

NAME:.....INDEX NO:.....

ADM:..... Class:.....SIGNATURE:.....

444/1
WOODWORK
PAPER 1
DECEMBER 2021
Time: 2 ½ hours

BUNAMFAN CLUSTER EXAMINATION 2021
WOODWORK
Paper 1
December 2021
Time: 2 ½ hours

INSTRUCTIONS TO CANDIDATES

Candidates should have the following for this examination:

Drawing Instruments
Drawing paper size A3

*This paper has **TWO** sections: **A** and **B**.
Answer **ALL** the questions in section **A**. From section **B**, answer question **11** and any other **THREE** questions.*

All dimensions are in millimeters unless otherwise stated.

*This paper consists of 11 printed pages.
Candidates should check the question paper to ascertain that all the
Pages are printed as indicated and no questions are missing.*

1. (a) State **two** advantages of water stains. (2 marks)

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(b) State **two** disadvantages of spirit stains. (2 marks)

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2. Name **three** types of saws in each of the following categories. (3 marks)

(a) Hand saws

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(b) Curve cutting saws

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3. (a) Explain the cause of each of the following defects. (2 marks)

(i) Wet rot

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(ii) Knots

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(b) List **four** types of glue used in veneering. (2 marks)

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4. State **four** safety rules to observe when using a power drill to drill a hole on piece wood. (4 marks)

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5. With the aid of sketch, explain the toe nailing method of driving nails. (4 marks)

6. With the aid of sketch, Explain how the accuracy of a try square is tested using a board and a straight edge. (4 marks)

7. Using labelled sketch differentiate between a plain Centre bit and screw nosed bit. (4 marks)

8. (a) State **four** factors which may cause closure of business. (2 marks)

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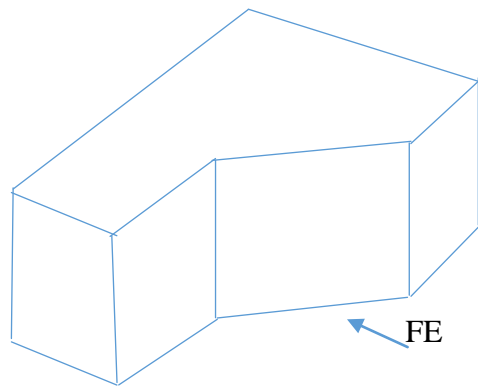
(b) Sketch the following patterns of matching veneers. (2 marks)

(i) Diamond matching

(ii) Slip matching

9. With the aid of labelled sketches, illustrate the **two** methods of boring a through hole. (4 marks)

10. The figure bellow shows a shaped block drawn in an isometric projection. (5 marks)



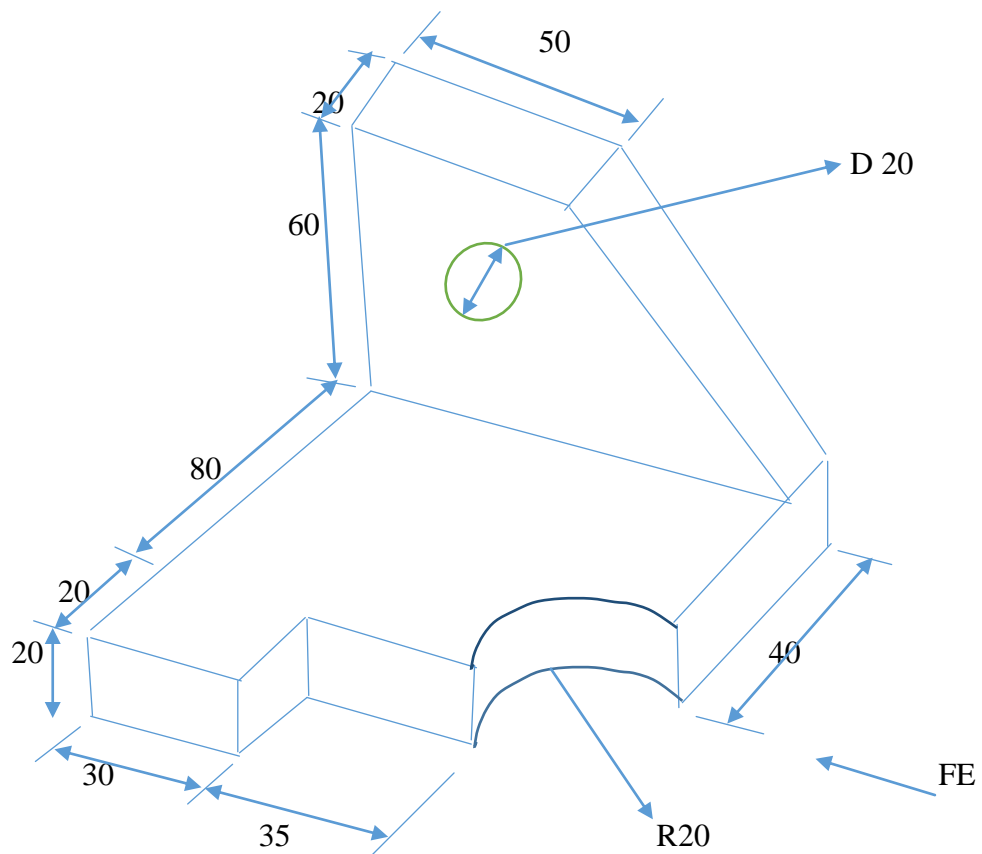
Sketch the **Three** orthographic views in 3rd Angle projection.

SECTION B (60 MARKS)

Answer question 11 and any other THREE questions on this section.

You should not spent more than 25 minutes on question 11.

11. The figure below is a shaped block drawn in pictorial. Draw the following views in 1st Angle orthographic projection; (15 marks)
- (a) The front elevation,
 - (b) The end elevation and
 - (c) The plan



12. (a) Draw and label an exploded pictorial sketch of a haunched mortise and tenon joint. (4 marks)

(b) Outline the procedure of manufacture of plywood. (4 marks)

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(c) State **two** possible causes of ridges on a piece of wood after planing with a jackplane. (4 marks)

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(d) What is meant by the term “grit size” in relation to abrasives. (3 marks)

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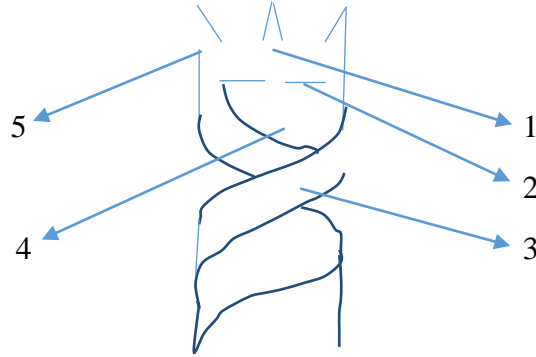
13. (a) State **four** factors that influence the cost of an article. (2 marks)

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(b) By means of sketches explain the three types of drawers. (6 marks)

(c) Make a labelled pictorial sketch of a through single dovetail joint and outline the procedure of constructing the joint naming the tools used at each step. (7 marks)

14. (a) The figure below shows a tool used in wood workshop, Name the tool and label the parts. (3 marks)



- (b) Explain what it means by a “sweep” of a ratchet brace. (1 mark)

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- (c) With the aid of sketches outline the procedures for installing a butt hinge. (8 marks)

- (d) State **three** basic stages necessary in developing a design. (3 marks)

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15. (a) State the cases/situations where drilling of a hole is necessary before driving nails in wood. (3 marks)

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(b) Outline **four** ways by which finishes dry. (4 marks)

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(c) Illustrate the reconditioning process of both cross cut and lip saws. (3 marks)

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- (d) The figure below shows a mitred bridle joint, Draw the exploded view of the joint. (5 marks)

