Question 1

Regenerative braking is not possible in a series motor.

Choose True or False.

- ● 1. True
  Feedback:
- ○ 2. False
  Feedback:

Question 2

Regenerative is the best electrical braking among all braking techniques.

Choose True or False.

- ● 1. True
- ○ 2. False

Question 3

____braking is a method of motor braking in which a motor is reconnected to act as a generator immediately after it is turned off

Choose one answer.

- ● 1. Dynamic
- ○ 2. Plugging
- ○ 3. Regenerative
- ○ 4. Mechanical

Question 4

Dynamic braking is normally applied to DC motors because there must be access to the____via the brushes to take advantage of the generator action.

Choose one answer.

- ● 1. armature
- ○ 2. Field
- ○ 3. Commutator
- ○ 4. All

Question 5

Electromechanical____brakes are often used along with dynamic braking in applications that require the load to be held.

Choose one answer.

- ○ 1. Windage
- ● 2. Friction
- ○ 3. Regenerative
- ○ 4. all

Question 6

Plugging is a method of motor braking in which the motor connections are reversed so that the motor develops a(n)____that acts as a braking force.

Choose one answer.

- ● 1. counter torque
- ○ 2. motor torque
- ○ 3. none
- ○ 4. all

Question 7
Which of the following is the best braking method? Choose one answer.

1. Friction
2. Electromechanical action
3. Eddy-currents
4. Electric braking

Question 8
Which of the following is not the method of electrical braking?
Choose one answer.

1. Plugging or counter-current
2. Dynamic or rheostatic
3. Regenerative
4. Eddy current

Question 9
Which of the following is the plugging method of braking?
Choose one answer.

1. Reversal of field connections
2. Reversal of armature connections
3. Addition of equal and opposite field
4. Removal of field circuit from current machine circuit

Question 10
Which of the following is correct formula for braking torque in plugging?
Choose one answer.

1. n (ka2/Rb)
2. n2 (ka2/Rb)
3. n-1 (ka2/Rb)
4. (ka2/Rb)

Question 11
Electrical braking of any variety becomes less effective as _____
Choose one answer.

1. Speed increases
2. Speed decreases
3. Independent of speed
4. Depends on supply voltage

Question 12
Plugging is applied in a motor, if we don't make the switch OFF what will happen?
Choose one answer.

1. Motor will come to rest as a result of plugging
2. Motor will come to rest and will start rotating in another direction
3. Motor will burn
4. Nothing will happen

Question 13
Plugging is used in _____
Choose one answer.

1. Small motors only
2. Small and medium powered
3. Only in large heavy machines
4. Everywhere

Question 14

Which of the following is dynamic braking?

Choose one answer.

- ○ 1. Reversal of field connections
- ○ 2. Reversal of armature connections
- ○ 3. Addition of equal and opposite field
- ● 4. Removal of armature circuit from current machine circuit

Question 15

Braking time in the dynamic braking is the function of _____

Choose one answer.

- ○ 1. System inertia
- ○ 2. Load torque
- ○ 3. Motor rating
- ● 4. All- system inertia, load torque and motor rating

Question 16

In dynamic braking, when braking is applied system acts as _____

Choose one answer.

- ○ 1. Freely running machine
- ○ 2. Motor with slow speed
- ● 3. Generator
- ○ 4. Motor with same speed in opposite direction

Question 17

In which of the following electrical braking method, energy is supplied back to the supply?

Choose one answer.

- ○ 1. Plugging
- ○ 2. Dynamic braking
- ● 3. Regenerative braking
- ○ 4. In all electrical braking

Question 18

Regenerative braking is used when duty cycle _____

Choose one answer.

- ● 1. Requires braking of machine
- ○ 2. Requires accelerating of machine
- ○ 3. Requires constancy of machine
- ○ 4. Cannot comment on duty cycle

Question 19

Regeneration is not easily possible for _____

Choose one answer.

- ○ 1. DC shunt motor
- ○ 2. Separately excited motor
- ○ 3. Compounding motor with weak series compounding
- ● 4. DC series motor

Question 20

Which of the following method is not used for regeneration?

Choose one answer.

- ○ 1. Increasing field current
- ○ 2. Increasing armature speed
- ● 3. Increasing supply voltage
- ○ 4. Reducing supply voltage

Question 21

The plugging braking gives the _____

Choose one answer.

- ○ 1. Zero torque braking
- ○ 2. Smallest torque braking
- ● 3. Highest torque braking
- ○ 4. Variable torque braking

Question 22

Regenerative method of braking is based on _____

Choose one answer.

- ○ 1. Back emf is less than the applied voltage
- ○ 2. Back emf is equal to the applied voltage
- ● 3. Back emf of rotor is more than the applied voltage
- ○ 4. Cannot be determined

Question 23

Where dynamic braking is used?

Choose one answer.

- ○ 1. Shunt motors
- ○ 2. Series motors
- ○ 3. Compound motors
- ● 4. All DC motors

Question 24

For which of the following motor dynamic braking is very effective?

Choose one answer.

- ○ 1. Shunt motors
- ● 2. Separately excited motors
- ○ 3. Series motors
- ○ 4. Differential compound motors

Question 25

When is the dynamic braking is employed?

Choose one answer.

- ○ 1. Non-reversing drive
- ○ 2. Reversing drive
- ● 3. Both Reversing and Non-reversing
- ○ 4. Cannot tell

Question 26

Half wave converters are used for controlling DC motor of _____

Choose one answer.

- ● 1. Below 400 W
- ○ 2. 400 W - 4000W
- ○ 3. More than 4000W
- ○ 4. Anywhere

Question 27

Semi-converters can't be used when regeneration is required.

Choose True or False.

- ● 1. True
- ○ 2. False

Question 28

When armature current becomes discontinuous?

Choose one answer.

- ○ 1. Small firing angles
- ● 2. Large firing angles
- ○ 3. Infinite firing angle
- ○ 4. Does not depend on firing angle

Question 29

Which of the following is the effect of non-uniform armature current?

Choose one answer.

- ○ 1. Ratio of peak to average and rms to average armature current decreases
- ● 2. Ratio of peak to average and rms to average armature current increases
- ○ 3. Ratio of peak to average increases and rms to average armature current decreases
- ○ 4. Ratio of peak to average decreases and rms to average armature current increases

Question 30

How many quadrants does full-converter work?

Choose one answer.

- ○ 1. 1
- ○ 2. half
- ● 3. 2
- ○ 4. Can be any

Question 31

Full-converter can be used in DC motor for regenerative braking in _____

Choose one answer.

- ○ 1. Constant operation
- ○ 2. Variable operation
- ● 3. Inversion operation
- ○ 4. Opposite operation

Question 32

Dual converter operates in_____quadrant/s

Choose one answer.

- ○ 1. 1
- ○ 2. 2
- ○ 3. 3
- ● 4. 4

Question 33

Which converter/s can be used for DC series motor control?

Choose one answer.

- ○ 1. Semi-converters
- ○ 2. Half-wave converter
- ○ 3. Full-converter
- ● 4. Semi converters and full converter

Question 34

Three phase converters are employed for _____

Choose one answer.

- ● 1. Large kW motors
- ○ 2. Small kW motors
- ○ 3. In all motors
- ○ 4. Never used

Question 35

Which of the following method is adopted for controlling a DC motor?

Choose one answer.

- ○ 1. Resistance control
- ○ 2. Motor-generator set
- ○ 3. Inverter Rectifier
- ● 4. DC chopper

Question 36

Which of the following method is employed when regenerative braking is necessary?

Choose one answer.

- ● 1. DC chopper
- ○ 2. Variable resistor
- ○ 3. Inverter rectifier
- ○ 4. Motor-generator

Question 37

Which of the following statement is not true regarding to DC chopper?

Choose one answer.

- ○ 1. cheap
- ○ 2. Fast response
- ○ 3. Regeneration
- ● 4. AC to DC control

Question 38

Which of the following correctly suits with chopper?

Choose one answer.

- ○ 1. Thyristor in series with load
- ○ 2. Thyristor in parallel with load
- ● 3. Thyristor switch in series with load
- ○ 4. Thyristor switch in parallel with load

Question 39

The average value of chopper output waveform is given by _____

Choose one answer.

- ● 1. αV
- ○ 2. V/α
- ○ 3. α2V
- ○ 4. V/α2

Question 40

How output voltage of chopper can be varied?

Choose one answer.

- ○ 1. By using constant frequency system
- ○ 2. By using variable frequency system
- ● 3. By using constant and variable frequency systems
- ○ 4. By using constant or variable frequency systems

Question 41

In voltage commutation, in chopper circuit we use _____

Choose one answer.

- ● 1. 2 auxiliary thyristors
- ○ 2. 2 diodes
- ○ 3. 1 auxiliary thyristor

◯ 4. Many diodes

Question 42

In current commutation, in chopper circuit we use _____

Choose one answer.

◯ 1. 2 auxiliary thyristors
◯ 2. 2 diodes
◯ 3. 1 auxiliary thyristor
● 4. 2 auxiliary thyristors and 2 diodes