Code No: R1622033 (R16) (SET - 1

II B. Tech II Semester Supplementary Examinations, April - 2021 PRODUCTION TECHNOLOGY

(Com to ME, AME)

Time: 3 hours		Max. Marks: 70	
111	ne. 3	Note: 1. Question Paper consists of two parts (Part-A and Part-B) 2. Answer ALL the question in Part-A 3. Answer any FOUR Questions from Part-B	ax. Marks. 70
		PART -A	
1.	a)	Write any two merits and demerits of using metal pattern in casting.	(2M)
	b)	Draw and denote different parts of pit type crucible furnace.	(3M)
	c)	Write a short note on left ward welding with a diagram.	(3M)
	d)	Define brazing. How it differs from braze welding.	(2M)
	e)	What is sintering? What is the advantage of doing sintering?	(2M)
	f)	Write any four applications of thermo plastics.	(2M)
		PART -B	
2.		Write a short note on (i) Floor moulding (ii) bench moulding (iii) Pit mould (iv) Sweep moulding (v) Plate moulding (vi) machine moulding	ing (14M)
3.	(a)	•	are (6M)
	(b)	provided by the riser. What is the best shape and size of the riser? Why? Write any eight casting defects? State their causes and remedies.	(8M)
4.	a)	Explain the working principle of plasma arc welding with a neat diagram.	(7M)
	b)	What is Gas welding? Describe in brief the equipment required for O Acetylene welding.	xy- (7M)
5.	a)	Explain the working principle of laser beam welding with a neat diagram.	(7M)
	b)	Explain about explosive welding and give its advantages	(7M)
6.	a)	Write any three advantages and three applications of powder metallurgy.	(6M)
	b)	Write a short note on (i) Smith forging and (ii) Drop forging.	(8M)
7		Explain about explosive forming process. Also state its merits and demerits	. (14M)

II B. Tech II Semester Regular/Supplementary Examinations, November - 2020 PRODUCTION TECHNOLOGY

(Com to ME, AME)

Time: 3 hours Max. Marks: 70 Note: 1. Question Paper consists of two parts (Part-A and Part-B) 2. Answer **ALL** the question in **Part-A** 3. Answer any **FOUR** Questions from **Part-B** PART-A (3M)a) Write about the various advantages of casting process? b) Explain about solidification of pure metals? (2M)c) What are the advantages and disadvantages of DC and AC welding? (2M)d) Give the causes and remedies of rolling defects. (3M)(2M) Write about applications of powder metallurgy? (2M)What is extrusion ratio? PART -B Explain the following with suitable sketches. (7M)(i) Cope and drag pattern (ii) Skeleton pattern b) Explain the terms shrinkage allowance and machining allowance. (7M)3. (7M)Discuss briefly on solidification of castings of pure metals and alloys. b) What is the function of riser? What is its preferred shape and briefly write (7M)about nucleation and grain growth related to casting. (7M) 4. Explain Oxy– Acetylene Gas cutting in detail? Explain about TIG and MIG welding techniques. Give the applications of each. (7M)7M) 5. a) Write a short note on (i) Wire drawing and (ii) Tube drawing. Explain soldering? What fluxes are generally used in soldering? (7M) Write the expression for determining the force required to produce an extrusion (7M)and discuss the effect of various parameters on the extruding force? b) Describe the method, advantages and application of powder metallurgy. (7M)7. (7M) Derive the force and power requirements in blanking operation. (7M) Explain about bending, spring back and its remedies?

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II B. Tech II Semester Supplementary Examinations, November - 2019 PRODUCTION TECHNOLOGY

(Com to ME, AME)

Time: 3 hours Max. Marks: 70 Note: 1. Question Paper consists of two parts (Part-A and Part-B) 2. Answer ALL the question in Part-A 3. Answer any **FOUR** Questions from **Part-B** PART -A a) What are the factors which govern the selection of proper material for pattern (2M)materials? (2M)b) Write any two merits and demerits of lost wax process. (3M)c) Write a short note on right ward welding with a diagram. d) (2M)Define soft soldering and hard soldering. (3M)Write a short note on wire drawing. (2M)Write any two differences between thermo plastics and thermo setting plastics. PART-B 2. What are the different types of gates you know? Explain them with neat (14M)sketches stating their relative merits and demerits. 3. Sketch cupola furnace and label essential parts. Also describe the operation of (14M)cupola in detail. 4. (7M)Explain the working principle of MIG welding with a neat diagram. b) Write any seven differences between AC and DC arc welding. (7M)5. (7M)Explain in brief about resistance welding. b) Explain about any two Non-Destructive testing of welding. (7M)(7M)Write a short note on impact extrusion. b) Write any seven differences between hot working and cold working. (7M)7. (6M)Write a short note on spring back bending process. b) Explain about blow moulding process. (8M)