VIVA VOCE QUESTION WITH ANSWER

Subject code: 100106 **Manufacturing Practice**

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 Name the carpentry process?
Ans. (i) Marking
(ii) Sawing
(iii) Planning
(iv) Chieseling
(v) Grooving

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 90Degree work

Q5 Should the hardness of workpiece be same as that of the file?
Ans. No. The hardness of Workpiece should be less otherwise it will not be able to file.

SHEET METAL SHOP

Q.1 What is sheet metal work?
Ans. Sheet metal work is used for making, Cutting and bending

Q.2 Which are the sheets of metals?
Ans. (I) Galvanized iron
(ii) Stainless steel
(iii) Copper
(iv) Aluminium

Q.3 Name the sheet metal hand tools?
Ans. (I) Steel rule
(ii) Vernier caliper
(iii) Micrometer
(iv) Scriber
(v) Divider
(vi) hammer
(viii) mallet
(ix) Shears

Q.4 What is G.I.?
Ans. G.I. is galvanised iron

Q.5 What is shearing?
Ans. Shearing means for sheet metal cutting.

Q.6 Difference between piercing and punching?
Ans. Piercing is making hole of desired shape. Punching is making circular hole.

Q.7 Why does the thickness decrease with increase in gauge no?
Ans. Gauge no. is the no. of sheets that can be fitted in 1 inch, so with increase in gauge no.individual thickness of sheets will be reduced

Q.8 Define NOTCHING, BLANKING & PUNCHING.
Ans. Notching blanking punching all are parts of sheet metal work...just different ways of sheet metal cutting. Like in
Notching – metal is removed from side or edges of sheet to get desired shape,
Punching – process of making circular holes in the sheet with punch & die
Blanking – process of cutting a small part of sheet (which will have to be converted to desired shape) from the large sheet

WELDING & RELATED PROCESS

Q.1 Name the types of welding?
Ans (i) Arc welding
(ii) Argon welding
(Iii) Gas welding
(iv) Tig welding
(v) Mig welding
(vi) Spot welding

Q.2 Which is the welding process you have carried out in workshop?
Ans. Electric arc welding

Q.3 What is welding?
Ans. Joining of two similar metals

Q.4 Name the welding tools used in workshop?
Ans. Welding holder,welding rod, hand screen, hand gloves, chipping hammer, wire brush

Q.5 Which outer cover is on the welding rod?
Ans. Silicon

Q.6 Difference between electrode and filler rod!
Ans. Electrode is part of circuit Can be consumable or non consumable Responsible for starting of arc and subsequent temperature rise Filler rod is not part of circuit Its of course consumable Uses the heat of arc to get melt.

Q.7 Flux used in soldering/ brazing
Ans. Soldering-zinc chloride and brazing-borax

Q.8 What is auto genous welding?

Ans. Joining of metal pieces by melting their edges w/o using any filler metal (a kind of fusion welding)

Q.9 What is the code of electrode used? What does 60,1,3 represent ?

Ans. The electrode code 6013, a common electrode used in many general purpose applications. This is a 4- digit code so the first 2 digits (60) indicate a minimum tensile strength of 60,000 pounds per square inch. The "1" in the third position means this electrode is suitable for all welding positions ("2" is for horizontal and flat welding and a "4" is for vertical positions.). Referring to an electrode classification chart, we see that a "3" in the last position means the electrode may be used with any power source, has a rutile coating (titanium dioxide), a soft arc with light penetration and a coating consisting of up to 10 percent iron powder.(last position tells about combination of characteristics including the power source (AC, DC or both), type of coating (low hydrogen, mineral, organic or rutile), type of arc (soft, medium or digging), penetration (light, medium or deep) and amount of iron powder in the coating) If instead 3 at d end we use 1 it means cellulose sodium coating DC+ ..2 means cellulose potassium coating in AC DC+ or DC- ..4 means Fe powder titania with AC DC+ or DC-..

Q.10 What is the machine used for welding? Is it step up out step down? What are input and output voltages?

Ans. Its step down,Input:220v Output: 80V, 120A for AC & 25-30V, 100A for DC

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

Q8 Name different types of forging tools
Ans. Anvil block, swage block, hammers, tongs, chisels, fuller, flatter, punch, drift

FOUNDRY SHOP

Q.1 What are the main ingredients of good moulding sand?
Ans. Silica sand, clay, coal dust/saw dust and traces of magnesium, potassium etc

Q.2 What are the main properties required for a good moulding sand?
Ans. Cohesiveness, adhesiveness, collapse-ability, refractoriness, porosity, flow ability, plasticity, permeability etc

Q.3 Can you tell the name of bottom and top parts of the moulding box?
Ans. Drag and cope

Q.4 What are the defects found in a casting?
Ans. Blow holes, sand spots, swell, shrinkage, hot tear gas porosity, run outs, shifts etc

Q.5 What is meant by foundry?
Ans. Foundry is the place where casting is being done

Q.6 What is the name of tool used to blow off the loose particles from the mould cavity?
Ans. Bellow

Q.7 What is meant by sprue pin?
Ans. Sprue pin is used to provide the runner and riser holes through which molten metal is being poured into the mould cavity and riser to hold molten metal as a reservoir

Q.8 What is the tool used to compact the moulding sand?
Ans. Hand Rammer and peen rammer

Q.9 What is the purpose of draft in pattern?
Ans. Draft is the taper provided in the pattern for the easy removal of the pattern from the molding sand.

Q.10. What are the materials to be charged in a cupola furnace?

Ans. Coke, lime stone, cast iron, scrap iron etc

Q.11 What is the purpose of laddle in a foundry shop

Ans. Laddle is used to collect the molten metal from the cupola furnace and pour the molten metal to the cavity?

Q.12 Why a tapering is provided on the sprue pin?

Ans. Sprue pin the portion through which the molten metal is poured into the mould cavity, when the molten metal is poured the velocity of the liquid metal will be going on increasing so a negative pressure will be created around the liquid metal and the air will be rushing to the mould cavity. This can be avoided if we provide taper on the sprue pin