacitance of $10 \mu \mathrm{f}$. A circuit breaker is connected to protect it from fault. At the time of fault, what is the time at which voltage across C.B. will be maximum
A. 0.314 msec
B. 0.2 msec
C. 0.628 msec
D. 0.1 msec

Ans. C
Sol. Voltage across circuit breaker is expressed as:
$v_{C B}=V_{m}\left(1-\infty s \frac{t}{\sqrt{L C}}\right)$
$V_{C B}$ will maximum at $t=\pi \sqrt{L C}$
$\mathrm{t}=\pi \sqrt{4 \times 10^{-3} \times 10 \times 10^{-6}}$
$\mathrm{t}=0.628 \mathrm{msec}$

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29. In a 4 pole, 50 Hz 3 -phase induction motor, then phase sequence of supply is $A B C$ and phase sequence of rotor voltage is ACB. The speed of rotor is 1350 RPM. Then the slip will be
A. 0.1
B. 0.9
C. 1.1
D. 1.9

Ans. D
Sol. Synchronous speed, $N_{8}=\frac{120 f}{p}=\frac{120 \times 50}{4}=1500$ RPM
As rotation is opposite than that of RMF
Slip, $s=\frac{N_{8}-(-N)}{N_{r}}$
$s=\frac{1500+1350}{1500}$
$s=1.9$
30. The current waveform through an element is shown as:


The charge enclosed by an element is
A. 16 C
B. 6 C
C. 22 C
D. 20 C

Ans. C
Sol. Charge can be expressed as:
$\mathrm{q}=\int \mathrm{i}(\mathrm{t}) \mathrm{dt}$
$\mathrm{q}=$ Area of current waveform


Area $=$ Area of rectangle $=$ Area of triangle
$=4 \times 4+\frac{1}{2} \times 2 \times(10-4)=16+6$
$q=22 C$

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31. A voltmeter of full-scale current of 2 mA and a meter resistance of $50 \Omega$. It is to be converted to a 5V voltmeter. The value of multiplier resistance will be
A. $2500 \Omega$
B. $2450 \Omega$
C. $1 \Omega$
D. $1.02 \Omega$

Ans. B
Sol. Full scale voltage $=2 \times 10^{-3} \times 50=0.1$ volt.
Full range voltage $=5 \mathrm{~V}$
$\mathrm{m}=\frac{\mathrm{V}}{\mathrm{V}_{\mathrm{m}}}=\frac{5}{0.1}=50$
required multiplier resistance:
$R_{s}=R_{m}(m-1)=(50-1) \times 50=49 \times 50$
$=2450 \Omega$
32. Which of the following method is used to minimize the error in differential protection scheme.
(i) use of Toroidal core
(ii) use of high permeable material in core
(iii) use of harmonic restrained coil
(iv) decrease in primary turn of CT
A. (i) and (ii) only
B. (i) and (iv) only
C. (i), (ii) and (iv) only
D. All of the above methods

Ans. D
Sol. All methods are correct to minimize the error in differential protection scheme.
33. A short circuit current in an alternator is
A. higher when fault occurs away from alternator
B. higher when fault occurs near to alternator
C. independent from the distance of fault occurs
D. None

Ans. B
Sol. As short circuit current,
$I_{s c} \alpha \frac{1}{X_{s}}$
Where, $X_{s}$ in inductance of line
When fault is near to alternator, inductance value will be smaller as it is proportional in length of line.

Hence, short circuit current will be higher.

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34. An electric machine consumes a power of 500 W per hour. What will be cost of energy consumption in a year. (cost per unit $=4.5 \mathrm{Rs}$ ) (Assume non-leap year)
A. Rs 9855
B. Rs 2463.75
C. Rs 19,710
D. Rs 821.25

Ans. C
Sol. No. of days in Non-leap year $=365$
Energy consumption in are year $=500 \times 24 \times 365$
$=4380 \mathrm{kWhr}$
No. of units of electric energy $=4380$
Cost of energy $=4380 \times 4.5=$ Rs 19,710
35. Two signals are applied on vertical and horizontal plates of CRO with frequency of signal on vertical plate be 10 KHz . The following Lissajous pattern appears:


The frequency of signal on horizontal plate will be:
A. 20 kHz
B. 10 kHz
C. 5 kHz
D. 40 kHz

Ans. A
Sol. $f_{y}=10 \mathrm{kHz}$
as we known,
$\frac{f_{y}}{f_{x}}=\frac{\text { Number of horizontal tangencies }}{\text { number of vertical tangencies }}$

$\frac{10}{f_{x}}=\frac{2}{4} \Rightarrow f_{x}=20 \mathrm{kHz}$
36. For a 60 -pole lap wound with 12 coils DC generator. Maximum number of equalizer rings connected in winding to limit circulating current will be.
A. 4
B. 6
C. 8
D. 10

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Ans. C
Sol. Number of equalizer rings $=\frac{\text { Number of conductors }}{\text { pole pairs }}$
$=\frac{2 \times 12}{6 / 2}=8$
Hence, number of rings will be 8
37. A 500 KVA , single phase transformer, has full load copper loss of 2 kW and iron loss of 720W. what will be the value of load at maximum efficiency?
A. 500 KVA
B. 180 KVA
C. 300 KVA
D. 833.34 KVA

Ans. C
Sol. Let the percentage load at which maximum efficiency occurs be n .
For maximum efficiency,
$n^{2} P_{c r e}=P_{i}$
$n^{2} \times 2000=720$
$\mathrm{n}=0.6$
load will be $=0.6 \times 500$
$=300 \mathrm{KVA}$
38. Which of the following AC bridge is used to measure frequency?
A. Wheatstone bridge
B. Hay's bridge
C. Wein's bridge
D. Schering bridge

Ans. C
Sol. Wein's bridge $\rightarrow$ frequency
Wheatstone bridge $\rightarrow$ Resistance
Hay's bridge $\rightarrow$ For high Q coils
Schering $\rightarrow$ Capacitance
39. If the span of coil of a winding in generator is $120^{\circ}$. Then it eliminates:
A. $3^{\text {rd }}$ harmonics
B. $5^{\text {th }}$ harmonics
C. Both
D. None

Ans. A
Sol. Chording angle $=180-120=60^{\circ}$
For $3^{\text {rd }}$ harmonics, $K_{d_{3}}=\cos \frac{n \alpha}{2}=\cos \frac{3 \times 60}{2}=0$
For 5the harmonics, $K_{d_{5}}=\cos \frac{n \alpha}{2}=\cos \frac{5 \times 60}{2} \neq 0$
Hence, it eliminates $3^{\text {rd }}$ harmonics.

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40. The majority carriers in the base of PNP transistor will be:
A. Hales
B. Electrons
C. Both
D. None

Ans. B
Sol. In PNP transistor, base is N type.
In $N$ type semiconductor, majority carriers are electrons.
41. If three resistors of equal value are connected in parallel to 10 V source and power consumption is 30 W . What will be the power consumption when they are connected in series?
A. 30 W
B. 10 W
C. 3.334 W
D. 60 W

Ans. C
Sol. In parallel connection:


Power in each branch $=\frac{30}{3}=10 \mathrm{~W}$
$10=\frac{\mathrm{V}^{2}}{\mathrm{R}}=\frac{10^{2}}{\mathrm{R}}$
$\mathrm{R}=10 \Omega$
When connected in series


Power $=\frac{10^{2}}{R_{\text {eq }}}$
Where, $\mathrm{Req}_{\text {eq }}=30 \Omega$
$P=\frac{100}{30}=3.34 \mathrm{~W}$

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42. If the voltage across an element and current through it is described by the fallowing equation.
$V(t)=4 \sin 5 t$
$i(t)=5 \cos 5 t$
then what is the element and what is the value of it.
A. capacitor, 4 F
B. Inductor, 4 H
C. capacitor, $\frac{1}{4} \mathrm{~F}$
D. inductor, $\frac{1}{4} \mathrm{H}$

Ans. C
Sol. As seen from the given equations, current is the differentiated form of voltage. The relation is satisfied by capacitor.
$i=\frac{C d v}{d t}$
$5 \operatorname{Cos} 5 \mathrm{t}=\mathrm{C} \cdot \frac{\mathrm{d}}{\mathrm{dt}}(4 \sin 5 \mathrm{t})$
$5 \cos 5 t=$ C. 20Cos5t
$C=5 / 20$
$\mathrm{C}=\frac{1}{4} \mathrm{~F}$
43. From the following method, which of the following method is used to reduce armature reaction in dc machine?
(i) By using interpoles
(ii) By using compensating windings
(iii) Pole stacking
(iv) By using distributed winding
A. (i) and (ii) only
B. (i) and (iii) only
C. (i), (ii) and (iii) only
D. All of the above methods

Ans. C
Sol. Except (iv) method, all other methods are used to reduce armature reaction.
Distributed winding is used in AC machines to reduce harmonics.
44. Heat transfer between two bodies will not occur on the condition that:
A. Bodies are kept in vacuum
B. Temperature of two bodies are identical
C. Bodies are kept in open atmosphere
D. Bodies are immersed in water

Ans. B
Sol. Heat transfer between two bodies occurs only when there some temperature difference between two bodies.

Hence, option B is correct.

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45. If in a common emitter amplifier, base current $I_{B}$ is 0.1 mA and collector current $I_{C}$ is 5 mA . Then the value of current gain in common base amplifier will be:
A. 50
B. 51
C. 0.02
D. 0.98

Ans. D
Sol. Current gain in CE amplifier, $\beta=\frac{\mathrm{I}_{\mathrm{C}}}{\mathrm{I}_{\mathrm{B}}}=\frac{5}{0.1}=50$
Current gain in CB amplifier will be:
$\alpha=\frac{\beta}{1+\beta}=\frac{50}{51}$
Current gain in CB amplifier $=0.98$
46. A voltage source of $v(t)=50$ sint is connected in a circuit with series RL elements with $R$ $=6 \Omega$ and $L=8 \mathrm{H}$. What will be the active power consumed in circuit.
A. 150 W
B. 250 W
C. 125 W
D. 75 W

Ans. D
Sol. Active power $=I^{2} R$
Where, $i(t)=\frac{v(t)}{R+j \omega L} \Rightarrow[\omega=1 \mathrm{rad} / \mathrm{sec}]$
$i(t)=\frac{50 \sin t}{6+j 8}=5 \sin t$
$I_{\mathrm{rms}}=\frac{5}{\sqrt{2}} \Rightarrow$ Power $=\left(\frac{5}{\sqrt{2}}\right)^{2} \times 6=75 \mathrm{~W}$
47. Which of the following distance relay is used to protect long transmission line.
A. Impedance relay
B. Mho relay
C. Reactance relay
D. None

Ans. B
Sol. Mho relay is used for long line
Reactance rely is used for short line
Impedance relay is used for medium line
48. What will be the effect on SCR (short circuit ratio) if an air gap of an alternator is increased.
A. Increases
B. Decreases
C. Increase and then decreases
D. Remains constant

Ans. A

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Sol. If air gap increases in an alternator, than the amount of field current required to produce rated voltage increases.

As we known,
SCR $=\frac{\text { Field current required for rated voltage }}{\text { Field curentrequired for rated current }}$
Hence, SCR also increases.
49. To limit the Ferranti effect in transmission line, the compensation required is
A. Shunt capacitive
B. Shunt reactive
C. Series capacitive
D. None of the above

Ans. B
Sol. At the time of Ferranti effect, voltage at receiving side becomes higher than sending side.
Hence, shunt reactor is used to absorb lagging VAR and reduce voltage at receiving side.
50. Which of the following is an example of diamagnetic material
(i) Copper
(ii) Zinc
(iii) Magnesium
(iv) Glass
(v) Lithium
A. (i), (ii), (iii) and (iv)
B. (i), (ii), and (v)
C. (i), (ii) and (iv)
D. All of the above

Ans. C
Sol. Magnesium and lithium are the examples of paramagnetic material.

## Upcoming Mini Mock Challenge in June Month

## SSC JE

## Electrical Engineering

| Exam | Live Date | Syllabus | No. of Questions | Time |
| :---: | :---: | :---: | :---: | :---: |
| SSC JE Mini Mock Test-1 | 06 June 2020 | Full Syllabus (Tech. (30 Q's) \& Non-Tech. (20 Q's)) | 50 | 30 |
| SSC JE Mini Mock Test-2 | 13 June 2020 | Full Syllabus (Tech. (30 Q's) \& Non-Tech. (20 Q's)) | 50 | 30 |
| SSC JE Mini Mock Test-3 | 20 June 2020 | Full Syllabus (Tech. (30 Q's) \& Non-Tech. (20 Q's)) | 50 | 30 |
| SSC JE Mini Mock Test-4 | 27 June 2020 | Full Syllabus (Tech. (30 Q's) \& Non-Tech. (20 Q's)) | 50 | 30 |

## gradeup

