**Unit 1**

1. What are the different types of defects.
2. Illustrate on different types of pattern.
3. Elaborate in detail about Investment pattern & costing pattern.
4. –
5. Explain the composition & properties of Bronze & --
6. Explain the characteristics of good sand.
7. –
8. Explain gating system & different types of gate & ratios.
9. Explain different types centrifugal casting.
10. Explain heat processes.
11. Explain the procedure of sand mould preparation.
12. Explain die casting & its processes.

Unit 4

1. Illustrate deep drawing with sketches.
2. Illustrate sentening, compacting & Preinking.
3. Describe power usuage in metallurgy process.
4. Explain sketch forming & spinning sketches.
5. Distinguish between primary & secondary process \_\_\_\_ powder metallurgy
6. Explain different types of tools & equipments of sheet metel work along with the sketches.
7. Explain mechanical pulveziation & describe the charaterstics of metal powder.
8. Explain apps of shear in blanking & punching
9. Illustrate nibbling, wining, embossing, notching.
10. Describe spring back phenomenon.
11. Explain the advantages & disadvantages of power metal.
12. Explain different bending operations.
13. Describe honing & lapping.
14. Explain & draw the sketches of punch & die
15. What are GI sheets? What is the purpose of standard specification of sheets.

Unit 2

1. Describe the marking tools fitted in the shop.
2. What are forging tools & its defects.
3. Describe \_\_\_\_\_\_\_ process
4. Explain different types of threading \_\_\_\_\_ & tools
5. Describe the bench work process & explain in detail about thread cutting, sawing, chipping, fitting etc
6. Explain the different types of forging process such as smitting, d\_\_\_, Press, machine etc
7. Explain smitting & drop forging.
8. What is die & tapping.

Unit 3

1. Explain the advantages & disadvantages of resistance spot weld.
2. Explain the advantages & disadvantages of Gas Weld.
3. Explain the advantages & disadvantages of Atomic Hydrogen Weld.
4. Explain the advantages & disadvantages of Carbon Arc Weld
5. Describe the welding defects & joints
6. Explain edge preparing.
7. Explain the advantages & disadvantages of Submerged Arc Weld.
8. Describe Flux along with its composition & properties.
9. What are different types of flames & their temperature range.
10. Explain Flash Butt welding
11. Differentiate between AC &BC welding.
12. Describe Electric resistance & its seam &\_\_\_\_\_ spot
13. Explain different types of electrode
14. Differentiate between solelening & Brazing
15. Describe oxy acetylene welding