

Unit 5 -Introduction to Manufacturing

1. Which of the following is manufacturing process?
 - a. Forging
 - b. Welding
 - c. Casting
 - d. All of the above
2. Which of the following is not a part of carriage of the centre lathe?
 - a. Tool post
 - b. Apron
 - c. Compound rest
 - d. Gear box controls
3. The centre lathes receive their power through
 - a. Headstock
 - b. Tailstock
 - c. Both a & b
 - d. None of the above
4. A flat surface can be produced by a lathe machine, if the cutting tool moves
 - a. parallel to the axis of rotation of workpiece
 - b. at an angle of 45°
 - c. perpendicular to the axis of rotation of work piece
 - d. None of the above
5. What is the function of pulley drive in lathe machines
 - a. Drive the lead screw
 - b. Change the spindle speed
 - c. Drive the tail-stock
 - d. All of the above
6. Which of the following is a mechanism for mechanized movements of the carriage along longitudinal axis?
 - a. Cross-slide
 - b. Compound rest
 - c. Apron
 - d. Saddle
7. The function of taper turning process is to
 - a. reduce the diameter of a work piece along its length
 - b. reduce the diameter by removing material about an axis offset from the axis of work piece
 - c. remove the material from end surface of a work piece
 - d. All of the above
8. The process of removing sharp ends of a work piece is called as
 - a. Knurling
 - b. Grooving
 - c. Facing
 - d. Chamfering
9. What is meant by drag in casting process?
 - a. Upper part of casting flask
 - b. Molten metal
 - c. Lower part of casting flask
 - d. Upper & lower part of casting flask
10. Casting replica used to make the cavity is called as
 - a. Mould
 - b. Pattern
 - c. Cope
 - d. None of the above
11. The process of joining similar or dissimilar materials by heating them below 450°C using non-ferrous filler material is called as
 - a. Brazing
 - b. Soldering
 - c. Welding
 - d. All of the above
12. Which process squeezes metals into peaks and troughs with plastic deformation?
 - a. Knurling
 - b. Grooving
 - c. Reaming
 - d. None of the above

13. Which of the following operations is/are performed on a lathe machine
- Spot-facing
 - Parting
 - Reaming
 - All of the above
14. The process of chamfering the entrance of a drilled hole is known as
- counter-boring
 - counter-sinking
 - counter-fillet
 - trepanning
15. On drilling machine, which process is known as reaming?
- Enlargement of existing hole
 - Hole made by removal of metal along the hole circumference
 - Smoothly finishing and accurately sizing a drilled hole
 - All of the above
16. Match the following Manufacturing processes with their Types and select the correct option.
- | | | |
|------------------------|-------|--------------|
| 1. Metal forming | _____ | A. Grinding |
| 2. Surface finish | _____ | B. Rivetting |
| 3. Sheet metal working | ----- | C. Extrusion |
| 4. Metal joining | _____ | D. Blanking |
- 1 – A, 2 – C, 3 – D, 4 – B
 - 1 – C, 2 – A, 3 – D, 4 – B
 - 1 – B, 2 – A, 3 – D, 4 – C
 - 1 – D, 2 – B, 3 – A, 4 – C
17. In which of the following processes, material is neither added nor removed but is deformed into desired shape
- Surface finishing process
 - Metal forming process
 - Casting
 - Machining
18. What is the process, in which the metal is caused to flow through a restricted orifice to create an extremely elongated strip of uniform and comparatively smaller cross-sectional area, called?
- Rolling
 - Extrusion
 - Drawing
 - Spinning
19. Castings are usually
- costlier than forgings
 - cheaper than forgings
 - at the same rate as forging for similar metal
 - none of the above
20. Which of the following options best describes the centre lathes?
- Machining machines
 - Shaping machines
 - Turning machines
 - None of the above
21. The process of joining two pieces of metal with a different fusible metal applied in a molten state is called as
- welding
 - soldering
 - both a. and b
 - none of the above
22. Which gears are used to connect two intersecting shaft axes?
- Crossed helical gear
 - Worm and worm wheel
 - Bevel gears
 - All of the above
23. What is meant by gear ratio?
- The ratio of pinion speed and gear speed
 - The ratio of number of teeth on pinion and number of teeth on gear
 - Both a. and b
 - None of the above
24. The sand in its natural or moist state is called as

- a. green sand
 - b. loam sand
 - c. dry sand
 - d. none of the above
25. Micro machining processes (MMPs) are used to increase selectivity, accuracy, performance, etc. parameters
- a. True
- b. False
26. Choose the odd one out.
- a. micro-turning
 - b. micro-milling
 - c. micro-EBM
 - d. micro-grinding

Answer Sheet:

Q. No.	Solution	Q. No.	Solution	Q. No.	Solution	Q. No.	Solution
1	d	8	d	15	c	22	c
2	d	9	c	16	b	23	a
3	a	10	b	17	b	24	a
4	c	11	b	18	b	25	a
5	b	12	a	19	b	26	c
6	c	13	b	20	c		
7	a	14	b	21	b		