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Question Paper Code : 80639

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Second Semester

Electrical and Electronics Engineering

GE 2152/080510002/GE 1151 A/ME 26 – BASIC CIVIL AND MECHANICAL
ENGINEERING

(Common to Electronics and Communication Engineering, Biomedical Engineering,
Electronics and Instrumentation Engineering, Computer Science and Engineering,
Instrumentation and Control Engineering and Information Technology)

(Regulations 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Name the few types of cements used in construction
2. What is meant by surveying?
3. Where do you provide the lintel in a building? And name the different types of lintels?
4. What are the purposes of plastering? List the various requirements of a good plaster.
5. Mention any four types of power plants.
6. How pumps are classified?
7. What are the applications of boiler?
8. Give the field applications of diesel power plants.
9. What are factors which affect the comfort air-conditioning.
10. Define Tonne of Refrigeration and COP.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the principle of levelling.
Or
(b) Classify bricks and state its characteristics and uses of each one of them.
12. (a) (i) What are the objectives of foundation? (8)
(ii) What are the loads acting on foundation? Explain them in detail. (8)
Or
(b) (i) What are the requirements of good flooring? (8)
(ii) Explain any two types mortars used for flooring. (8)
13. (a) (i) Draw the layout of a steam power plant and discuss the working principle. (8)
(ii) Explain briefly, the following circuits of the steam power plant. (8)
(1) Coal and ash circuit
(2) Air and gas circuit
(3) Feed water and steam flow circuit
(4) Cooling water circuit.
Or
(b) (i) Draw a neat block diagram of a nuclear power plant and indicate the various parts. (6)
(ii) Explain, briefly, the functions of the components of nuclear power plant. (10)
14. (a) (i) Differentiate between two stroke and four stroke engine. (4)
(ii) Show the neat sketch of working principle of Diesel Engine. (12)
Or
(b) Discuss the working of two stroke cycle petrol engine with help of neat sketch. (16)
15. (a) Explain with neat sketch working of Domestic Refrigerator. (16)
Or
(b) Describe with help of diagram, Vapour compression refrigeration system.
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