

| COMPETITIVE ENTRANCE EXAMINATION INTO HTTTC BAMBILI | |
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| <u>CYCLE</u> : 1 ST CYCLE | Session: 2013 |
| <u>LEVEL</u> : 1 ST YEAR | |
| <u>OPTION</u> : WOODWORK | |
| DURATION: 3hrs | |

- In your answer booklet, write only the letter of the answer chosen against the question number.
 - This question paper must be submitted together with the answer booklet.
 - Each question carries one (1) mark
1. Suggest one of the reasons for which a sanding bed must be installed on the direction of arrow stamped on is back.
 - a) To indicate the direction of rotation of the standing equipment
 - b) Because it indicates the sharpness direction of the course of his grift
 - c) To indicate the direction of the sanding action
 - d) To indicate the direction of maintenance if a ruptured sanding belt
 2. Determine the function of the primer in a complete paint treatment.
 - a) It provides a strong bond for the following coats to prevent it from soaking into the wood
 - b) It ensures glossary appearance especially if applied with a brush
 - c) The primer conforms with all types of material
 - d) It ensures deep penetration of the final coat of polish
 3. Identify a factor that influence the choice of wood finishing
 - a) Degree of gloss required for the given article
 - b) Degree of manufacture of the finish after application
 - c) The effect of the finish to sound transmission
 - d) Poor finishing
 4. Write the purpose for which you will recommend additives to the finishing products in the workshop:
 - a) They are used to plasticize the wood
 - b) To hide dents on poorly surfaced wood

- c) To thin or give color to finishes
 - d) To retard the speed of wood stains and pigment
5. Propose the cause and practical solution to maintain a spray equipment when fluid stops flowing from the pressure gun:
- a) Clogged air vent, clean gun and tightened connection for painting
 - b) Lack of air pressure in cup, clean air holes and inspect gaskets for replacement
 - c) Poor seating of the needle, need to be removed for cleaning or replacement for vanishing
 - d) Leaking gun connection which simply need to be tightened
6. Simulated distressing is an art in the restoration process that describes the decision to:
- a) Highlight areas of furniture with strong heat to change its color contrast\
 - b) Completely replace a damaged part of a cabinet
 - c) Render old furniture or fabric newer than its original state
 - d) Render new furniture or fabric warm appearance
7. Express the meaning of the term SOLUTE
- a) Substance that can dissolve another substance
 - b) A blend of substance
 - c) A solution in which no other substance can be dissolved
 - d) A substance dissolved in a substance to form a solution
8. Identify a factor to bear in mind in the selection of wood dye
- a) Chemical reactivity
 - b) Non – grain
 - c) Adhesion of the substance
 - d) Film – forming quality

9. Recommend a good method of applying wood finish on small elements of furniture units:
- a) Stripping
 - b) Dipping
 - c) Deeping
 - d) Rubbing
10. State the characteristics considered to determine the sale of a portable belt sanding
- a) The capacity of the electric motor
 - b) The width of the belt
 - c) The drive pulley
 - d) The manufacturer recommendation
11. Identify the part of a tree that distinguishes hardwood from the softwood species.
- a) Not
 - b) Knot
 - c) Nod
 - d) Naught
12. Choose the formula for calculating periphery speed of a given woodworking machine:
- a) $\frac{\pi D}{1000} \times Rev/min$
 - b) $\pi D \times Rev/min \times 100$
 - c) $\pi \times Rev/min \times 1000$
 - d) $\frac{\pi r \times \left(\frac{Rev}{min}\right)}{1000} \times 100$
13. Identify the part of a saw beside indicated letter “a” on figure 1.
- a) The cutting distant

- b) The tough gauged
 - c) The pitch
 - d) The Gullet
14. Express the meaning of “Thermoplastic material”
- a) Materials or substance that becomes soft and pliable when heated
 - b) Material that will not soften in spite of the heat specified
 - c) Resin material that can be cured after setting
 - d) Volatile material used to regulate the consistency of other material
15. Specify the role of wood cells known as Parenchymes rays, to a beaking tree
- a) It transmits sap from the roots to the rest of the tree
 - b) It passes the food – stuff of the tree called sap from leaves to the tree trunk
 - c) It enhances the growth of annual growth rings
 - d) It is formed of partly substance which store reserve food for the formation of parts of the tree
16. Identify the part of a rim lock that keeps the door shutter to a closed position
- a) Lock belt
 - b) Latch
 - c) Lower
 - d) Cylinder
17. A feather is particularly adopted in classical wood joints construction. Establish its role to the joint
- a) To ease squaring of complicated firming joint
 - b) To facilitate the assembly of mitre dowel joints
 - c) To reinforce joints otherwise called a tongue
 - d) A joint consolidation assistant otherwise known as dowels

18.A feather is particularly adopted in classical wood joints construction.

Establish its role to the joint

- a) To ease squaring of complicated framing joint
- b) To facilitate the assembly of mitre dowel joints
- c) To reinforce joints otherwise called a tongue
- d) A joint consolidation assistant otherwise known as dowels

19.Dado finishing in living rooms, otherwise known as wainscot is recently gaining popularity. Besides the aesthetic presentation establish its technical value.

- a) To protect the lower part of the wall in the room
- b) To support furniture and picture frames
- c) To act as a rest for flower pots
- d) To minimize the cost of plastering

20. Hand saws like machine tools have a principle to determine the size.

Express how to determine the size of a particular handsaw.

- a) By the length of the saw blade measured in millimeters
- b) By its weight, size and angle of teeth measure in degrees per 25mm
- c) By the number of points per 25mm along the length of the blade
- d) It is easier to determine its size from appearance

21.The success of an enterprise depends on its organizational structure, identify two services of the commercial department

- a) Production and purchase
- b) Finishing and sales
- c) Marketing and advertisement
- d) Control of mass production and quality

22.Express the meaning of “Breakeven points” as a business strategy

- a) The point in business where profit cover cost

- b) A period of breakdown in business, popularly known as bad – market
- c) A point where cost owner shadow gain
- d) A time when the enterprise require more equipment as it develops

23. Predict the type of energy source referred to as Oleo – Pneumatic

- a) Power supply in the workshop by standby generator
- b) Power supply whose main source of energy is oil
- c) Power supply by rechargeable batteries
- d) Muscular energy

24. Qualify the long lasting ability of wood without sustaining damage or wear

- a) Durability
- b) Resistance
- c) Hardness
- d) Toughness

25. State the role of the riving knife and indicate the machine on which it applies:

- a) To expand the kerfs of the cutting tool on the dimension a saw bench
- b) To ease trimming of veneer on the horizontal band saw mill
- c) To support stock during massive cross cutting on a radial arm saw
- d) It facilitates ascribing on the spindle moulder in the absence of tenoning machine.