**Questions on Basics of electrical ---Motor**

1. State different types of induced EMF
2. Give two example of Static induced EMF
3. Give two example of Dynamically induced EMF
4. State 2 application where mutual induction principle is used
5. State different types of induction motor
6. Why induction motors are mostly preferred?
7. Which is the most common type of induction motor used in practice?
8. For rolling mill which motor is suitable & why ?
9. How the torque performance of Slipring Induction motor can be controlled?
10. Why the rotor bars of Suirrel cage are skewed?

**Answers**

Ans 1 Types Of induced EMF

1 Static induced EMF –A) self induced EMF B) mutual induction EMF

2 Dynamically induced EMF

Ans 2 Example of Static induced EMF

1 Transformer

2 Emf induced in stationary coil

Ans 3 Example of Dynamically induced EMF

1. Alternator/ generator
2. dynamo

Ans 4 Application where mutual induction principle is used

1 Transformer

2 Induction motor

Ans5 Types of induction motor

1. Squirrel cage Induction motor

 2 Slipring Induction Motor

Ans 6 **Induction motors are now the preferred choice for industrial motors due to**

1. Their Simple rugged construction
2. Low cost & reliability
3. High efficiency
4. absence of brushes (which are required in most DC motors)
5. Low maintenance
6. Simple starting arrangements
7. and—thanks to modern power electronics—the ability to control the speed of the motor.

Ans 7 Common type of induction motor used in practice is Squirrel cage Induction motor

Ans 8 For rolling mill Slipring Induction motor is suitable due to Suitable for High starting T & smooth speed control

Ans 9 The torque performance of Slipring Induction motor can be controlled using rotor variable resistors.

Ans 10 The rotor bars of Suirrel cage are not straight, but have some skew to reduce noise and harmonics.