

AC/DC Motor Drives

1). What is the reason of using shielded cable for connecting low signal circuits in D.C drives?

- (A) Easy for connection
- (B) Good appearance
- (C) Protects from mechanical injuries
- (D) Eliminates the electrical interference

Correct Answer : D

2). Why the A.C drives are mostly used in process plant?

- (A) Easy to operate
- (B) Robust in construction
- (C) Very high starting torque
- (D) Maintenance free long life

Correct Answer : D

3). What is the purpose of LCD on basic operator panel in D.C drive or A.C drive?

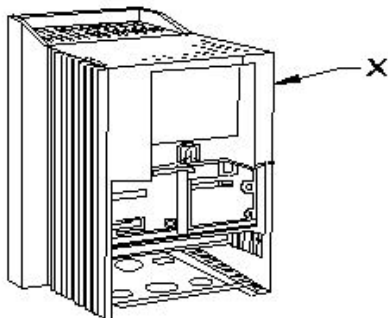
- (A) Calculate the speed
- (B) Measure the speed
- (C) Monitor the parameter
- (D) Detect the load current

Correct Answer : C

4). What is the part name of the DC drive marked as 'X' shown in the figure?

- (A) Terminal cover
- (B) keypad part
- (C) Main drive assembly
- (D) Gland plate

Correct Answer : C



5). What is the purpose of PROG / DATA button in BOP of AC drive?

- (A) To change the parameter setting

(B) To store the entered data and show the factory stored data

(C) To display the direction of rotation forward / REV

(D) To display the values of the frequency and current

Correct Answer : B

6). What is the full form of VVVF?

- (A) Variable Voltage Variable Frequency Drive
- (B) Value Variable Voltage and Frequency Drive
- (C) Voltage Value Variable Frequency Drive
- (D) Variable Value Voltage Frequency Drive

Correct Answer : A

7). Which control system is used for Eddy current drives?

- (A) Slip controller
- (B) Rectifier controller
- (C) AC voltage controller
- (D) DC chopper controller

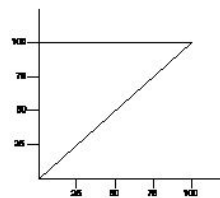
Correct Answer : A

8). Which is proportional to the torque in D.C motor?

- (A) Back e.m.f
- (B) Field current
- (C) Terminal voltage
- (D) Armature current

Correct Answer : D

9). What is the name of the characteristic curve in D.C drive as shown in the figure?



- (A) Speed Vs torque characteristic
- (B) Torque Vs field current characteristic
- (C) Speed Vs armature current characteristic

(D) Field current Vs armature current characteristic

Correct Answer : A

10). How the base speed of D.C shunt motor can be increased by using D.C drive?

- (A) By reducing the field current
- (B) By increasing the field current
- (C) By decreasing the supply voltage
- (D) By reducing the armature voltage

Correct Answer : A

11). What is the disadvantage of DC drive?

- (A) Not suitable for high speed operation
- (B) More complex with a single power conversion
- (C) Less expensive than AC drive for high capacity motor
- (D) Less maintenance cost

Correct Answer : A

12). What is the purpose of JOG key in control panel of D.C drive?

- (A) Stop the motor
- (B) Restart the motor
- (C) Inching operation
- (D) Reverse the direction of motor

Correct Answer : C

13). Which is the application for the single quadrant loads, operating in the first quadrant of a drive?

- (A) Hoists
- (B) Elevators
- (C) Lifts
- (D) Centrifugal pumps

Correct Answer : D

14). Which is the classification of drive according to dynamics and transients?

- (A) Short time duty drive
- (B) Intermittent duty drive
- (C) Automatic control drive
- (D) Controlled Transient period

Correct Answer : D

15). Which control system consumes very low power for motion control in AC and DC motors?

- (A) Field control
- (B) Drives control

(C) Voltage control

(D) Armature control

Correct Answer : B

16). Why it is necessary to keep V/F ratio constant in a drive?

- (A) Keep the stator flux maximum
- (B) Maintain the rotor current minimum
- (C) Maintain the speed of motor constant
- (D) Maintain the rated torque at all speeds

Correct Answer : D

17). Which device controls the speed of A.C motor in A.C drive?

- (A) Field supply unit (FSU)
- (B) COMMS technology box
- (C) Speed feedback technology box
- (D) Microprocessor based electronic device

Correct Answer : D

18). Which is the correct sequence operation of key button in BOP of AC drive to change the direction of rotation?

- (A) Press ON → REV → ON
- (B) Press OFF → ON → REV
- (C) Press ON → OFF → REV → ON
- (D) Press ON → REV → OFF → ON

Correct Answer : C

19). What is the purpose of STEP-BY-STEP motor drive?

- (A) It can be used for high power application
- (B) It can be used for high speed application
- (C) It can be used for precise control of position
- (D) It can be used for very low speed application

Correct Answer : C

20). Which type of sensing unit employed in drive system?

- (A) Opto coupler
- (B) Speed sensing
- (C) Photo voltaic cell
- (D) Resistance temperature detector

Correct Answer: B

21). Which drive is classified according to mode of operation?

- (A) Group drive
- (B) Manual drive
- (C) Individual drive
- (D) Continuous duty drive

Correct Answer: D

22). What is the function of the Field Supply Unit (FSU) in DC drive?

- (A) Produces required firing current to the firing circuit
- (B) Provides variable voltage to the field winding of the motor
- (C) Provides variable voltage to the armature winding of the motor
- (D) Provides a constant voltage to the armature of the motor

Correct Answer: B

23). Which type of machine in industries is provided with multi motor electric drive?

- (A) Rolling machine
- (B) Air Compressor
- (C) Shearing machine
- (D) Heavy duty electric drilling machine

Correct Answer: A

24). What is IGBT in VF drive?

- (A) Inverter switching device
- (B) D.C bus switching device
- (C) Voltage regulator switching device
- (D) Field supply switching device

Correct Answer: A

25). What is the full form of "VFD"?

- (A) Variable Frequency Drive
- (B) Value Fixed Drive
- (C) Volume Frequency Drive
- (D) Voltage Frequency Drive

Correct Answer : A

