



C20-EC-501

7640

BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER / NOVEMBER—2023

DECE – FIFTH SEMESTER EXAMINATION

INDUSTRIAL MANAGEMENT AND SMART TECHNOLOGIES

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define industry, commerce and business.
2. Distinguish between delegation and decentralisation.
3. Define social responsibility.
4. Define grounding and shielding in the development of electronic product.
5. What is bump testing?
6. Define product documentation and state its types.
7. State any three National level financial institutions to promote an entrepreneur.
8. What is zero defect and zero effect?
9. Define Internet of things (Iot).
10. State any three applications of Iot.

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) State the explain the functions of top, middle and lower levels of management.

(OR)

(b) Explain Maslow's hierarchy of needs with a suitable diagram.

12. (a) Explain the product development process using Bathtub Curve.

(OR)

(b) Explain the thermal management in the design of electronic products.

13. (a) Explain the product packaging and storage.

(OR)

(b) Explain the concept of ergonomic and aesthetic considerations of pilot production.

14. (a) Explain any four self employment schemes for an entrepreneur.

(OR)

(b) Explain the conduct of market survey and demand survey.

15. (a) Explain the applications of IoT in context of smart transportation and mobility.

(OR)

(b) Explain the application of IoT in context of smart energy and smart grid.

PART—C

10×1=10

- Instructions :** (1) Answer the following question.
(2) The question carries **ten** marks.
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Explain UL and CE certification of industrial electronic products.

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