# **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:**

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# *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.*

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***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)

FE

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

50

20

D 20

60

80

20

20 40

30 FE

35 R20

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 planning 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)

5 1

2

4 3

(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) 