1. RMS stands for _____
   (a) **Root Mean Square**
   (b) Root Mean Sum
   (c) Root Maximum sum
   (d) Root Minimum Sum

2. What is the effective value of current?
   (a) RMS current
   (b) Average current
   (c) Instantaneous current
   (d) Total current

3. In a sinusoidal wave, average current is always _____ rms current.
   (a) Greater than
   (b) Less than
   (c) Equal to
   (d) Not related

4. For a rectangular wave, average current is _____ rms current.
   (a) Greater than
   (b) Less than
   (c) Equal to
   (d) Not related

5. Peak value divided by the rms value gives us?
   (a) Peak factor
   (b) Crest factor
   (c) Both (a) and (b)
   (d) Neither peak nor crest factor

6. If maximum value of current is $5\sqrt{2}$ A, what will be the value of RMS current?
   (a) 10 A
   (b) 5 A
   (c) 15 A
   (d) 25 A

7. If Im is the maximum value of a sinusoidal voltage, what is the instantaneous value?
   (a) i=Im/2
   (b) i=Imsinθ
   (c) i=Imcosθ
   (d) i=Imsinθ or i=Imcosθ

8. Average value of current over a half cycle is?
   (a) 0.67Im
   (b) 0.33Im
   (c) 6.7Im
   (d) 3.3Im

9. What is the correct expression for the form factor?
   (a) Irms * Iav
   (b) Irms / Iav
   (c) Irms + Iav
   (d) Irms – Iav

10. For a direct current, the rms current is _____ the mean current.
    (a) Greater than
    (b) Less than
    (c) Equal to
    (d) Not related to

11. What is the value of the form factor for sinusoidal current?
    (a) $\pi/2\sqrt{2}$
    (b) $\pi/4$
    (c) 2π
    (d) $\pi/\sqrt{2}$

12. In Series RLC circuit, phase difference between voltage across inductor and capacitor is
    (a) Zero
    (b) $\pi/2$
    (c) π
    (d) 2π

13. The number of complete cycles of an alternating current occurring in one second is known as:
    (a) the maximum value of the alternating current
    (b) the frequency of the alternating current
    (c) the peak value of the alternating current
    (d) the r.m.s. or effective value

14. The value of an alternating current at any given instant is:
    (a) a maximum value
    (b) a peak value
    (c) an instantaneous value
    (d) an r.m.s. value

15. An alternating current completes 100 cycles in 0.1 s. Its frequency is:
    (a) 20 Hz
    (b) 100 Hz
    (c) 0.002 Hz
    (d) 1 kHz

16. The value normally stated when referring to alternating currents and voltages is the:
    (a) instantaneous value
    (b) r.m.s. value
    (c) average value
    (d) peak value

17. State which of the following is false. For a sine wave:
    (a) the peak factor is 1.414
    (b) the r.m.s. value is 0.707 × peak value
    (c) the average value is 0.637 × r.m.s. value
    (d) the form factor is 1.11

18. The period of a wave is
    (a) the same as frequency
    (b) time required to complete one cycle
    (c) expressed in amperes
    (d) none of the above

19. The period of a sine wave is 1/50 Its frequency is
    (a) 20 Hz
    (b) 30 Hz
    (c) 40 Hz
    (d) 50 Hz

20. The maximum instantaneous value measured from zero value is known as?
    (a) Peak value
    (b) Peak to peak value
    (c) Cycle
    (d) Period

21. Power in a Three Phase Circuit = _____.
    (a) $P = 3\ V_{ph}\ I_{ph}\ Cos\Phi$
    (b) $P = \sqrt{3}\ V_L\ I_L\ Cos\Phi$
    (c) **Both a & b**.
    (d) None of The Above

22. In a three phase AC circuit, the sum of all three generated voltages is _____
    (a) Infinite (∞)
    (b) Zero (0)
    (c) One (1)
    (d) None of the above

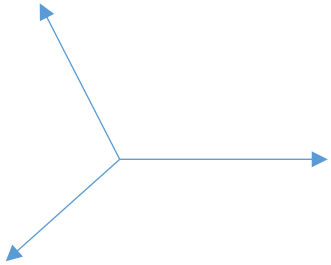
23. For a star connected three phase AC circuit ———
    (a) Phase voltage is equal to line voltage and phase current is three times the line current
    (b) Phase voltage is square root three times line voltage and phase current is equal to line current
    (c) Phase voltage is equal to line voltage and line current is equal to phase current
    (d) None of the above

24. In a three phase, delta connection ——-
    (a) line current is equal to phase current
    (b) Line voltage is equal to phase voltage
    (c) None of the above
    (d) Line voltage and line current is zero

25. The angular displacement of three phase voltage is
    (a) zero
    (b) 90^0
    (c) 120^0
    (d) 180^0

26. In a balanced three-phase system-delta load, if we assume the line voltage is $V_{RY} = V\angle 0^0$ as a reference phasor. Then the source voltage V_{YB} is?
    (a) $V\angle 0^0$
    (b) $V\angle -120^0$
    (c) $V\angle 120^0$
    (d) $V\angle 240^0$

27. In a balanced three-phase system-delta load, if we assume the line voltage is $V_{RY} = V\angle 0^0$ as a reference phasor. Then the source voltage V_{BR} is?
    (a) $V\angle 180^0$
    (b) $V\angle 240^0$
    (c) $V\angle -240^0$
    (d) $V\angle -120^0$



28. In a three-phase system, when the loads are perfectly balanced, the neutral current is
    (a) zero
    (b) one-third of maximum
    (c) two-thirds of maximum
    (d) at maximum

29.