# **Question Bank**

## <u>CHAPTER – 1:- INTRODUCTION TO MANUFACTURING PROCESS</u>

- 1. Define manufacturing process.(12-05-2016-(2), 27-11-2014(2))
- 2. Define Hardness.(12-05-2016-(2),13-6-2014(7))(19/11/2016)(29/04/2017)
- 3. State the effect of residual stress on manufacturing process.(12-05-2016-(3), 13-6-2014(7))
- 4 Define Recrystallization Temperature. List and explain factors affecting on it. (12-05-2016-(3), 02-05-2015-(07),17-12-2015-(2),27-11-2014(2)28-11-2013 (6)) (19/11/2016)(29/04/2017)
- 5 Define ductility (17-12-2015-(2)) (19/11/2016)(29/04/2017)
- Define (1) Strength (2) Brittleness (3) Elasticity (4) toughness (5) Machinability (6) Ductility (7)
   Rigidity (17-12-2015-(3), 27-11-2014(2),13-6-2014(7),28-11-2013(8)) (19/11/2016)

## <u>CHAPTER – 2:- METAL WORKING PROCESS</u>

- 1 Explain piercing process. (12-05-2016-(2)) (29/04/2017)
- 2 Define cold working process. Give Differences between Hot Working and Cold Working. (12-05-2016-(2), (17-12-2015-(4)) (19/11/2016)(29/04/2017)
- 3. Give difference between Hot and Cold rolling process. (12-05-2016-(3), (17-12-2015-(4), 13-6-2014(7)) (19/11/2016)
  Explain meaning of (i) ingot (ii) bloom (iii) billet (iv) slab (12-05-2016-(3), (17-12-2015-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-2005-(3), 12-200

## 13-6-2014(7)) (19/11/2016)

- 5. Explain bulging operation with figure. (12-05-2016-(4))
- 6. Explain curling operation with figure. (12-05-2016-(4))
  Give different types of classification of press list the point selection of press. (12-05-2016-(4), 13-6-2014(7) 28-11-2013(7)) (19/11/2016)
- 8 Explain any four press operations. (12-05-2016-(4))
- 9. Define following terms:
  - 1. Mechanical working 2. Ingot 3. Billet 4. Embossing
    - 4. Swaging 6. Flash Mis match (7) spinning (02-05-2015-(07), (27-11-2014(2), 13-6-2014(7)) (19/11/2016)
- 10. List various types of rolling mills and explain three high and four high rolling mills with sketch (02-05-2015-(07), (27-11-2014(2), 13-6-2014(7), 28-11-2013(7)) (19/11/2016)(29/04/2017)
- 11. Define forging process and write the application and advantages of it. (02-05-2015-(07) (19/11/2016)
- Classify the forging process. Explain various forging operations in brief. (02-05-2015-(07), (27-11-2014(2))(29/04/2017)
- 13. State different drawing operations and explain tube drawing, wire drawing and blank drawing operation with neat sketch. (02-05-2015-(07), (17-12-2015-(4), (27-11-2014(2), 13-6-2014(7)) (29/04/2017)
- 14. Define bending. Explain bending operation with neat sketch. (17-12-2015-(2), (27-11-2014(2)) (19/11/2016)
- 15. Explain factors affecting the drawing Process (17-12-2015-(3))
- 16. Enlist methods of Extrusion and explain tube extrusion. And give the advantage & limitation (17-12-2015-(3), 28-11-2013(7))(29/04/2017)
- 17. List the Defects of forging Process and its reason (17-12-2015-(3)), (27-11-2014(2), 28-11-2013) (19/11/2016)
- 18. Explain the Punching operation with neat sketch (17-12-2015-(4), (27-11-2014(2))
- 19. Suggest appropriate metal working process for (1) Bolt Head(2)Pipes (3)Fly wheel (4) presser vessels.(27-11-2014(2))

- 20. List the metal forming process state the different types and classification of forming process and explain any one of them. (13-6-2014(7), 28-11-2013(7)) (19/11/2016)
- 21. Define Extrusion Coining & Piercing (19/11/2016)

•

## CHAPTER – 3:- METAL CASTING

- 1. List main five step of casting with line diagram. (12-05-2016-(2), 17-11-2014-(2))
- 2. List types of foundry. (12-05-2016-(2))
- 3. Classify moulding sand. (12-05-2016-(2))(29/04/2017)
- 4. List the types of pattern and explain to its. (12-05-2016-(3), 02-05-2015-(07),
   (17-12-2015-(2) 28-11-2013(7)) (19/11/2016)
- 5. List advantages and limitation of casting processes. (12-05-2016-(3), (17-12-2015-(2))
- 6. Explain pattern allowances. (12-05-2016-(3), (17-12-2015-(2) 13-6-2014(7), 28-11-2013(7)) (19/11/2016)(29/04/2017)
- 7. List the types of core and explain any three. (12-05-2016-(3), (17-12-2015-(2), 27-11-2014(2) 13-6-2014(7))(29/04/2017)
- 8. Explain properties of moulding sand. (12-05-2016-(4), (17-12-2015-(2))(29/04/2017)
- 9. Explain casting defects (12-05-2016-(4), (17-12-2015-(2), 17-11-2014-(4) 13-6-2014(7)) (19/11/2016)(29/04/2017)
- 10. Explain investment casting process. (12-05-2016-(4), 02-05-2015-(07))(29/04/2017)
- 11. Explain with neat sketch cupola furnace.(12-05-2016-(4),(17-12-2015-(2), 17-11-2014-(4) 13-6-2014(7), 28-11-2013(7)) (19/11/2016)(29/04/2017)
- 12. Write colour code of pattern as per I.S. (12-05-2016-(3))
- 13. Enlist various pattern making materials. Write main five required properties of pattern materials.
  Explain pattern material. 02-05-2015-(07), (17-12-2015-(2), 17-12-2015-(2)) (29/04/2017)
- 14. List and explain different steps in core making procedure. (02-05-2015-(07))
- 15. Enlist different electric furnaces and explain induction furnace with neat sketch. (02-05-

#### 2015-(07), 17-11-2014-(4))

- 16. Explain following casting process: 1. Semi centrifugal casting 2. Die casting (02-05-2015-(07)
- 17. Functions of Runner & Risers in casting process (17-12-2015-(2), 17-11-2014(2))
- 18. What is pattern? Explain the necessity of patter in casting. (17-12-2015-(2)
   17-11-2014-(2))
- 19. Explain preparation of mould. (17-11-2014-(4))
- 20. Explain the centrifugal casting process. 28-11-2013(7) (19/11/2016)(29/04/2017)
- 21. Define Pattern & Mould (19/11/2016)
- 22. State the special of Shell Moulding Process & state special field of its applications. (29-04-2017)

## CHAPTER 5:- METAL JOINING PROCESS.

- 1. Define welding process. (12-05-2016-(2)) (19/11/2016)(29/04/2017)
- 2. List out welding defects and give the cause. (12-05-2016-(2), (17-12-2015-(4) 17-11-2014(2))
- 3. List out the name of destructive and non- destructive welding test. (12-05-2016-(2))
- 4. Differentiate between soldering, brazing and welding. (12-05-2016-(3), (17-12-2015-(4)) (29/04/2017)
- Describe different gas flame or oxy acetylene flames with sketch. (12-05-2016-(3), 02-05-2015-(07), (17-12-2015-(2), 17-11-2014(2), 28-11-2013(7)) (19/11/2016)(29/04/2017)
- State the name of equipment used in arc welding with its function. (12-05-2016-(4), 17-11-2014(2), 28-11-2013(7))
- 7. Explain arc welding process with neat sketch. (12-05-2016-(4)) (19/11/2016)(29/04/2017)
- 8. Explain submerged arc welding with figure. (12-05-2016-(4) 13-6-2014(7), 28-11-2013(7))
- 9. Give advantage and disadvantage and application of adhesive material. (12-05-2016-(4))
- 10. Write short note on Fasteners. (12-05-2016-(4), 17-11-2014(4))
- 11. Write safety precautions in welding shop. (12-05-2016-(4), 02-05-2015-(07), 17-11-2014(7))
- 12. State the procedure of Brazing and Soldering process. (02-05-2015-(07) 13-6-2014(7)) (19/11/2016)(29/04/2017)
- 13. Write short note on any two: 1.Submerged arc welding 2. Thermit pressure welding 3.
   Adhesive joining (02-05-2015-(07))(29/04/2017)
- 15. State the advantages and applications of resistance welding. (02-05-2015-(07))
- 16. Give full Name of PAW, TIG & SAW (17-12-2015-(2), 17-11-2014(2))
- 17. Draw the gas welding techniques & equipment (17-12-2015-(4) 13-6-2014(7, 28-11-2013(7)) (19/11/2016)(29/04/2017)
- 18. Give at list five application of welding process (17-12-2015-(3), 17-11-2014(3))
- 19. Explain Spot Welding, seam welding and laser beam welding (17-12-2015-(3), 17-11-2014(4) 13-6-2014(7), 28-11-2013(7)) (19/11/2016)(29/04/2017)
- 20. Draw the neat sketch of Metal Inert Gas (MIG) welding (17-12-2015-(4)) (19/11/2016)
- 21. Write short note on adhesive material (17-12-2015-(4), 17-11-2014(4))
- 22. Draw set up of electron beam welding process. (17-12-2015-(3))
- 23. Differentiate between soft soldering and hard soldering.(17-11-2014(2))
- 24. Draw four types of weld joints (17-11-2014(2))
- 25. Write classification of non- pressure welding process. (17-11-2014(3))
- 26. Explain with neat sketch nacecitty of edge preparation in welding process. (17-11-2014(2))
- 27. Explain Tig welding process. (19/11/2016)
- 28. Classify welding process (19/11/2016)(29/04/2017)
- 29. Describe spinning process sequence with neat sketch. (29/04/2017)
- 30. Explain Ultrasonic welding (29/04/2017)