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Question Paper Code : 53293

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2010

Second Semester

Electrical and Electronics Engineering

GE 2152 — BASIC CIVIL AND MECHANICAL ENGINEERING

(Common to Bio-medical Engineering, Electronics & Communication Engineering,
Electronics & Instrumentation Engineering, Information Technology, Computer
Science & Engineering and Instrumentation & Control Engineering)

(Regulation 2008)

Time : Three hours

Maximum : 100 Marks

Answer ALL questions

PART A — (10 × 2 = 20 Marks)

1. What is meant by surveying and leveling?
2. What are the raw materials required to manufacture the cement?
3. List different types of foundation used for buildings.
4. Define plastering. List the types of plasters.
5. What is known as gravity dam?
6. Give the classification of power plants.
7. What is known as scavenging?
8. What is known as stroke in an internal combustion engine?
9. Differentiate fire tube boilers from water tube boilers.
10. Mention any four refrigerants.

PART B — (5 × 16 = 80 Marks)

11. (a) Explain the various types of surveying.

Or

- (b) Discuss the qualities, classification and uses of Bricks.

12. (a) With a sketch explain the various types of foundations.

Or

- (b) What are roofs? Explain a reinforced cement concrete roof.

13. (a) Draw the plan and elevation of a typical bridge and explain its components.

Or

- (b) Draw the layout of Hydro-electric power plant and explain its working principle.

14. (a) Explain the working principle of steam power plant with neat sketch.

Or

- (b) Compare the air cooling and water cooling systems in I.C. engines.

15. (a) Explain the working principle of four stroke Compression Ignition engine.

Or

- (b) Draw a neat sketch and explain the working principle of vapour absorption refrigeration system.
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