

Code No: R20DME52

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

R20

(Autonomous Institution – UGC, Govt. of India)

M.Tech II Year I Semester Supplementary Examinations, August 2023

Industrial Safety

(MD)

Roll No									
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Time: 3 hours

Max. Marks: 70

Note: This question paper Consists of 5 Sections. Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1 Define Industrial Accident. Explain the causes, types and results of industrial accidents. [14M]

OR

- 2 A Discuss how accidents are reported, investigated and analysed in an industry. How does it help in prevention of future accidents in that industry? [7M]
B Expand the word OSHAS. Discuss the salient features of the act. [7M]

SECTION-II

- 3 A What are personal protective equipment's? Explain PPEs meant to protect head, hand and respiratory tract. [7M]
B Explain the various provisions in the explosive act 1884. [7M]

OR

- 4 A Discuss the safety aspects in process plants. [7M]
B Explain the effect of pollution on human body. [7M]

SECTION-III

- 5 A What steps can be adopted by industries to prevent fire at manufacturing areas? [7M]
B How do organizations plan for installation of various types of fire fighting equipment at manufacturing areas? [7M]

OR

- 6 A Discuss safety measures to be followed while performing welding operation. [7M]
B Describe the program and schedule of preventive maintenance of electrical equipment. [7M]

SECTION-IV

- 7 A Write a note on the common Chemical and Radiation hazards in an industry. How exposure to these can be controlled in an industry? [7M]
B Explain the mechanical devices of safety used in industry. [7M]

OR

- 8 A Explain the First-Aid measures in case of accidents. [7M]
B Describe types of faults in machine tools and their general causes. [7M]

Code No: R20D1517

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

R20

(Autonomous Institution – UGC, Govt. of India)

M.Tech II Year I Semester Supplementary Examinations, August 2023

Design for Manufacture Assembly and Environment

(MD)

Roll No									
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Time: 3 hours

Max. Marks: 70

Note: This question paper Consists of 5 Sections. Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION-I

- 1 A Develop various evaluation methods used for manufacturability in DFMA [7M]
B Discuss the capabilities and qualities needed by sequential designer [7M]
OR
2 A Explain the factors influencing Design. [7M]
B Explain the various factors that determines the choice of material [7M]

SECTION-II

- 3 A Discuss about the welded defects in form design with suitable sketch [7M]
B Illustrate with neat sketch about form design of casting defects. [7M]
OR
4 A Explain the influence of material with suitable example on form design. [7M]
B Elaborate the Guidelines for designing weldments. [7M]

SECTION-III

- 5 A Write the design method for clamp ability with neat sketch. [7M]
B Discuss in detail Economic And Product Design Considerations In Machining [7M]
OR
6 A Explain in detail about the design for assembly. [7M]
B Illustrate the design rules for design for machinability with suitable sketch. [7M]

SECTION-IV

- 7 A Describe about machined holes in casting process with suitable example [7M]
B Discuss in detail General design rules for riser necks used in iron castings [7M]
OR
8 A Discuss with neat sketch about detail about casting requiring special sand cores. [7M]
B Describe in detail about design features to facilitate machining, drills and milling cutters. [7M]

SECTION-V

- 9 A Explain in detail in AT & T Product assessment method. [7M]
B Describe with suitable sketch of Remanufacturing process in DFE. [7M]

