



6. In deep drawing of sheets, the value of limiting draw ratio depends on
- |                                 |                                       |
|---------------------------------|---------------------------------------|
| (a) % elongation of sheet metal | (b) Yield strength of the sheet metal |
| (c) Type of press used          | (d) Thickness of the sheet            |
7. Annealing leads to
- |                             |                            |
|-----------------------------|----------------------------|
| (a) Relieve internal stress | (b) Improve surface finish |
| (c) Improve hardness        | (d) Improve strength       |
8. Metal extrusion process is generally used for producing
- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| (a) Uniform solid sections            | (b) Uniform hollow sections           |
| (c) Uniform solid and hollow sections | (d) Varying solid and hollow sections |
9. Plasticizer used for
- |   |                           |
|---|---------------------------|
| (a) To improve the viscosity of polymer | (b) To enhance the colour |
| (c) To enhance the polymerization       | (d) To improve strength   |
10. Fillers added to plastics to
- |                               |                        |
|-------------------------------|------------------------|
| (a) Improve flow              | (b) Reduce brittleness |
| (c) Facilitate processability | (d) Improve strength   |

PART - B (5 x 2 = 10 Marks)

11. What is core venting?
12. What is the principle of Thermit welding?
13. What is impact extrusion?
14. What is the spring back effect in sheet metal component?
15. What is film blowing?

PART - C (5 x 16 = 80 Marks)

16. (a) Explain the steps required to carry out green sand moulding. (16)

Or

- (b) Illustrate about the lost wax method of moulding to cast quality product. Also state their advantages and disadvantages. (16)

17. (a) Compare and contrast TIG and MIG welding by explaining their principles of operation with necessary sketches. (16)

Or

(b) What are the special features of resistance welding methods? Explain all the methods in detail with neat sketches. (16)

18. (a) List out various extruding operations to make hollow tubes with necessary sketches. (16)

Or

(b) Enumerate the various hammers used for forging operations. (16)

19. (a) Discuss super plastic forming with necessary sketches. (16)

Or

(b) (i) What is meant by stretch forming? Explain. (8)

(ii) Explain with a neat sketch the principle and operation of magnetic pulse forming. (8)

20. (a) Explain briefly with neat sketches, commercially used method of blow moulding for blowing of plastics bottles and mention their specific advantages. (16)

Or

(b) Illustrate about the various methods of injection moulding in the processing of plastics. (16)

