Electronics & Communication Engineering DC Machines Questions Pdf

1. The armature of a dc machine is made of silicon steel laminations to
   a. Reduce hysteresis loss only
   b. Reduce the eddy current loss only
   c. Increase the permeability
   d. Reduce both hysteresis and eddy current loss
   Ans: D
2. The series field of a short shunt dc generator is excited by _____ current.
   a. Armature
   b. Shunt field
   c. Load
   d. Resistance
   An: C
3. Laminated yoke in dc motor can reduce
   a. Speed regulation
   b. Iron loss
   c. Temperature rise
   d. Sparking on load
   Ans: B
4. The air gap between the yoke and armature in a dc motor is kept small
   a. To achieve a stronger magnetic field
   b. To avoid overheating of the machine
   c. To avoid locking of the armature
   d. To avoid transverse motion
   Ans: A
5. The principle of dynamically induced emf is utilised in
   a. Transformer
   b. Choke
   c. Generator
   d. Thermocouple
   Ans: B
6. The commutator of a dc motor serves the purpose of
   a. Changing ac to dc
   b. Converting dc into ac
   c. Reducing friction
   d. Avoiding arc at the brushes
   Ans: B
7. Which of the following dc generators will have negligible terminal voltage on no load?
   a. Shunt
   b. Series

c. Compound
d. None of these
Ans: B

8. The torque speed characteristic of a dc shunt motor is
   a. A rectangular hyperbola
   b. A drooping straight line
   c. A parabola
   d. None of these
   Ans: B
9. If a speed of a dc motor increases with load torque, then it is a
   a. Series motor
   b. Permanent magnet
   c. Differentially compounded motor
   d. Cumulatively compounded motor
   Ans: C
10. Field divertor method of speed control of a dc series motor gives speeds above rated one due to reduction of
    a. Field current
    b. Armature current
    c. Line current
    d. None of these
    Ans: A