



# Al Sharq Bright International School

## Model Paper for Mid Term Exam 2017-2018

Name: \_\_\_\_\_ Subject: Physics Class:10\_\_ Date: \_\_\_\_\_

### Paper – 1

#### A. Multiple choice questions:

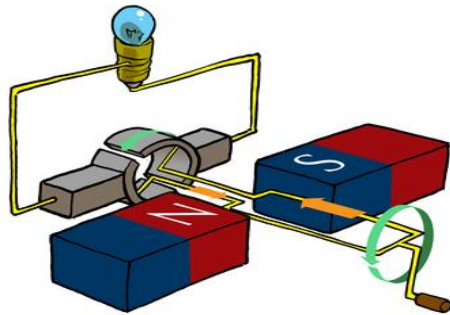
1. Most magnetic materials contain iron are commonly known as \_\_\_\_\_.
  - a) Ferrous materials
  - b) Nonferrous materials
  - c) Both a and b
  - d) None of these
2. Objects gain an electric charge when they gain or lose \_\_\_\_\_.
  - a) protons
  - b) neutrons
  - c) atoms
  - d) electrons
3. A \_\_\_\_\_ is a switch operated by an electromagnet.
  - a) magnet
  - b) relay
  - c) resistor
  - d) none of these
4. \_\_\_\_\_ tells you the direction of the field lines.
  - a) Right hand grip rule
  - b) Left hand grip rule
  - c) Fleming's Right hand rule
  - d) Fleming's Left hand rule
5. The process of generating electricity from motion is called \_\_\_\_\_.
  - a) Electronics
  - b) Electricity
  - c) Electromagnetic induction
  - d) Magnetization
6. The spectrum of white light consists of \_\_\_\_\_ colours.
  - a) eight
  - b) seven
  - c) six
  - d) seventeen

7. At what speed electromagnetic waves travel through the vacuum?  
a) Speed of water    b) Speed of air    c) Speed of light    d) None of these

### Paper – 3

#### **B. Answer the following questions:**

1. State two ways in which the current induced in the coil placed in a magnetic field could be increased?
2. A transformer has 100 turns on primary coil and 1000 on the secondary. Is it a step up or step down transformer?
3. Suppose a power station generates 500 MW of power. What current will flow from the power station, if it transmits this power at 50Kv? What current will flow if it transmits it at 1 MV?
4. Write a short note about the picture below



5. What name do we give to -
  - a) The bending of light as it enters the prism
  - b) The different amounts of bending that give rise to the spectrum.
6. Name two types of electromagnetic radiations that can be used for cooking food.
7. Copy and complete the following sentences.
  - a) A transformer has three parts, the \_\_\_\_\_ coil, the \_\_\_\_\_ and the \_\_\_\_\_ coil.
  - b) A \_\_\_\_\_ transformer increases the \_\_\_\_\_ of the supply.
  - c) A \_\_\_\_\_ transformer decreases the \_\_\_\_\_ of the supply.

## Paper – 6

### **C. Alternative to Practical:**

1. Draw and explain the electromagnetic spectrum.
2. State Fleming's Left hand rule with the help of a picture.
3. Draw the dispersion diagram of white light passing through a prism.

**Note: This is just a model, not the exam paper.**