Coimisiún na Scrúduithe Stáit State Examinations Commission

## Junior Certificate Examination 2012

# Materials Technology (Wood) Ordinary Level Section $\boldsymbol{A}(40$ Marks) 

Monday 18 June<br>Afternoon, 2.00-4.00

## Instructions

(a) Answer any sixteen questions.
(b) All questions carry equal marks.
(c) Answer the questions in the spaces provided.
(d) This booklet must be handed up at the end of the examination.
(e) Write your examination number in the box provided and on all other pages used.

Examination Number: $\square$

| Centre Number |  |
| ---: | ---: |


| Section A |  |
| ---: | ---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5(a) or 5(b) |  |
| Total |  |

## SECTION A-40 MARKS <br> Answer any 16 questions from this section. <br> All questions carry equal marks.

1. From the list given, select the correct name for the nails shown.
A


Round Wire Nail
Staple
Panel pin
Corrugated fastener
Cut tack

NAIL A $\square$ NAIL B

2. Name the tool labelled $\mathbf{A}$ and explain what you would use it for.


Name the tool labelled B and explain what you would use it for.
NAME


USE

3. The diagram shows a block that is to be shaded to look like a piece of wood.

Draw the grain pattern on each of the three surfaces.

4. Name the fitting shown and explain what you would use it for.


NAME


USE

5. The diagrams $\mathbf{A}$ and $\mathbf{B}$ show the seeds from two common Irish trees. Select the correct name for each tree from the given list.

A

| Pine |
| :---: |
| Oak |
| Sycamore |
| Ash |
| Holly |



TREE B

6. Name the power tool shown in the diagram.


NAME

7. List two safety precautions that should be followed when varnishing a piece of furniture.
1.

2. $\square$

8. The diagram shows a wide board that has chipped edges after the end grain was planed.

How can this be avoided?

ANSWER

9. The diagram of the cross section of a tree shows its various parts including the bark. Give one function of the bark of a tree.


FUNCTION
10. Show by means of a tick $(\checkmark)$ what will happen to the following metals if they get wet.

|  | Will rust | Will not rust |
| ---: | :---: | :---: |
| Iron |  |  |
| Zinc |  |  |
| Silver |  |  |
| Copper |  |  |
| Mild Steel |  |  |
|  |  |  |

11. Name the joint shown in the diagram.

12. The diagram shows wood which is being air seasoned.

Give one reason why the wood is raised up on blocks.

ANSWER

13. Diagrams A and $\mathbf{B}$ show two items used in wood turning.

From the list given, name the items.

| Toolrest |
| :---: |
| Calipers |
| Tailstock |
| Forked Centre |
| Faceplate |



B
14. Wood is commonly used for dance floors in nightclubs and hotels.

Identify one important property of wood that makes it suitable for this use.

PROPERTY

15. The diagram shows a wooden Dowel.

Give one reason for the grooves along the length of the dowel.


REASON

16. Name the moulding shown at $\mathbf{A}$ in the diagram.


NAME $\qquad$
17. The diagram shows an incomplete Dovetail joint.

Complete the diagram by drawing the marking out on part $\mathbf{A}$.

18. What is a sash cramp normally used for?


USE

19. The diagram shows a strip heater.

What are strip heaters normally used for?


USE
20. Computer programs are commonly used to model wooden items before making them.

Give one reason for this.


REASON $\qquad$

This booklet must be handed up at the end of the examination.

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