KADI SARVA VISHWAVIDYALAYA

B.E SEMESTER V THEORY EXAMINATION (NOVEMBER- 2016)

SUBJECT CODE : ME 503 SUBJECT NAME : MANUFACTURING PROCESS

DATE: 15/11/16 TIME: 10:30 am to 1:30 pm TOTAL MARKS: 70

Instructions:

1. Answer each section in separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate **clearly**, the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

Section - 1

Q.1 (All Compulsory)

(A) Explain the importance of Manufacturing Processes in context of recent development. 5

(B) Describe the types of flame obtained in oxy-acetylene gas welding with neat sketch. 5

(C) State different cold working processes. Discuss any four cold working processes in details 5

OR

(C) Write short note on Electro beam welding. 5

Q.2

(A) Classification of plastic and its general properties. 5

(B) Explain wire drawing and tube drawing with neat sketches. 5

OR

(A) What is laser beam welding process? Explain the steps involved and state its application. 5

(B) Explain with neat sketch injection moulding process. What are the limitations of this process? 5

Q.3

(A) Enlist the various types of presses used in forging explain with neat sketch. 5

(B) Explain TIG welding process in details. 5

OR

(A) Explain various welding defects, its causes and remedies. 5

(B) Explain with sketch and application: Cylindrical and Center less grinding process for finishing operation. 5

P.T.O.

Section - 2

Q.4

(A) Explain compression moulding and blow moulding process. 5

(B) Explain principle of welding, brazing and soldering with their applications. 5

(C) Discuss the merits and demerits of A.C. and D.C. power sources. Explain straight and reverse polarity. 5

OR

(C) Describe explosive welding process with its advantages and limitations. 5

Q.5

(A) Explain the terms: Ingot, slab, bloom and billet. 5

(B) How grinding wheel is specified? Explain in details. 5

OR

(A) Explain the following terms. 5
i) Glazing ii) Loading iii) Dressing

(B) Differentiate between Spot and Seam Welding processes. 5

Q.6

(A) Enlist types of super finishing processes. Discuss the selection criteria for appropriate super finishing process. 5

(B) Discuss various methods of extrusion with neat sketch. 5

OR

(A) Explain principle and operation of rolling process. 5

(B) Discuss various types of smith forging operations. 5

----------All the Best --------

KADI SARVA VISHWAVIDYALAYA

B.E SEMESTER 5th EXAMINATION (NOVEMBER / 2015)

SUBJECT CODE: ME-503 **SUBJECT NAME: Manufacturing Process**
DATE: 23/11/2015 **TIME: 10:30 am to 1:30 pm** **TOTAL MARKS: 70**

Instructions:

1. Answer each section in separate answer sheet
2. Use of scientific calculator is permitted
3. All questions are **compulsory.**
4. Indicate **clearly**, the options you attempt along with its respective question number.
5. Use the last page of main supplementary of **rough work**.

Section-I

Q.1	[A]	How manufacturing processes can be differentiated? Explain with example.	05
	[B]	Classify the welding processes. Explain Principal of carbon arc welding with its application in industry.	05
	[C]	Write about chemical reactions produced in oxy-acetylene gas welding also explain about carburizing flame and its application.	05
		OR	
	[C]	What is polarity in arc welding? Also explain the effect of welding current in arc welding.	05
Q.2	[A]	Explain the various forms of flux and its advantages in welding process.	05
	[B]	Write about principle of resistance welding. Explain projection welding with neat sketch.	05
		OR	
Q.2	[A]	Explain spot and seam welding process.	05
	[B]	Explain plasma beam welding process with neat sketch.	05
Q.3	[A]	Explain metal transfer in MIG welding.	05
	[B]	Explain welding techniques with neat sketch.	05
		OR	
Q.3	[A]	Explain about ultrasonic welding with neat sketch.	05
	[B]	What is solid state welding explain any one with neat sketch?	05

Section-II

Q.4	[A]	Explain recrystalization, Also define hot and cold forming processes in brief.	05
	[B]	Explain principle of elastic and plastic deformation with example.	05
	[C]	Explain mechanism of rolling with neat sketch.	05
		OR	
	[C]	What is forward and backward extrusion process? Explain with neat sketch.	05
Q.5	[A]	What is shear? Explain it by using piercing and blanking with neat sketch.	05
	[B]	Explain steps of cold drawing operation.	05
		OR	
Q.5	[A]	Write about metal spinning and it application in industry.	05
	[B]	Explain embossing and coining with neat sketch.	05
Q.6	[A]	What is blow moulding? Explain with neat sketch.	05
	[B]	Classify the super finishing processes. And explain about buffing.	05
		OR	
Q.6	[A]	Explain plunger type injection moulding.	05
	[B]	Draw schematic diagram of vertical lapping machine and explain its working?	05

BEST OF LUCK

KADI SARVA VISHWAVIDYALAYA

B.E. SEMESTER-V (MECHANICAL ENGG.) EXAMINATION (NOV-2014)

SUBJECT CODE: ME503 SUBJECT NAME: Manufacturing Process

DATE: 18/11/2014 TIME:10:30 a.m. to 1:30 p.m.

TOTAL MARKS:70

Instructions:

1. Answer each section in separate answer sheet
2. Use of scientific calculator is permitted
3. All questions are **compulsory.**
4. Indicate **clearly**, the options you attempt along with its respective question number.
5. Use the last page of main supplementary of **rough work**.

Section-I

Q.1	[A]	What is manufacturing process? Explain Selection of manufacturing process.	05
	[B]	Classify the welding processes.Explain Principal of arc welding its application in industry.	05
	[C]	Explain different types of flames produced during Oxy-Acetylene Gas welding with its applications.	05
		OR	
	[C]	Write about power sources in arc welding process and its characteristics.	05
Q.2	[A]	Explain about various type of flux used in welding processes. Also explain the advantages of flux and coatings in welding process.	05
	[B]	What is resistance welding? Explain spot welding with neat sketch.	05
		OR	
Q.2	[A]	Explain projection and seam welding process.	05
	[B]	Explain plasma beam welding process with neat sketch.	05
Q.3	[A]	Write difference between the TIG and MIG.	05
	[B]	Explain welding techniques with neat sketch.	05
		OR	
Q.3	[A]	Explain about explosive welding with neat sketch.	05
	[B]	What is friction welding explain it?	05

Section-II

Q.4	[A]	Differentiate hot and cold working processes.	05
	[B]	Explain principal of elastic and plastic deformation and also explain concept of strain hardening.	05
	[C]	What is rolling process explain mechanism of rolling with neat sketch.	05
		OR	
	[C]	Explain forward and backward extrusion process with neat sketch.	05
Q.5	[A]	Explain piercing and blanking with neat sketch.	05
	[B]	Explain wire drawing operation with neat sketch.	05
		OR	
Q.5	[A]	Write about general properties of Plastics and explain blow moulding process.	05
	[B]	Explain injection moulding with neat sketch.	05
Q.6	[A]	What is thermoforming and slush moulding?	05
	[B]	Classify the super finishing processes. And explain about polishing.	05
		OR	
Q.6	[A]	Explain grinding and Lapping.	05
	[B]	What is Buffing and Barrel Tumbling?	05

BEST OF LUCK

KADI SARVA VISHWAVIDYALAYA

B.E. SEMESTER-V (MECHANICAL ENGG.) EXAMINATION (APRIL-2015)

SUBJECT CODE: ME503 SUBJECT NAME: Manufacturing Process

DATE: 22/04/2015 TIME:10:30 a.m. to 1:30 p.m.

TOTAL MARKS:70

Instructions:

1. Answer each section in separate answer sheet
2. Use of scientific calculator is permitted
3. All questions are **compulsory.**
4. Indicate **clearly**, the options you attempt along with its respective question number.
5. Use the last page of main supplementary of **rough work.**

Section-I

Q.1	**[A]**	Define manufacturing process? Explain different type of manufacturing process.	**05**
	[B]	Define welding processes.	**05**
	[C]	Explain principal of Oxy-Acetylene Gas welding with neat sketch. Also list the equipments used in Oxy-Acetylene gas welding.	**05**
		OR	
	[C]	Write mechanism of arc initiation in arc welding process.	**05**
Q.2	**[A]**	Write shot note on flux used in various welding process.	**05**
	[B]	Explain spot welding with neat sketch.	**05**
		OR	
Q.2	**[A]**	Explain projection welding process with neat sketch.	**05**
	[B]	Explain ultrasonic welding process with neat sketch.	**05**
Q.3	**[A]**	Differentiate TIG and MIG welding.	**05**
	[B]	Explain welding defects.	**05**
		OR	
Q.3	**[A]**	Write about welding position with neat sketch.	**05**
	[B]	What is plasma welding explain it with neat sketch?	**05**

Section-II

Q.4	[A]	Differentiate hot working and cold working processes.	05
	[B]	What is plastic deformation and also explain concept of strain hardening.	05
	[C]	Explain mechanism of rolling with neat sketch.	05
		OR	
	[C]	Differentiate forward and backward extrusion process.	05
Q.5	[A]	Explain cold heading and riveting.	05
	[B]	Explain wire drawing operation with neat sketch.	05
		OR	
Q.5	[A]	Explain blow moulding process with neat sketch.	05
	[B]	Explain injection moulding and its application with neat sketch.	05
Q.6	[A]	What is slush moulding explain it?	05
	[B]	Explain about buffing and burnishing.	05
		OR	
Q.6	[A]	Explain different types of lapping and polishing.	05
	[B]	Write general properties of plastics.	05

BEST OF LUCK