PRACTICAL:- 1 INTRODUCTION TO WORKSHOP

Q.1 What is the importance of workshop?

ANS:- Workshop is the center of learning about engineering Materials, manufacturing practices, equipments, tools and safety precaution to be observed in manufacturing operations.

For practical knowledge and skills workshop is of importance.

- Q.2 Name the different shops?
- ANS:- (A) common shops
 - (B) Special shops.
- Q.3 Name the various shop coming under common shops?
- ANS:- (i) Carpentry and pattern making shop
 - (ii) Bench work & fitting shop
 - (iii) Foundry and casting
 - (iv) Smithy and forging
 - (v) Sheet metal
 - (vi) Electric arc and gas welding
 - (vii) Machine shop
- Q.4 Which are Special shops?
- ANS:- (i) Electrical wiring, soldering,& electronic
 - (ii) Painting
 - (iii) Heat treatment
 - (iv) Plumbing
 - (v) Automobile
 - (vi) Refrigeration, Air conditioner
 - (vii) Material testing

Q.5 Name the machines you know?

ANS:- (i) Hacksaw machine

- (i) Lathe machine
- (iii) shaping machine
- (iv) Drilling machine
- (v) Slotting
- (vi) Bench grinder
- (vii) Press machine
- (viii) Milling machine

PRACTICAL 2:- STUDY OF WORKSHOP MEASURING & MARKING INSTRUMENTS

Q.1 Name of any five measuring instruments?

ANS:- (i) Try square
(ii) Vernier caliper
(iii) Micrometer
(iv) Divider
(v) Inside caliper
Q.2 Name the gauges?
ANS:- (i) Depth gauge
(ii) Filler OR slip gauge
(iii) Radious gauge
(iv) Vernier height gauge
(v) Thread OR pitch gauge
(vi) Wire OR thickness gauge
Q.3 What is least count?
ANS:- Minimum dimension that can be expressed on vernier caliper
Q.4 What is the use of outside micrometer?
ANS:- To measure out side diameter & thickness of any job
Q.5 What is the use of divider?
ANS:- It is used for marking arc, dividing a line or transfering the diamension.

PRACTICAL 3: SHEET METAL SHOP

bending

PRACTICAL 4: BENCH WORK & FITTING

Q.1	What is the name of vice used in fitting shop?
ANS:	Bench vice
Q.2	Name the different files?
ANS:	(i) Flat file
	(ii) Square file
	(iii) Round file
	(iv) Triangular file
	(v) Half round file
Q.3	Which tools are used in fitting shop?
ANS:	(i) Steel rule
	(ii) Try square
	(iii) Vernier caliper
	(iv) Scriber
	(v) Center punch
	(vi) Hammer
	(vii) Hacksaw frame with blade
	(viii) Rough file & Smooth file
Q.4	What is the use of center punch?
ANS:	Center punch used in a bench work for marking out work, locating center etc.
Q.5	What is the use of try square?
ANS:	For measuring 90 Degree work

PRACTICAL 5: PLUMBING

Q.1 How the pipes are specified?	
Ans: (i) Material	
(ii) Inside diameter	
(iii) Wall thickness	
(iv) Length	
Q.2 which is the common pipes used nowadays?	
ANS: (i) C pvc	
(ii) U pvc	
Q.3 Which vice used in plumbing	
ANS: Pipe vice	
Q.4 Name only five fittings?	
ANS: (i) Elbow	
(ii) Tee	
(iii) Union	
(iv) Coupling	
(v) Reducer	
Q.5 What is B.S.P.?	
ANS: British Standard Pipe	

PRACTICAL 6: WOOD & WOOD WORKING (CARPENTRY)

Q.1:	Name the common carpentry tools?
AnS:	(i) Steel rule
	(ii) Try square
	(iii) Rip saw
	(iv) firmer chisel
	(v) Jack plane
	(vi) Rasp cut file
	(vii) Hammer
	(viii) Wooden mallet
Q.2	What is the use for firmer chisel ?
ANS:	To make groove
Q.3	What is the use of metal jack plane?
ANS:	To make smooth surface
Q.4 \	What is the use of Rasp file?
ANS:	Rasp file is used for cleaning up some curved surface
Q.5 N	Name the carpentry process?
ANS:	(i) Marking
	(ii) Sawing
	(iii) Planning
	(iv) Chieseling
	(v) Grooving

PRACTICAL 7: WELDING & RELATED PROCESS

Q.1 Na	ame the types of welding?
ANS: (i) Arc welding
(ii) Argon welding
(lii) Gas welding
(iv) Tig welding
(\	v) Mig welding
(v	i) Spot welding
Q.2 W	hich is the welding process you have carried out in workshop?
ANS: E	Electric arc welding
Q.3 W	hat is welding?
ANS: J	oining of two similar metals
Q.4 Na	ame the welding tools used in workshop?
ANS: V	Welding holder, welding rod, hand screen, hand gloves, chipping hammer, wire brush
Q.5 W	hich outer cover is on the welding rod?
ANS:	Silicon

PRACTICAL 8: STUDY OF LATH MACHINE

Q.1 What is the function of lathe machine?
ANS: To remove metal from a piece of work to give required shape & size
Q.2 Name the only five parts of lathe machine?
ANS: (i) Bed
(ii) Tail stock
(iii) Carriage
(iv) Chuck
(v) Tool post
Q.3 What is the use of chuck?
ANS: To hold the job
Q.4 Name the types of chuck?
ANS: (i) Thru chuck
(ii) Dock chuck
Q.5 Name the operation which can be performed by lathe machine?
ANS: (i) Facing
(ii) Turning
(iii) Chamfring
(iv) grooving
(v) Boring
(vi) Parting
(vii) Threading

PRACTICAL 9: SMITHY & FORGING

- Q.1 Name the types of furnace?
- ANS: Open fire & Stock fire furnace
- Q.2 Name the tools used in smithy shop?
- ANS: (i) Anvil
 - (ii) Swage block
 - (iii) Sledge hammer
 - (iv) Flat tongs
- Q.3 Why furnace is used in our workshop?
- ANS: To heat the job to set the required shape
- Q.4 Which type of furnace is used in our workshop?
- **ANS: Open fire furnace**
- Q.5 What is use of anvil & swage block?

ANS: Anvil for the support the job. Swage block is used for squaring, sizing, bending & forming operation