

Unit No. & Name: 1 & Permanent magnet brushless DC Motor

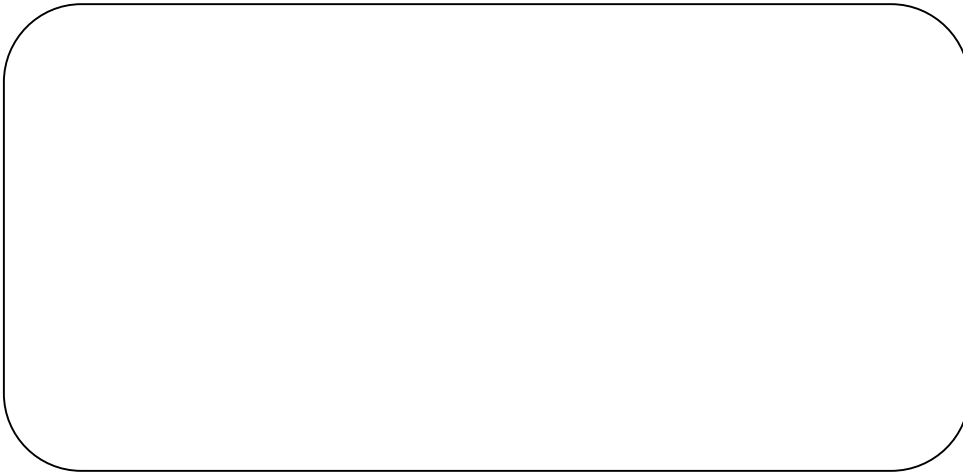
Topic Name : Construction

Duration: 10 Mins

No. of Questions : 04

K-2

1. Draw the construction of PM BLBD Rotor



2. The rotor of PM BLDC motor is made up of _____

3. List the merits and demerits of PMBLDC Motor

4. Compare BLDC Motor with Induction motor

Topic Name : Principle of operation

Duration: 10 Mins

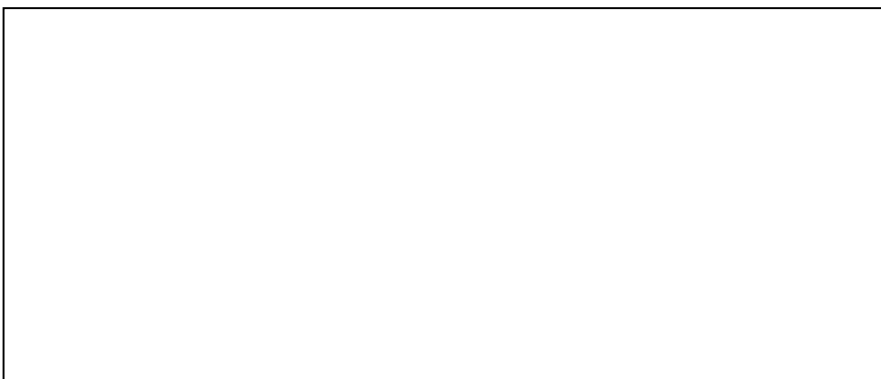
No. of Questions : 04

1. Compare Electronic Commutator and Mechanical Commutator

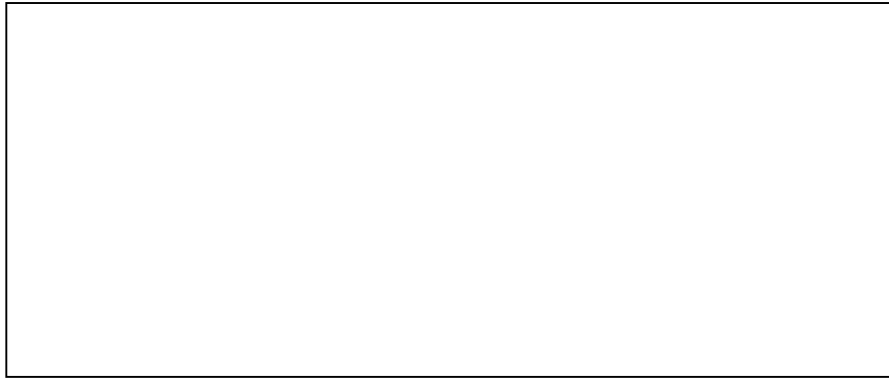
2. Draw BH Curve



3. Draw the switching circuit of electronic commutator



1. Draw the delta connected stator armature winding



Topic Name: Solid stranded and bundled conductor

Duration: 10 Mins

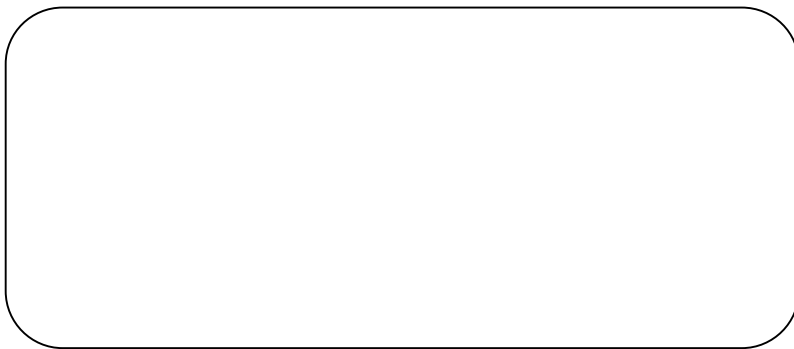
No. of Questions : 04

1. What is meant by Demagnetization curve?

2. What is meant by electromechanical transfer?

1. List out the types of PMBLDC Motor

4. Draw the air flux density for BLPM Square wave motor



Topic Name: EMF and torque equations

Duration: 10 Mins

No. of Questions : 04

K-2

1. Mechanical power = _____

2. $K_t =$ _____

3. $T / T_{stg} =$ _____

4. power converted as mechanical = _____

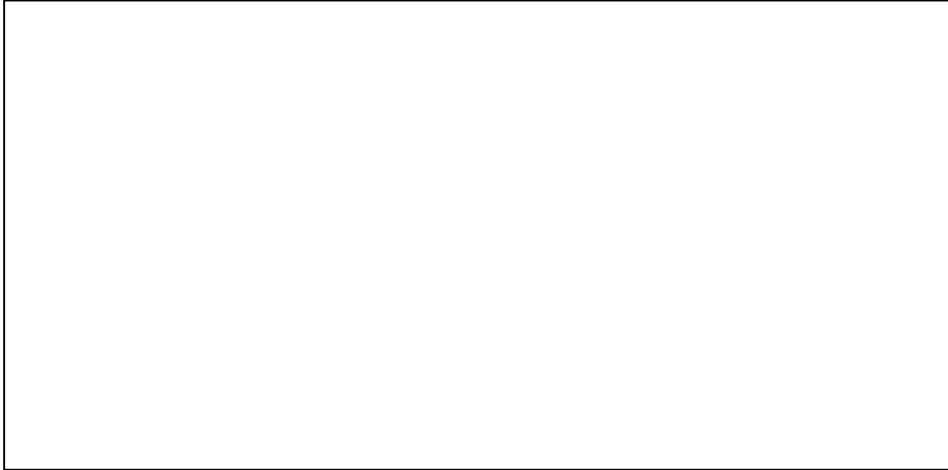
Topic Name: **CHARACTERISTICS OF BLPM SQM DC MOTOR**

Duration: 10 Mins

No. of Questions : 04

K-2

1. Draw the torque speed characteristics of BLPM SQM Motor



2. List out the constraints of torque speed characteristics of PMSBLDC

3. Continuous limit - _____.

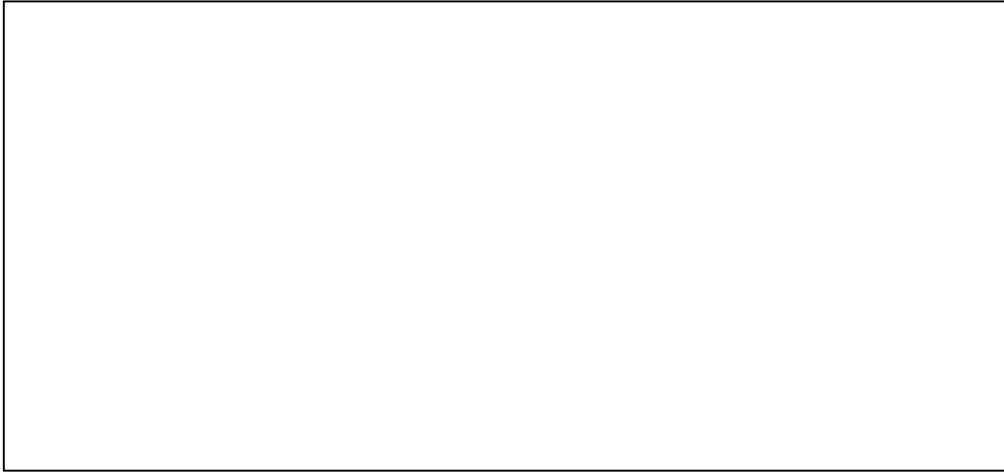
2. Intermittent limit – _____.

Topic Name : Power Converter Circuits and their controllers

Duration: 10 Mins

No. of Questions : 04

1. Draw the BLDC 120 degree phase current



2. Draw the 180 degree BLDC Motor phase current



3. Draw the flux density around air gap

4. What is the purpose of optical position sensor

Topic Name : Motor characteristics and control– Applications.

Duration: 10 Mins

No. of Questions : 04

1.What is the limitation of PM BLDC MOTOR?

2.What are the advantages of BLDC MOTOR?

3.Mention the applications of BLDC MOTOR?

4.Compare the cost of BLDC MOTOR with other special motor

K-2