



DEPARTMENT OF EDUCATION
SCHOOL CERTIFICATE EXAMINATIONS

DESIGN AND TECHNOLOGY

13th October 2010

GENERAL INSTRUCTIONS TO CANDIDATES

(To be read out to the candidates before the start of the examinations.)

This booklet contains examinations for the four subjects under Design and Technology.

SECTION 1.	DESIGN AND TECHNOLOGY	1 hour 30 minutes
SECTION 2.	HOME ECONOMICS	1 hour 30 minutes
SECTION 3.	PRACTICAL SKILLS	1 hour 30 minutes
SECTION 4.	COMPUTING	1 hour 30 minutes

WHAT SECTIONS SHOULD YOU ANSWER?

1. IF YOU STUDIED A COMBINATION OF ALL FOUR D&T SUBJECTS?

Students who have studied a combination of all the 4 subject areas under D&T must answer Section 1 only.

2. IF YOU STUDIED ONE SUBJECT ONLY? (HOME ECONOMICS, PRACTICAL SKILLS OR COMPUTING)

- Students who have studied Home Economics only must answer Section 2 only.
- Students who have studied Practical Skills only must answer Section 3 only.
- Students who have studied Computing only must answer Section 4 only.

3. IF YOU STUDIED TWO D&T SUBJECTS?

Students who have studied 2 D&T subjects will sit for those exams in the respective order of the papers as given above.

ANSWER SHEETS

The Answer Sheets are part of this Examination Booklet. Take out the middle pages and separate the Answer Sheets by tearing along the perforation. You may use the unused answer sheets for rough work.

Make sure that you answer each section on the correct Answer Sheet.

EXAMINATION TIMING

When you are told to start, you will have 1 hour and 30 minutes to answer your first section. The invigilator will then tell you to stop writing and will collect all answer sheets used up to that time.

Candidates who sit for only one subject may then leave the room.

Those students taking a second D&T subject will now be told to start answering their second section.

NOTE: YOU MAY NOT LEAVE THE EXAMINATION ROOM AT ANY TIME DURING THE FIRST PAPER. THOSE SITTING FOR A SECOND SUBJECT MAY LEAVE 30 MINUTES AFTER THE EXAMINATION HAS STARTED.

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SECTION 1

DESIGN AND TECHNOLOGY

Time allowed:
1 hour 30 minutes

**Candidates are advised to
fully use the time allocated**

INSTRUCTIONS TO CANDIDATES:

(To be read out by the external invigilator before the start of the examination)

There are 36 questions in this paper. Attempt ALL questions even if you are not so sure of some of the answers.

The Examination is divided into three parts:

PART A: Multiple-Choice (Questions 1 to 20)

PART B: Short-Answer (Questions 21 to 35)

PART C: Extended Response (Question 36)

For each question in **PART A (Questions 1 to 20)** choose the best answer by writing the letter A or B or C or D in the space provided on the **ANSWER SHEET**.

For each question in **PART B and C (Questions 21 to 36)** work out the answer and write the answer in the space provided on the **ANSWER SHEET**.

If you find a question very difficult, do not spend too much time thinking about it. Leave the question out and go on with the rest of the paper. If you have time in the end, return to the difficult questions and think about them more carefully.

Write your answers in BLUE or BLACK (pen or biro).

If you decide to change an answer, make your correction as shown below so that it is clearer to the markers what your final answer is. Do NOT use correction fluid on your answer sheet.



Hand in BOTH the Answer Sheet and the papers used for rough work at the end of the examination.

Extra time will NOT be allowed to complete the examination under any circumstances.

Penalty for cheating or assisting to cheat in national examinations is non-certification.

**DO NOT TURN OVER THIS PAGE AND DO NOT
WRITE UNTIL YOU ARE TOLD TO START.**

PART A (QUESTIONS 1 to 20)

For Questions 1 to 20, choose the best answer by writing A or B or C or D or E in the space provided on your answer sheet.

QUESTION 1

In a design brief, sustainability is considered in the development of projects. This sustainable development is best described as development that

- A. provides an organization with the competitive edge.
- B. meets the needs of the present generation and disregards the past decisions.
- C. compromises the needs of the present to ensure the needs of the future are met.
- D. meets needs of present and future generations.

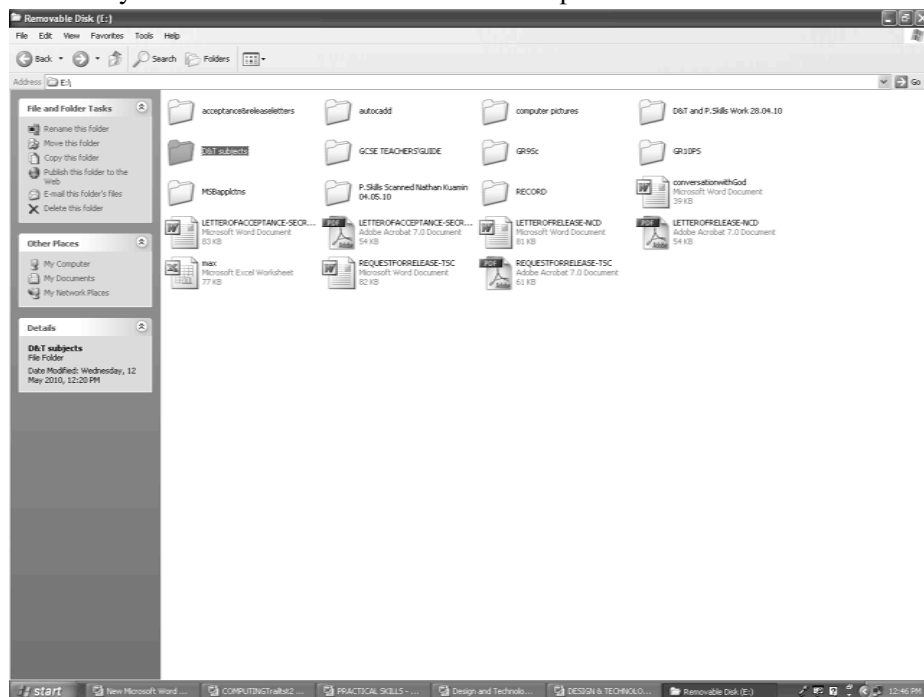
QUESTION 2

‘Beef’ is a type of fresh meat sold in stores and shops. Which animal does it come from?

- A. goat
- B. cattle
- C. sheep
- D. deer

QUESTION 3

How many word documents are visible in the open window?



- A. 3
- B. 4
- C. 8
- D. 11

QUESTION 4

Researching and designing projects involves

- A. gathering information on the need for the commercial success of a project.
- B. investigating and analysing the nature of the target market.
- C. locating and analysing information on all aspect of a design project.
- D. making enquiries through the internet and professional design organizations.

QUESTION 5

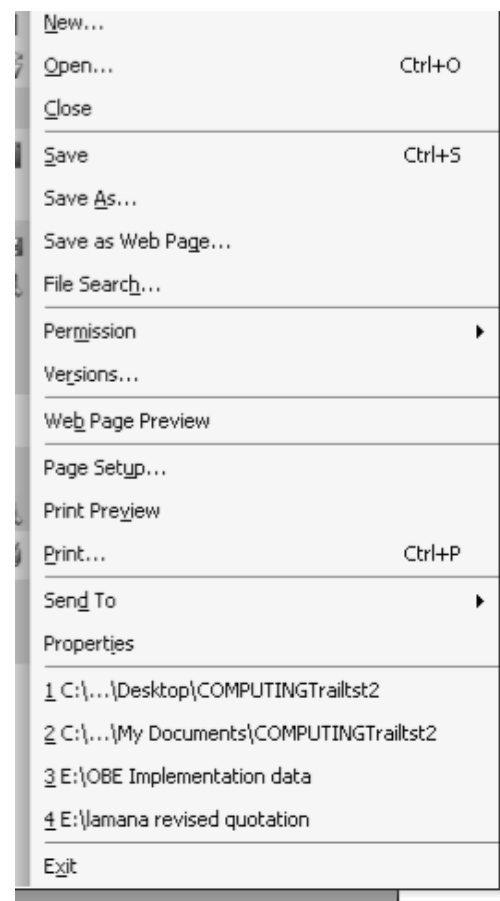
Which of the following nutrients is used to make the protoplasm of body cells and is also made of simpler substances called amino acids?

- A. carbohydrates B. vitamins C. minerals D. protein

QUESTION 6

The options shown in the diagram can be found in a computer standard tool bar known as the

- A. File menu. B. Edit menu.
- C. Insert menu. D. Format menu

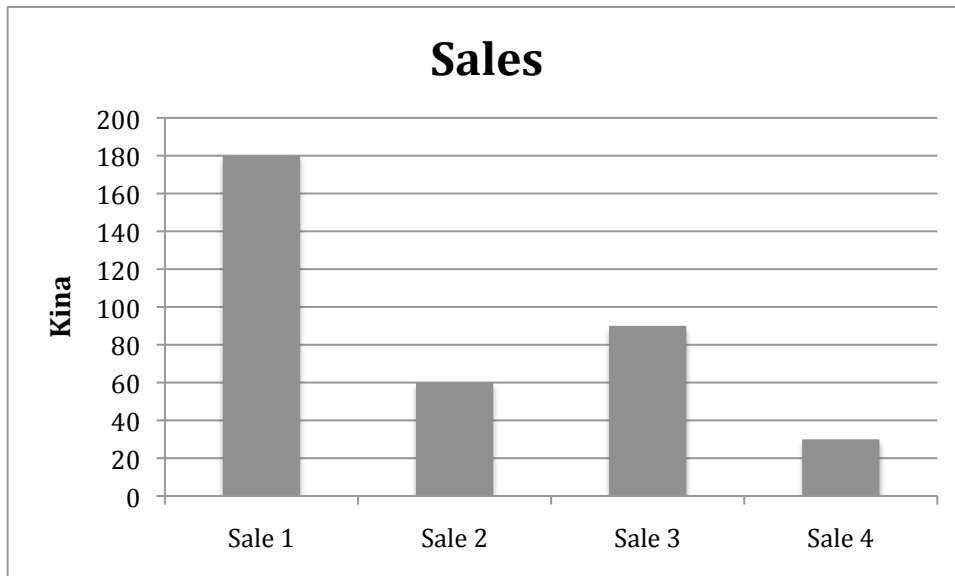
**QUESTION 7**

Fibres are classified under three main groups. They are the plant fibres, animal fibres, and man-made fibres. Which of the following is an example of a plant fibre?

- A. wool B. nylon C. linen D. polyester

For questions 8 and 9 refer to the graph below, which shows project sales income for a product being developed in a school.

The department head was instructed to sell the completed items at K15 each, based upon the directive enforced by the Board of Governors of the school. Upon completion of the project, 27 items had been produced.



QUESTION 8

How many items did the school sell at sales 1?

- A. 11 B. 12 C. 13 D. 14

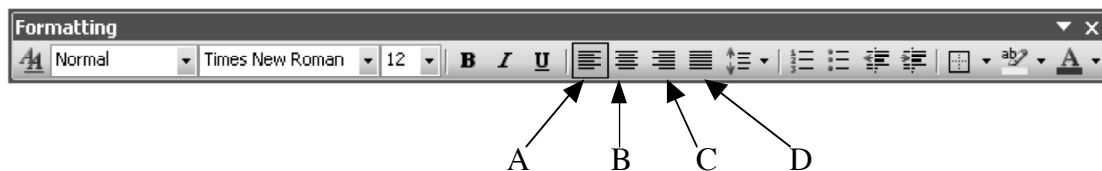
QUESTION 9

How many items remained unsold after the completion of sale 4?

- A. 12 B. 9 C. 6 D. 3

QUESTION 10

Refer to the information below.



Which text alignment style was used to adjust the text below?

Tom's dog was killed by a car this morning. Tom found out about it when he went to collect the morning papers. He dragged his dog into his yard, dug a hole and buried it.

Use the information below on fibre materials to answer questions 11 and 12.

- I. wool strings, agave strings, tulip strings
- II. twines strings, coconut fibres, cane plies
- III. nylon strings, rayon strings, pandanus leaves
- IV. bamboo plies, sago blinds, pitpit plies

QUESTION 11

Which list contains all the materials that could be used for the walls of houses?

- A. IV B. III C. II D. I

QUESTION 12

Which list contains all the materials that could be used to knit into *bilums*?

- A. IV B. III C. II D. I

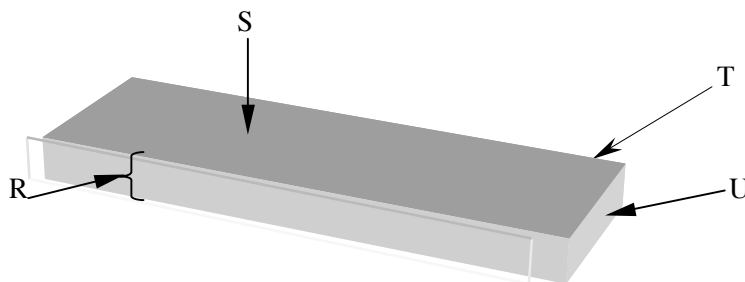
QUESTION 13

In an orthographic projection, an object is drawn from three different angles. When viewing the object from above, the correct name of the view will be

- A. front view B. left side view C. right side view D. plan

QUESTION 14

The parts of a timber plank labelled as R, S, T, U would, in order, be the



- A. end, face, edge and thickness. B. thickness, face, edge and end.
C. thickness, end, face and edge. D. edge, end, thickness and face.

QUESTION 15

Which of the following pencils is the softest of all?

- A. 6B B. 5H C. 3B D. 2H

QUESTION 16

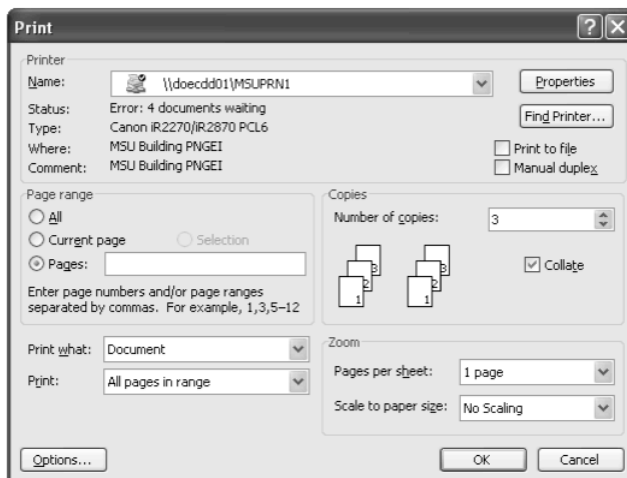
Why doesn't rain come through the fabric of an umbrella?

Because the fibre of the fabric is

- A. closely packed and tightly woven. B. very absorbent and dries easily.
C. non-moisture absorbent and light-weight. D. extremely strong and crease resistant.

For Questions 17 to 18 refer to the features of Windows XP Screen below.

Kila wants to print the first three pages of a 10-page document. He has entered the following options in the print dialogue box.

**QUESTION 17**

How many sheets of paper will be used?

- A. 9 B. 6
C. 3 D. 1

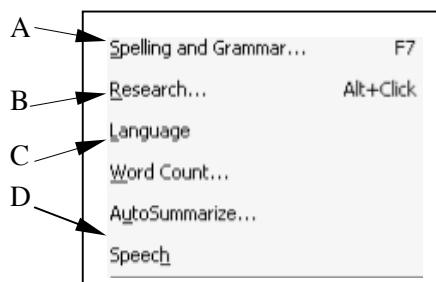
QUESTION 18

How should Kila specify the page range for the first three pages?

- A. 1-3 B. 1 to 3
C. 1,3 D. 1:3

QUESTION 19

What option should be selected to use the computer's 'Thesaurus'?

**QUESTION 20**

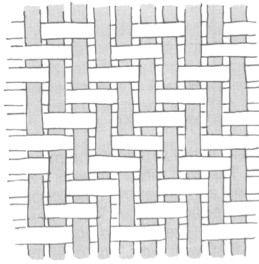
Valerie wanted to cook some vegetables and meat in a quick and easy cooking method. What would be the appropriate method of cooking to be used?

- A. steaming B. boiling C. stewing D. casseroing

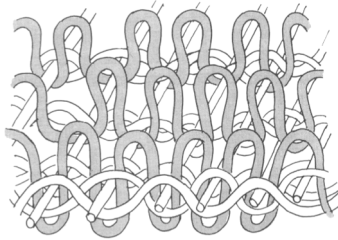
PART B: (QUESTIONS 21 to 35)

For Questions 21 to 35, work out the answer and write it on the answer sheet.

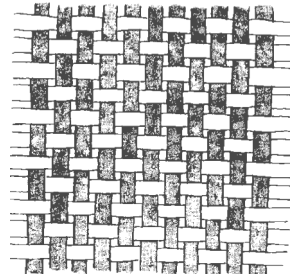
For question 21 and 22 refer the following fabric weaves diagrams below.



Weave I



Weave II



Weave III

QUESTION 21

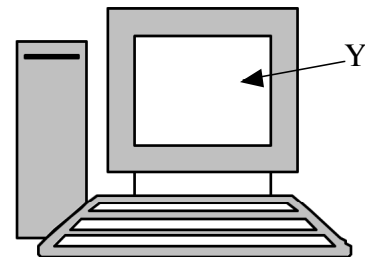
Which of these weaves is known the *pile weave*?

QUESTION 22

Name the type of weave that the weft thread passes over one warp thread and under the next, continuing in this manner across the cloth.

QUESTION 23

Name the part of the computer setup labelled 'Y'.

**QUESTION 24**

What computer term is used to refer to keyboards, mouses, and scanners?

QUESTION 25

What is the name of the type of milk without fat, leaving it with no vitamin A and D?

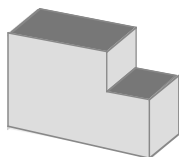
QUESTION 26

This is the main chip in the computer. It carries out instructions, performs calculations and manages the flow of information in a computer system. Name it.

QUESTION 27

The RAM and ROM are both types of _____.

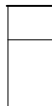
Use the illustrations below to answer questions 24, 25 and 26.



Drawing I



Drawing II



Drawing III

QUESTION 28

Which of the drawings is the detailed drawing of the block?

QUESTION 29

Which of the illustrations shows an oblique drawing?

QUESTION 30

The drawing that is drawn from three-equal axes would be drawing number?

QUESTION 31

Which of the following groups of food contains cereal products that are made from one type of cereal only.

Group I
Wheatmeal
Cornflour
cornflakes

Group II
roasted oats
pasta
rice

Group III
Weetbix
spaghetti
macaroni

QUESTION 32

Which of the following computer components is an output device?

Hard Disk, Compact Disk, Floppy Disk, Printer

QUESTION 33

Name the table that is used to support work with all its necessary operations in woodwork.

QUESTION 34

Geraldine wanted to draw a 30° line with her T-square. What is the appropriate set square she needs to use?

QUESTION 35

Name a technique used on fabrics in the process of colouring?

PART C: (QUESTION 36) 5 marks

For QUESTION 36, refer to the information below. Write the answer in the space provided on your answer sheet.

CONSTRUCTING A SCREEN FOR PRINTING*DESIGN BRIEF*

As your project in Design and Technology, you are required to construct a screen to print designs on a plain material.

TASK

Construct a screen that is 300 mm in length and 200 mm in width.

CONSIDERATION AND CONSTRAINTS

You are given a 1000 mm length of timber which is 50 mm in width and 20 mm in thickness.

You are required to cut this timber into four pieces. Two pieces should be 300 mm in length and other two have to be 200 mm length. The four pieces of timber have to be nailed together with the 200 mm pieces to be in between the ends of 300 mm pieces. You will need eight 40 mm nails to hold the timber pieces. A piece of screen of 440 mm in length and 340 mm in width should be stretched and stapled around the top of the complete screen.

QUESTION 36

The steps in the construction of the Printing screen frame are not in order. Put them into their correct order by writing the numbers in the correct sequence on the answer sheet.

STEPS

- I. Nail two nails at one end of a 300 mm piece and into a 200 mm piece end grain to hold them together.
- II. From leftover length of timber, cut two 200 mm pieces.
- III. Stretch the screen on the level top of the frame and staple firmly.
- IV. Out of the length of timber, cut two 300 mm pieces.
- V. Do the same to the other three ends.

END OF SECTION 1

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SECTION 2**HOME
ECONOMICS**

**Time allowed:
1 hour 30 minutes**

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PART A (QUESTIONS 1 to 20)

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QUESTION 1

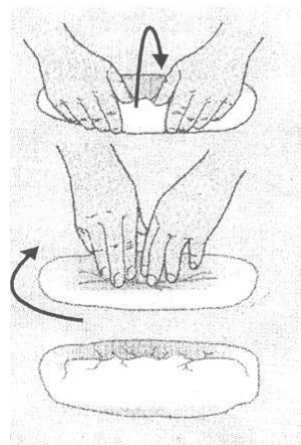
Which of the following is an example of a Natural Animal fibre?

- A. Nylon B. Flax C. Asbestos D. Wool

QUESTION 2

What process is clearly being illustrated in this diagram?

- A. rolling and folding B. creaming
C. beating and whisking D. rubbing in

**QUESTION 3**

Towels and nappies are made from pile woven fabrics so that they can be

- A. easily bleached and dried. B. strong, durable and fire proof.
C. moist-absorbent and soft D. resistant to colder climate.

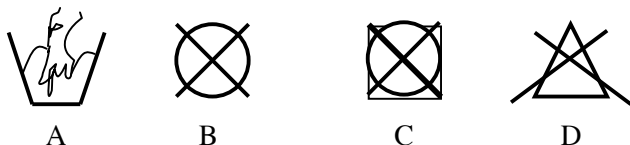
QUESTION 4

What nutrition-related disease is associated with chronic lack of iodine in the diet?

- A. Scurvy B. Goitre C. Beriberi D. Grille

QUESTION 5

Which symbol tells you that the garment should not be bleached?

**QUESTION 6**

Sports wears and T-Shirts are less rigid and more stretchable. They are examples of

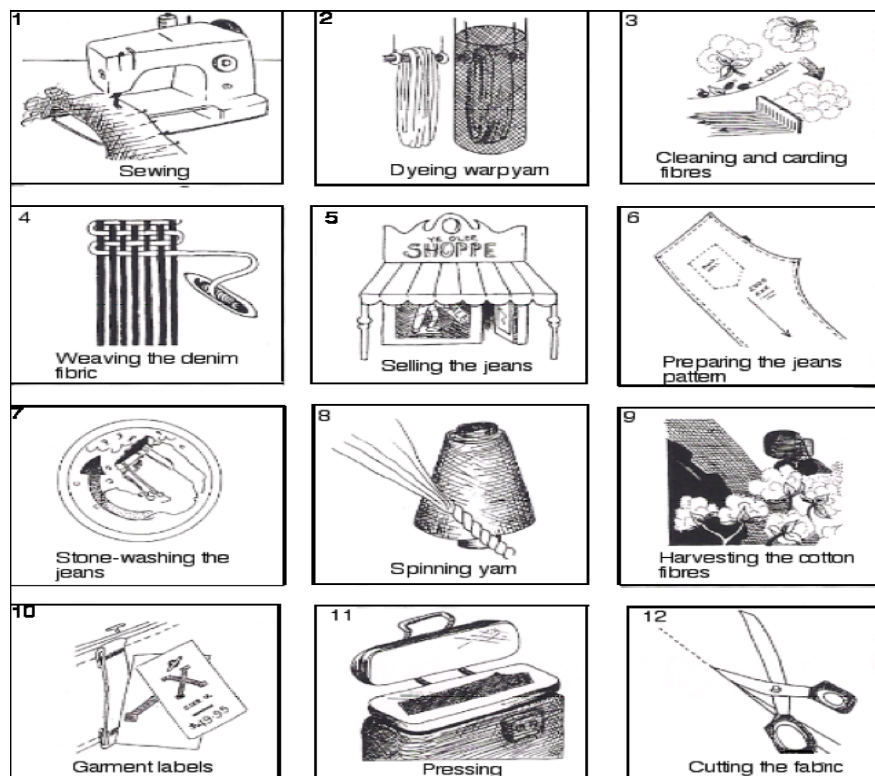
- A. bonded fabrics. B. woven fabrics.
C. knitted fabrics. D. non-woven fabrics.

QUESTION 7

Which list contains equipment used for measuring ingredients in food preparation?

- A. Teaspoon, $\frac{1}{2}$ cup, scale, jug
- B. Thermometer, strainer, tablespoon, mug
- C. Frying pan, 1 cup, temperature, broom
- D. Stove, $\frac{3}{4}$ cup, measuring jug, kettle.

For Questions 8 and 9, refer to the illustration below.



Each of the pictures illustrates a specific step in the manufacturing process for jeans. These jeans are stone wash-denim, that is, they have been made from 100 percent cotton denim fabric and have been specifically treated to obtain the fashionable stone-wash look.

QUESTION 8

How many processes will the fibre go through before being woven into fabric?

- A. 2
- B. 3
- C. 4
- D. 5

QUESTION 9

Which aspect of the process will provide information on how to take care of the jeans?

- A. stone-washing the jeans
- B. pressing
- C. selling the jeans
- D. garment labels

Questions 10 and 11 refer to the following information.

Fibre properties								
	Cotton	Wool	Silk	Flax	Rayon	Polyester	Acrylic	Nylon
Absorbent	****	****	****	****	***		**	
Water repellent					**	****	***	****
Soft	***	****	**	*	***	***	***	***
Strong	***	*	***	****		****	***	****
Cool	****		****	****	**	**		****
Warm	**	****	***	**		*	****	
Windproof					****	***	***	****
Easy to wash	***	*			**	***	***	***
Star rating system:	**** = Excellent *** = Good ** = Not very good * = Poor							

QUESTION 10

Which property makes Flax suitable for warmer climates?

- A. easy to wash B. soft C. cool D. strong

QUESTION 11

Which of the fabrics is commonly used for making tea towels, table clothes and bed sheets?

- A. wool B. cotton C. polyester D. linen

QUESTION 12

To prevent oil from spilling while deep-frying, it is best to

- A. Dry the foods before adding to the oil.
 B. Drop the foods quickly into the pot.
 C. Use wooden spoons only for stirring.
 D. Put the foods in the pot before heating the oil.

QUESTION 13

Cross-contamination is a

- A. method used to prevent food poisoning.
 B. sign of practices and attitudes that are unhygienic.
 C. transfer of harmful bacteria from one thing to other.
 D. condition by which bacterial will survive and multiply.

QUESTION 14

Protein is used by the body for growth and repairing of tissues. Which group of people below have a special need for protein?

- A. sports people
- B. growing children
- C. the elderly
- D. hard working farmers

QUESTION 15

Which method of fabric making is traditional and common in Papua New Guinea?

- A. weaving
- B. threading
- C. matting
- D. knitting

QUESTION 16

Burns and scalds are common accidents in the kitchen. Scalds are caused by moist heat, while burns are caused by dry heat.

How should a scald on the hand be treated?

- A. Break swollen blisters formed and leave open to dry.
- B. Put the hand under running water.
- C. Apply antiseptic and cover with a band aid.
- D. Apply butter to the area.

QUESTION 17

Which of the following is the best description of casseroles, a method of cooking?

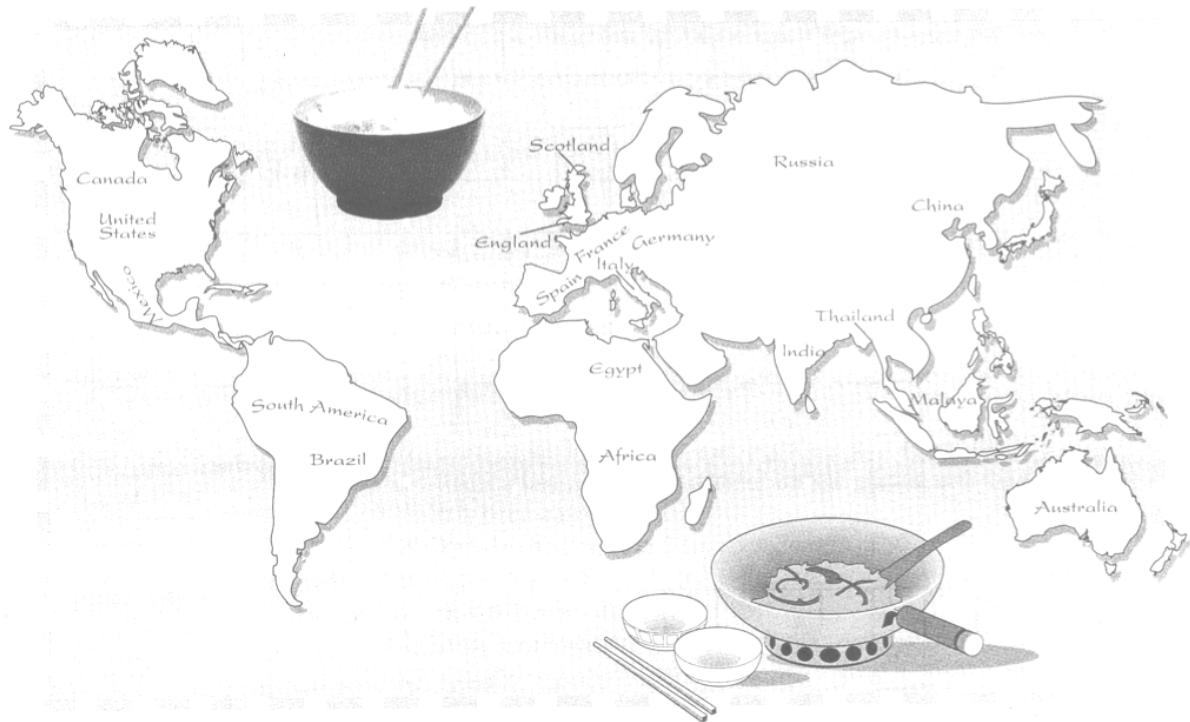
- A. Food placed on a baking tray and cooked in an oven.
- B. Food placed on a rack and cooked over hot charcoal.
- C. Food placed in a dish, covered and cooked in an oven.
- D. Food covered in leaves and cooked over hot stones.

QUESTION 18

A finish applied to natural fibres to make them smoother as well as cause them to swell and shrink lengthways is called

- A. sanforisation.
- B. mercerisation.
- C. napping.
- D. crease resistance.

Questions 19 and 20 refer to the following information.



Below are listed many countries whose staple food is rice.

- | | | | |
|--------------|----------------------|--------------|---------------|
| * Bangladesh | * Dominican Republic | * Korea | * Panama |
| * Brazil | * Gambia | * Liberia | * Philippines |
| * Burma | * Guyana | * Madagascar | * Singapore |
| * Cambodia | * India | * Malaysia | * Surinam |
| * China | * Ivory Coast | * Mauritius | * Thailand |
| * Colombia | * Japan | * Nepal | * Vietnam |

QUESTION 19

In which two Continents are most of these rice-eating countries located?

- | | |
|-----------------------------|-----------------------------|
| A. Asia and Africa | B. North America and Africa |
| C. Russia and South America | D. Europe and North America |

QUESTION 20

Which of these statements is true about rice?

- A. It originated from Scotland and has spread across the world.
- B. It is eaten in almost all parts of the world.
- C. It can be eaten using chop sticks.
- D. It is popular among the Asian people.

PART B: (QUESTIONS 21 to 35)

For Questions 21 to 35, work out the answer for each question and write the answer in the space provided on the answer sheet.

QUESTION 21

A colander is a cooking utensil used to separate solid foods from the water after cooking. What type of cooking method is this referring to?

Refer to the table to answer questions 22 and 23.

Fibres	Strength	Resilience	Absorbency
Wool	Weak Fibre	Very good due to its elasticity	Very good
Flax	Very strong, much stronger when wet	Creases and wrinkles badly	Very absorbent
Cotton	Strong fibre	Creases badly	Excellent absorbency
Silk	Very strong	Good wrinkle recovery	Slow absorbency

QUESTION 22

Which fibre can be used to make clothes that stretch or warm clothes?

QUESTION 23

Which fibre can be mistaken for rayon unless the label on its bolt is read?

QUESTION 24

What method of cooking takes place with low heat applied for a long time?

QUESTION 25

What is the common term for wrong nutrition or wrong feeding?

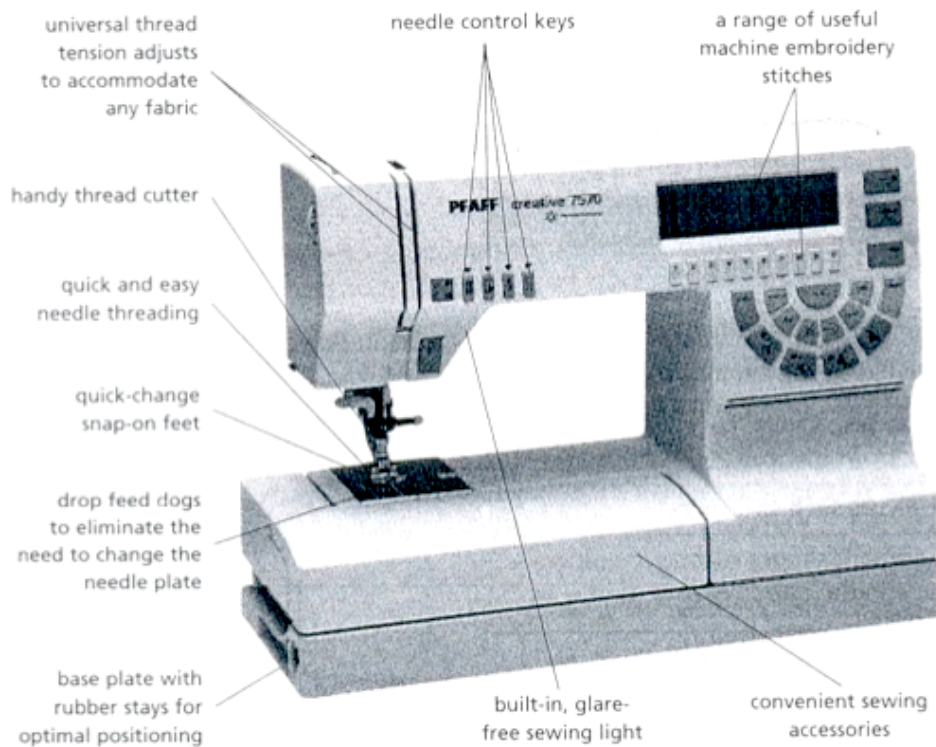
QUESTION 26

What is the most common method of fabric construction?

QUESTION 27

Name the method of colouring fabric where the colours are applied onto the fabric?

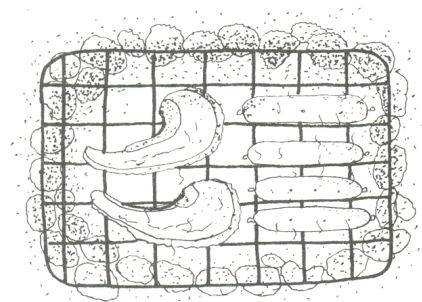
QUESTION 28



What type of sewing machine is shown in this picture?

QUESTION 29

What is the method of cooking shown in the illustration?



QUESTION 30



The diagram opposite showed a popular method of _____ a yarn in Papua New Guinea.

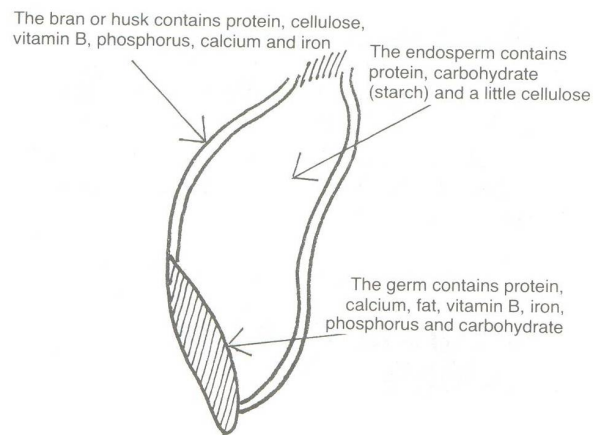
QUESTION 31

Carbohydrate is largely obtained from staple foods eaten by people. Foods like kaukau, sago, etc contain a lot of carbohydrates in the form of _____ and glucose.

QUESTION 32

The diagram below illustrates the parts of a cereal grain.

According to the information given, it could be concluded that a cereal grain does not contain _____ in its germ.

**QUESTION 33**

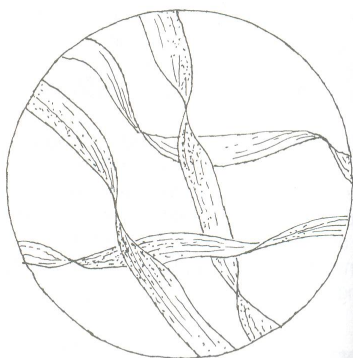
Name the type of dyeing where the thread is coloured after spinning but before being woven or knitted into fabrics?

QUESTION 34

Scones and biscuits are popular examples of baked foods. Which one is made best using yeast?

QUESTION 35

What type of fibre does the microscopic view below represents?



PART C: (5 marks)

For question 36 write the answer in the space provided on your answer sheet.

QUESTION 36

Here is a recipe to bake bread.

*Bread***Ingredients:**

4 teaspoons dried yeast	3 cups flour
2 teaspoons sugar	2 teaspoons salt
1 cup warm water	2 teaspoons margarine

Procedural Steps 1 – 3 have been done for you. They are now in their correct order in the preparation for baking. But steps 4 – 8 have not been done for you so they are not in their proper order of preparation for baking.

Rearrange the remaining steps 4 – 8, by writing them in their correct order of preparation for baking.

Method:

1. Mix the yeast, sugar and warm water in a small jug. Allow to stand about 10 minutes until bubbles appear.
 2. Sift the flour and salt into a bowl. Rub in the margarine.
 3. Add the yeast liquid to the flour mixture. Stir into a soft dough.
- *Bake in a moderate oven until cooked. A loaf takes about 20 minutes. Rolls take 10 minutes.*
 - *Place the dough into a bowl. Cover with a damp cloth. Stand in a warm place until the mixture doubles in size. (This is quicker on the tropical coast than in the cooler highlands.)*
 - *Let the bread cool and serve it buttered with your favourite filling.*
 - *Knock the dough down. Shape it either into a loaf or into rolls. Place in a greased oven tin. Let it stand until it doubles in size again.*
 - *Turn onto a floured board and knead well.*

END OF SECTION 2

SECTION 3**PRACTICAL
SKILLS**

Time allowed:
1 hour 30 minutes

**Candidates are advised
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Write your answers in BLUE or BLACK (pen or biro).

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Hand in BOTH the Answer Sheet and the papers used for rough work at the end of the examination.

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**DO NOT TURN OVER THIS PAGE AND DO NOT
WRITE UNTIL YOU ARE TOLD TO START.**

PART A (QUESTIONS 1 to 20)

For each question, choose the best answer by writing A or B or C or D in the space provided on the ANSWER SHEET.

QUESTION 1

Which statement best describes the term 'Universal Language'?

- A. Language signs used by the deaf and dumb.
- B. General signs and logos common around the world.
- C. Ability of speaking in many languages.
- D. Spoken language that is restricted to only one country.

QUESTION 2

In Technical drawing, alphabet of lines is important because

- A. we use Australian standards in constructions.
- B. there are three main types of lines.
- C. any shape or drawing is made out of lines.
- D. in dimensioning different types of lines are used.

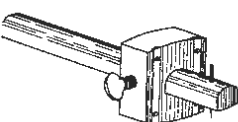


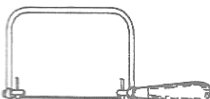
QUESTION 3

What are the two appropriate uses of the T' Square?

- A. For drawing vertical lines and setting papers on the drawing board.
- B. Extracts accurate drawing from sketches and squares them up.
- C. Used for drawing straight vertical and horizontal lines.
- D. Enables proper paper setting and aids accurate use of the set square.

QUESTION 4

Which of the following tools is a 'marking gauge'?

- | | | | |
|----|---|----|--|
| A. |  | B. |  |
| C. |  | D. |  |

QUESTION 5

There are several types of planes used in woodwork with specific functions. Which description below best suits the function of a trying or jointer plane?

- A. Used for smoothening in timber preparation.
- B. For planing timbers with larger and longer surface areas.
- C. For planing against the grain.
- D. Planing mainly timbers along the grain.

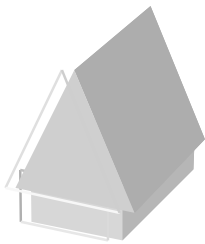
QUESTION 6

All types of tapes and rulers are graduated in

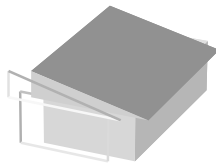
- A. millimetres and metres.
- B. centimetres and metres.
- C. millilitres and centilitres.
- D. millimetres and centimetres.

QUESTION 7

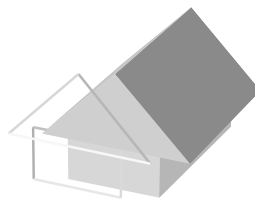
Which type of roof is commonly known as the 'Double Pitched roof'?



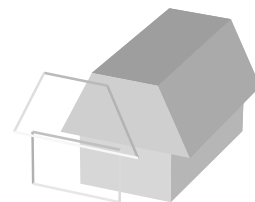
A.



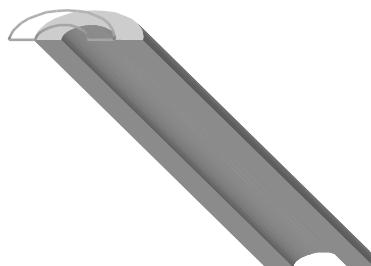
B.



C.



D.

QUESTION 8

The above diagram shows a timber defect. The timber as shown has its face not flat but the edge is straight. What is the name given to this defect or curvature?

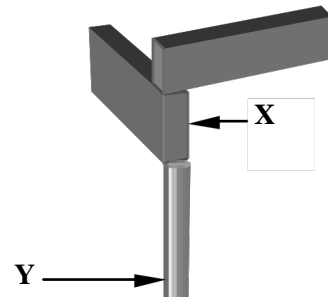
- A. cup
- B. twist
- C. spring
- D. bow

For Questions 9 and 10 refer to the illustration below.

QUESTION 9

The diagram shows a section of a house under construction where timbers are all used. What common building term is given to the timber labelled “X” in the diagram?

- | | |
|---------|----------------|
| A. pier | B. floor joist |
| C. stud | D. bearer |



QUESTION 10

What common building term is used to describe the timber labelled “Y” in the diagram?

- | | |
|----------------|------------|
| A. stump | B. ant cap |
| C. floor joist | D. bearer |

QUESTION 11

Machine shaped timber that is used for the external part of the house is known as

- | | |
|-------------------|-------------------|
| A. fibro. | B. plywood. |
| C. weather board. | D. particleboard. |

QUESTION 12

Where would you normally see a “Rafter”?

- | | |
|----------------|---------------|
| A. roof frame | B. wall frame |
| C. floor frame | D. door frame |

QUESTION 13

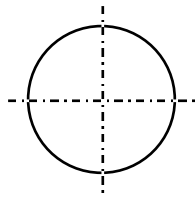
The blades of any cutting tool should be

- A. given little attention as it is not important.
- B. kept sharp all the time for use.
- C. blunt as there is little chance of cutting yourself.
- D. grinded before use every time.

QUESTION 14

Solid, heavy lines found on drawings are called

- | | |
|------------------------|----------------------|
| A. dimension lines. | B. centre lines. |
| C. construction lines. | D. visible outlines. |

QUESTION 15

What does the diagram represent when used in a drawing?

- A. course of section plane
- B. centre of a circle
- C. hidden outlines
- D. visible outlines

QUESTION 16

Which of the lists below correctly contains the common bench tools?

- A. woodwork vice, G-clamp, bench stop and bench hook
- B. bench hook, G-clamp, try square and sliding bevel
- C. G-clamp, woodwork vice, wood file and hammer
- D. bench stop, marking gauge, rulers and nails

QUESTION 17

A tool specifically used for marking a mortise and tension joint construction is

- A. marking gauge.
- B. carpenters rule.
- C. mortise gauge.
- D. tape measure.

QUESTION 18

A job that requires a percussion tool is

- A. sawing.
- B. chiselling.
- C. marking.
- D. gauging.

QUESTION 19

The ideal abrasive materials for working in wet or dry conditions is

- A. glasspaper.
- B. sandpaper.
- C. garnet paper.
- D. emery cloth.

QUESTION 20

The electrical tool used in the process of cutting circular holes is the

- A. electric drill.
- B. angle grinder.
- C. router machine.
- D. bench saw.

PART B (Questions 21 to 35)

For each question work out the correct answer and write it in the space provided on the answer sheet.

QUESTION 21

The holding power of nails is improved by the use of the following techniques.

Technique/Holding Power	Description	Example of Nail types that address the techniques
I. Ring barbs	Along the nail shank	Bullet head nails, spring head nails
II. Square shank section or twisted shank	Shaped shank	Spring head nails, square copper nails, cut tack nails
III. Skew nailing	A type of nailing technique	Bullet head nails
IV. Flat or wider nail head	Shape of head or with additional attachment	Flat head nails, spring head nails, clout nails
V. Clinching nailing	A type of nailing technique	Flat head nails

According to the above table, which nail is likely to have the best holding power compared others?

QUESTION 22

What angle is used to draw all sloping lines in an isometric drawing?

QUESTION 23

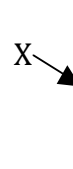
The 4B pencil is not suitable to draw lines in technical drawing because its lead is too _____?

QUESTION 24

Which building member is used in the construction of a typical wall frame to prevent lateral forces such as winds or internal construction pressures from collapsing the wall?

QUESTION 25

The line marked X is one of the lines used in technical drawing. State the name of this line.

**QUESTION 26**

Green timber is carefully stacked in the open prepared foundations with air spaces between the boards to allow air to circulate freely. This method is slow and dependent on the prevailing weather conditions. The above description refers to the process of _____ seasoning.

QUESTION 27

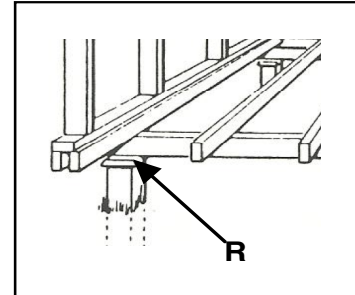
Which category of tool does a combination square come under?

QUESTION 28

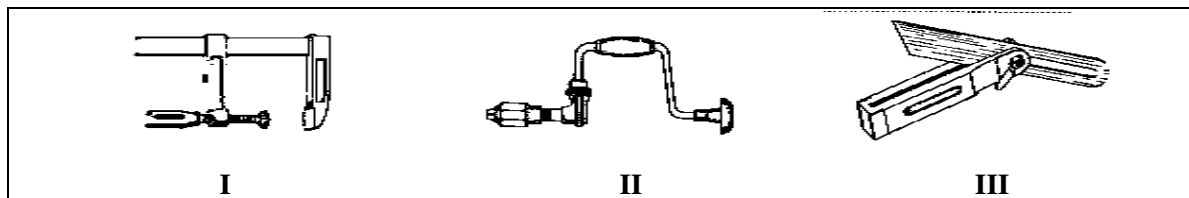
Veneers are produced by either slicing or peeling logs. Which of the two methods is the most economical one?

QUESTION 29

The purpose of the part labelled **R** is to prevent_____.



For questions 30 to 32, use the following tools. Write either I, II or III as your answer.

**QUESTION 30**

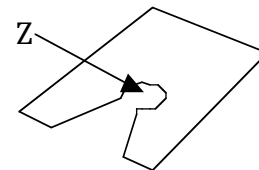
What tool is used when copying a given angle and tracing it to another piece of timber?

QUESTION 31

What tool is used for gluing two pieces of timber together without the reinforcement of nails?

QUESTION 32

What tool is used with a cutting tool to make the part labelled **Z** on coconut scraper legs?

**QUESTION 33**

The length of a screw is 300mm. What would be the new length of screw if the scale of 1:4 is used?

QUESTION 34

State the building member that is used in the construction of a typical wall frame and is positioned between studs, approximately in the centre of the height of the wall?

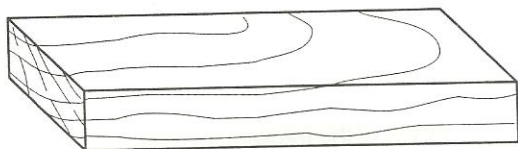
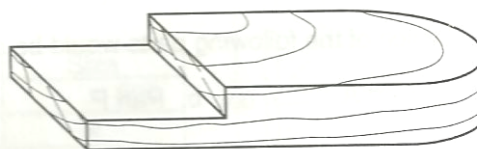
QUESTION 35

State one of the methods of dimensioning used in drawings?

PART C (Question 36)**5 marks****QUESTION 36**

Write the answer in the space provided on the ANSWER SHEET.

Below are two similar pieces of timber labelled X and Y. Timber X was used to construct the rebate joint (timber Y).

**X****Y**

The steps given are not in the correct order. Re-arrange them in their correct order of construction and write the correct sequence of letters P, Q, R, S, T, on the answer sheet.

- P. Cut close to the line but on the waste side and chisel out the waste
- Q. Measure in from the other end the same measurement as the width
- R. Use the width of the timber to mark the cut of the rebate on one end
- S. Square all around the line to be cut, gauge the thickness of rebate and mark out the waste
- T. Mark the centre of the width, draw the curve with divider and rasp to round curve

END OF SECTION 3

SECTION 4**COMPUTING**

Time allowed:
1 hour 30 minutes

**Candidates are advised
to fully use the time
allocated**

INSTRUCTIONS TO CANDIDATES:

(To be read out by the external invigilator before the start of the examination)

There are 36 questions in this paper. Attempt ALL questions even if you are not so sure of some of the answers.

The Examination is divided into three parts:

PART A: Multiple-Choice (Questions 1 to 20)

PART B: Short-Answer (Questions 21 to 35)

PART C: Extended Response (Question 36)

For each question in **PART A (Questions 1 to 20)** choose the best answer by writing the letter A or B or C or D in the space provided on the **ANSWER SHEET**.

For each question in **PART B and C (Questions 21 to 36)** work out the answer and write the answer in the space provided on the **ANSWER SHEET**.

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PART A (QUESTIONS 1 TO 20)

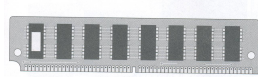
For each question, choose the best answer by writing A or B or C or D, etc. in the space provided on the ANSWER SHEET.

QUESTION 1

Which one of the following is a primary storage device?



A. Hard Disk



B. RAM



C. Compact Disk



D. Floppy Disk

QUESTION 2

Which one of the following can be found on the desktop?

A. start button

B. minimize button

C. scroll bar

D. menu bar

QUESTION 3

What is the appearance of the mouse pointer when it is busy working in the background?



A.



B.



C.



D.

QUESTION 4

Which of the following buttons enlarges the applications window when clicked?



A.



B.



C.



D.

QUESTION 5

The term used to describe all the physical components of a computer is

A. software

B. firmware

C. hardware

D. shareware

QUESTION 6

What instructs the physical component of the computers on what to do?

A. software

B. keyboard

C. mouse

D. hardware

QUESTION 7

Which list contains only the input devices?



Monitor



CPU



laser printer



CD-ROM Drive



Speakers



Mouse



Floppy Drive



Keyboard



Floppy Disk



Scanner

- | | |
|-----------------------------------|-----------------------------------|
| A. CPU, Floppy Disk, CD-ROM Drive | B. Floppy Drive, Printer, Scanner |
| C. Printer, Speakers, Monitor | D. Keyboard, Mouse, Scanner |

QUESTION 8

Which formatting feature changes the thickness of the letters?

- | | | | |
|---------|-----------|--------------|--------------|
| A. bold | B. italic | C. underline | D. alignment |
|---------|-----------|--------------|--------------|

QUESTION 9

Justifying a paragraph means

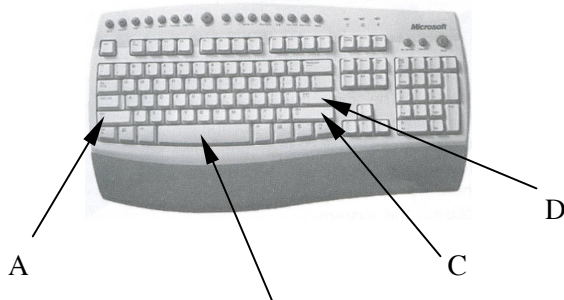
- | | |
|-----------------------|-------------------------|
| A. moving text. | B. changing the text |
| C. aligning the text. | D. correcting the text. |

QUESTION 10

You have typed two words together as shown

Computerassignment

Which keyboard key should be pressed to separate the two words with the cursor placed between the 'r' and the 'a'?



B

QUESTION 11

Where should the page numbers be placed so that they appear at the bottom of each page?

- A. in footnotes B. in the headers C. in text boxes D. in the footer

QUESTION 12

You have a document file called 'Computer Generation' open. Which of the following actions would allow the document file to be saved under another name?

- A. right click on the icon B. select Save from the File Menu
C. select Save As from the File Menu D. use short cut keys Ctrl-S

QUESTION 13

You have selected information from the electronic encyclopaedia. Which command(s) should be used to place this text in a word processing document?

- A. copy and paste B. new document C. insert and save D. replace

QUESTION 14

Look at the way the word 'computers' has been formatted in the next line.

Learning ***computers*** is fun

Which of the following best describes the format of the word 'computers'?

- A. underlined and smaller font B. larger font and in upper case
C. bold, underlined and italic D. in italics, bold and larger font

QUESTION 15

Which image below shows the view of the above image after it has been flipped horizontally?

- A.  B.  C.  D. 

QUESTION 16

The _____ allows you to organise and develop the content of the presentation.

- A. View Pane B. Slide Sorter C. Outline Pane D. Status Bar

QUESTION 17

Which of the following is an example of one type of organisation chart??

- A.  B.  C.  D. 

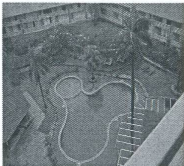

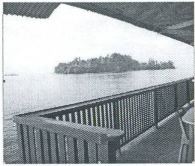

QUESTION 18

The _____ tab provides a quick and easy way of creating a presentation.

- A. outline B. Auto Shapes C. Word Art D. Clip Art

QUESTION 19

You are setting the timings for a slideshow.

1	2	3	4
			
⊕00.06	⊕00.03	⊕00.04	⊕00.02

Which slide will be on the screen for the least time?

- A. 4 B. 3 C. 2 D. 1

QUESTION 20

While typing your assignment, you noticed a green wavy line appeared in your text under several of the words.

What does the green wavy line under the words indicate?

- A. The text is underlined.
 B. The text contains a spelling error.
 C. The text has been highlighted.
 D. The grammar in the text is incorrect.

PART B: (QUESTIONS 21 TO 35)

For Questions 21 to 35, work out the answer for each question and write the answer in the space provided on the answer sheet.

QUESTION 21

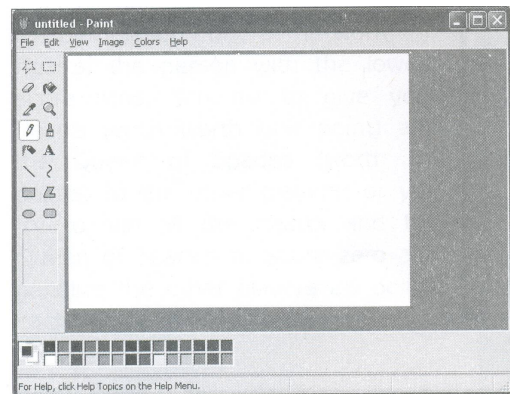
Which view allows the user to specify the arrangement of placeholders in a Power point slide presentation?

QUESTION 22

Select the list with the correct procedures followed to open the above document. **Write the number next to the list in the space provided on the answer sheet.**

Lists:

- I. Start > Program > Paint > Accessories
- II. Start > Accessories > Program > Paint
- III. Start > Paint > Accessories > Program
- IV. Start > Program > Accessories > Paint

**QUESTION 23**

Which of the following is a video file?
Frogs.avi, Fish.png, Toads.mp4, Orchids.wav

QUESTION 24

When a document is 'Read Only' it cannot be changed or _____.

QUESTION 25

Which menu option will allow a user to see how a document will look before it is printed?

File > Print, File > Page Setup, File > Print Preview, View > Print Layout

QUESTION 26

A list of commands available in a view like the one shown above is called a _____.

QUESTION 27

Which keys are held down on the keyboard in order to 'paste' something into a document?

QUESTION 28

What key should be used create spaces between paragraphs?

Questions 29 and 30 refer to the illustrations below.



Figure 1



Figure 2

In order to achieve the image shown in figure 2, figure 1 was first

29 and then 30.

QUESTION 31

What is the name given to the picture on the screen that represents a specific file or program?

QUESTION 32

What is button clicked to make the Windows application occupy the entire screen.

QUESTION 33

What allows users to move horizontally and vertically to display the contents of a document.

QUESTION 34

What is a rectangular panel on your screen that displays information and operates a particular program?

QUESTION 35

What is the item that stores deleted files and allows you to recover them?

PART C: Question 36 – (5 marks)

For question 36 write the answer in the space provided on your answer sheet.

QUESTION 36

TASK 1. *Copy a whole document and paste it on a new word document. Rename the document.*

TASK 2. *Insert a table with three equal width columns and five rows. Set the width of the columns to 30 mm.*

The commands to use in Task 1 and Task 2 are from the menu bar. They are not in their **logical sequence**. **Re-arrange them in their logical sequence and write them down in the spaces provided on the answer sheet.**

TASK 1.

i. *To copy a whole document*

COMMANDS: **COPY>EDIT>SELECT ALL>EDIT**

ii. *Paste the document into a new word document*

COMMANDS: **EDIT>NEW WORD DOCUMENT>PASTE>FILE**

iii. *Rename the document*

COMMANDS: **SAVE AS>TYPE NEW NAME>FILE> SAVE**

TASK 2.

iv. *Insert a table with three columns and five rows.*

COMMANDS: **Insert Table>3>Scroll>Columns# >Rows#>Table>Scroll>5**

v. *Setting the width of the columns*

COMMANDS: **30>OK>Scroll>Fixed Column Width**

END OF SECTION 4