

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2017

**GENERAL ENGINEERING**

[Time : 3 hours

(Maximum marks : 100)

**PART — A**

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. What is a bench mark ?
2. Name the components of an IC engine.
3. What is potential difference ?
4. What is MCB ?
5. Name four types of cement.

(5 × 2 = 10)

**PART — B**

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. What do you mean by workability of concrete ?  
Name the factors affecting workability.
2. Give any four classifications of IC engines.
3. What are the advantages and disadvantages of diesel power plants ?
4. A 60W/100 V bulb is to be operated from a 220V supply. What is the value of resistance to be connected in series with the bulb to glow normally ?
5. Explain the importance of Earthing.
6. What is an LED ? Give its advantages.
7. Explain the classification of aggregates.

(5 × 6 = 30)

## PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

## UNIT — I

III Draw the odd and even courses of a one brick English bond. 15

OR

IV (a) What do you mean by ranging, give the classification. 8

(b) Explain the good qualities of cement. 7

## UNIT — II

V (a) With a neat sketch show the parts of a Petrol Engine. 10

(b) Name the parts of power transmission system in automobiles. 5

OR

VI (a) Give the comparison between petrol engine and diesel engine. 8

(b) What are the advantages of a hydroelectric power plant ? 7

## UNIT — III

VII (a) How much energy in KWh is required to light a 60 W bulb continuously for one year. 8

(b) What are the advantages of AC ? 7

OR

VIII Draw a simple electric circuit and explain its functions. 15

## UNIT — IV

IX (a) What is an LED light ? What are its advantages ? 8

(b) What is an integrated circuit ? 7

OR

X (a) Define GSM. What are its advantages ? 8

(b) What is an E-waste ? Give any three disposal options. 7