Code No. 201

FACULTY OF ENGINEERING

B.E. 4/4 (M/P) II Semester (Main) Examination

April/May 2009

PRODUCT DESIGN AND PROCESS PLANNING

Time 3 Hours

[Max. Marks:75

Note: Answer all questions from Part A, and five questions from Part B.

Part - A

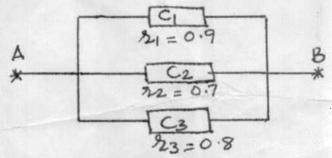
Marks: 25

- Explain in brief the procedure involved in marketing a new product.
- 2. What is creativity?
- 3. Describe Human Machine Interaction.
- What is a process sheet? Explain in brief.
- 5. Explain the concept of brain storming.
- 6. What is meant by Intellectual Property Rights?
- 7. Explain in brief about Trade Mark.
- What are Patent Laws?
- Explain the procedure involved in designing a process for a new product.
- 10. What is concurrent engineering.

Part - B

(Marks: 50)

- 11. a) Discuss the factors which contribute to successful technological innovation.
 - b) Describe Delphi technique in process design.
- 12. a) Explain the procedure involved in the design of 1) controls, 2) displays.
 - b) Describe the ergonomic principles in the design of table and chair for a computer operator.
- a) Compute Reliability for the following system AB



Define and distinguish between Copyright and Trademark.

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- a) Define and differentiate between control charts for variables and control charts for attributes.
 - b) Develop a process sheet in terming a pulley on a lathe.
- 15. a) List out features of Intellectual Property Rights.
 - b) Explain briefly process of Value Engineering.
- 16. a) Discuss procedures involved in testing a new product.
 - b) Explain steps involved in the selection of material for different products.

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17. Write short notes on any four:

 $(4 \times 2^{1/2} = 10)$

- a) Fatigue,
- b) Screening of ideas,
- c) Price estimation of a product,
- d) Group technology
- e) Selection of right product,
- f) Reasons for a product failure.