TED (21) 2022

(Revision-2021)

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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL - 2022

MANUFACTURING TECHNOLOGY

[Maximum marks: 75] (Time: 3 Hours)

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	Define Hardness	M1.01	R
2	Define Refractoriness.	M1.03	R
3	Define mechanical working of metals.	M2.03	R
4	Define Centrifugal casting,	M2.01	U
5	Define Pressure welding	M3.01	U
6	List different types of arc welding machines	M3.03	R
7	Name any two fluxes used in gas welding.	M3.02	R
8	Define press working	M4.03	U
9	Define Notching	M4.03	U

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Write short note on Sweep pattern	M1.02	R
2	Describe the term fettling.	M2.02	U
3	Explain Vacuum die casting.	M2.01	U
4	Briefly explain slush casting.	M2.01	U
5	Briefly explain any two methods to manufacture powder in powder metallurgy.	M2.05	U
6	What is the difference between Soldering and Brazing?	M3.05	U
7	Differentiate between hot chisel and cold chisel which are used in smithy shop.	M4.02	R
8	What are the three types of hammers used in smithing?	M4.02	R
9	What are the advantages of press working operations?	M4.03	U
10	Explain the use of swage block	M4.02	R

PART C

III. Answer all questions. Each question carries seven marks

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level
1.	Mention the functions and location of riser.	M1.05	U
	OR		
2.	Explain any three properties of a good moulding sand.	M1.03	R
3.	(a) Explain the functions of a pattern (4marks) (b) Write any two pattern material and advantage of using it. (3 marks)	M1.02	U
	OR		
4.	(a) Explain (i)Shrinkage allowance (ii) Machining allowance (4 marks) (b) Distinguish between plasticity and elasticity (3 marks)	M1.02 M1.01	R
5.	Sketch and explain the working of a goose neck type hot chamber die casting machine	M2.01	U
	OR		
6.	Explain impact extrusion with the help of a neat sketch. Mention its applications.	M2.04	U
7.	Compare between AC and DC arc welding processes	M3.03	R
	OR		
8	Describe any three defects in welding.	M3.04	R
9.	(a) List the commonly used welding accessories. (3 marks) (b) Write short note on submerged arc welding. (4 marks)	M3.03	R U
	OR		
10	Write short notes on (a)Spot welding (b) Seam welding (c) Projection welding	M3.03	U
11	Write short notes on (a) Forge welding (b) Swaging (c) Bending.	M4.01	U
	OR		
12	Write short notes on (a) Effect of clearance between punch and die (b) hand forging and machine forging	M4.02	R

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