Questions : 90
Duration : 1 ½ hours

**General Instructions to candidates:**
1) All questions carry equal marks.
2) No negative marks.
3) Answer all questions.
4) Every question has 4 options and only ONE is CORRECT Answer.
5) Use OMR sheet for marking the correct answer by bubbling with BLUE or BLACK ballpoint pen only.

1. The electric current is the flow of
   1) electrons
   2) protons
   3) neutrons
   4) elements

2. A 200 volts is applied to a resistance of 50 ohms. The current flows through the resistance is
   1) 3 Amps
   2) 4 Amps
   3) 0.25 Amps
   4) 1.25 Amps

3. The magnetic flux is measured in
   1) webers
   2) Tesla
   3) Farads
   4) Ohms

4. The commutator segments of a DC Generator are separated by
   1) carbon
   2) copper
   3) mica
   4) manganese

5. In a DC series motor the current in field coils is -------- that of armature current
   1) equal to
   2) greater than
   3) lower than
   4) none of these
6. In an Alternator, the number of poles is 4. the speed is 1500 RPM. The frequency of generated e.m.f is
   1) 55 Hz
   2) 50 Hz
   3) 60 Hz
   4) 100 Hz

7. The Electric energy is measured by
   1) Volt meter
   2) Ammeter
   3) Energy meter
   4) Watt meter

8. The phase angle between voltage phasor and current phasor in a resistive circuit is (in degrees)
   1) 0
   2) 30
   3) 45
   4) 60

9. The transformer is operated on the basic principle of
   1) self induction
   2) Mutual induction
   3) cork screw rule
   4) Lenz\'s law

10. In a single phase transformer of primary turns 100 and secondary turns 50, and the primary applied voltage is 200 volts, The secondary voltage produced will be
    1) 100 V
    2) 200 V
    3) 50 V
    4) 150 V

11. The transformer core is laminated to reduce
    1) hysteresis loss
    2) eddy current loss
    3) Both A and B
    4) copper loss

12. The Mixie motor in our home appliances is a
    1) repulsion motor
    2) shaded pole motor
    3) capacitor start motor
    4) Universal motor
13. The single phase fan motor used in our houses is a
   1) DC shunt motor
   2) AC series motor
   3) capacitor start motor
   4) Universal motor

14. The fan used in houses is rated for 75 Watts. The energy consumed if it works for 10 hours is
   1) 750 Watts
   2) 750 Watt hours
   3) 750 kWh
   4) 7.5 W

15. The DC motor commonly used for electric traction is
   1) serie motor
   2) shunt motor
   3) compound motor
   4) single phase motor

16. Where is the thousand pillars temple is located?
   1) Andhra Pradesh
   2) Telangana
   3) Maharastra
   4) Tamilnadu.