

AQ – 2770

Second Semester M. E. (Mech) (CAD/CAM) Examination

INDUSTRIAL PRODUCT DESIGN

2 MCC 4

P. Pages : 2

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) Separate answer book must be used for each section in the subject Geology, Engineering material of civil branch and Separate answer book must be used for Section A and B in Pharmacy and Cosmetic Tech.
- (2) Answer **Three** questions from Section A and **Three** questions from Section B.
- (3) Due credit will be given to neatness and adequate dimensions.
- (4) Assume suitable data wherever necessary.
- (5) Illustrate your answer wherever necessary with the help of neat sketches.

SECTION A

1. (a) Distinguish between industrial design and engineering design by giving example of each. 7
- (b) What is meant by the functional material and visual requirements and how they guide the design process ? 7
2. (a) Distinguish between ferrous and non ferrous material. Give example of each. 7
- (b) Explain what is stainless steel. 6
3. (a) Explain cutting by separation and cutting by removal. 7
- (b) Discuss basic finishing processes. 6
4. (a) Describe some of the human factors associated with office design. 7
- (b) Suggest some common measures used to reduce noise in power tools and in the workplace. 6

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5. (a) What makes one computer more user friendly than other ? 7
(b) What do you mean by visual requirement of a product ? 6

SECTION B

6. (a) Define "design for assembly". Describe its importance in design for manufacturing. 7
(b) Enlist various guides to design for producibility. 7
7. (a) Explain the process offset lithography. 7
(b) Describe the function, material and visual requirements as they pertain to graphic design. 6
8. (a) Define the terms product liability, negligence, warranty and strict liability. 6
(b) List various requirements for a patentable invention. 7
9. (a) What is copyright ? What is the term of duration of copyright ? 7
(b) Explain design for maintenance with the help of example. 6
10. Discuss various features of computer aided product design. 13

