



DEPARTMENT OF  
EDUCATION

LOWER  
SECONDARY  
SCHOOL  
CERTIFICATE  
EXAMINATION  
(LSSCE)

PRACTICAL  
SKILLS

Wednesday

08<sup>th</sup> October 2014

Time allowed

1 hour 30 minutes

Candidates are advised to  
fully use the time  
allocated

PS

## 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)**

The Answer Sheet is part of the Examination Booklet. Take out the middle pages and remove the Answer Sheet by tearing along the perforation. You may use the blank sheet for rough work.

Write your province code, school code, candidate number, name and school name in the space given on the **ANSWER SHEET**.

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

For each question in **PART B and PART C (Questions 21 – 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. Skip the question 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** ink (pen or biro).

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

### Example



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: MULTIPLE CHOICE QUESTIONS (QUESTIONS 1 to 20)**

For each question, choose the correct answer and write A or B or C or D in the space provided on the ANSWER SHEET.

**QUESTION 1**

What does this symbol represent?



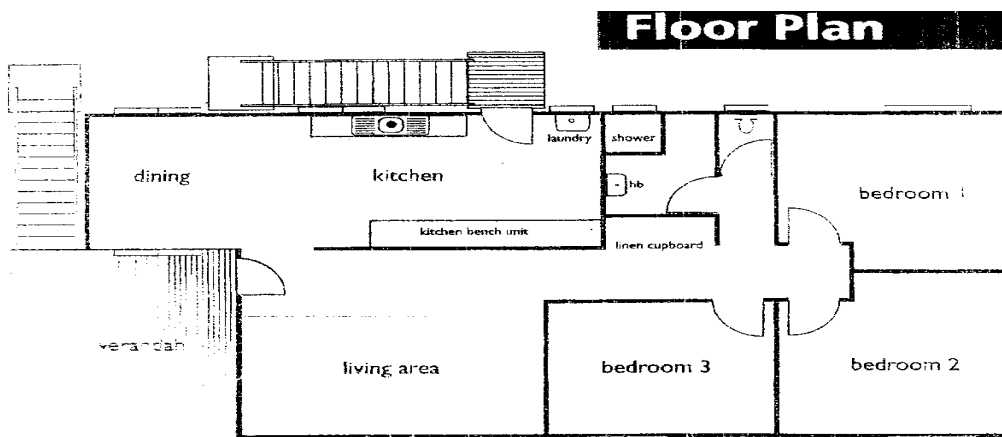
- A. Fire  
B. Dangerous Fire  
C. Flammable  
D. Do not start fire

**QUESTION 2**

Which of these is used in technical drawing either with a T-square or parallel rule for drawing vertical and incline lines?

- A. Protractor  
B. Drawing board  
C. Set squares  
D. Try square

For Questions 3 and 4, refer to the following illustration of a floor plan.

**QUESTION 3**

How many doors are there in the plan?

- A. 6  
B. 7  
C. 8  
D. 9

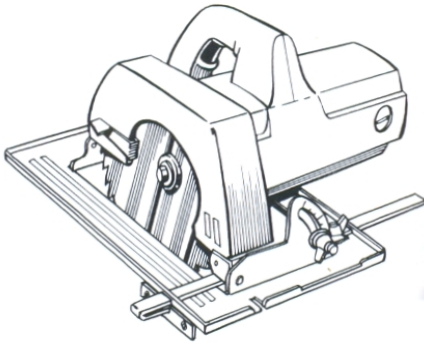
**QUESTION 4**

How many double windows are located in the floor plan?

- A. 7  
B. 8  
C. 9  
D. 10

**QUESTION 5**

The diagram below illustrates a type of power tool.



What is the name of this portable power tool?

- A. Sander      B. Bandsaw      C. Circular saw      D. Jig saw

**QUESTION 6**

How many different types of lines are used in dimensioning?

- A. 1      B. 2      C. 3      D. 4

**QUESTION 7**

What is the type of set square used specifically to draw isometric drawings?

- A. 30° - 60° set square      B. 45° - 45° set square  
C. 30° - 45° set square      D. 45° - 60° set square

**QUESTION 8**

Most original ideas and designs are put down on a paper as a/an \_\_\_\_\_.

- A. outline      B. line      C. picture      D. sketch

**QUESTION 9**

A reduction scale would be

- A. 1:1      B. 10:1      C: 1:10      D. 20:1

**QUESTION 10**

The type of joint milled on boards to use for house flooring is known as \_\_\_\_\_ joint.

- A. rebate and fillet      B. tongue and trench      C. tongue and groove      D. groove and fillet

**QUESTION 11**

The process whereby roots absorb water and dissolved minerals from the soil is called \_\_\_\_\_.

- A. osmosis      B. transportation      C. photosynthesis      D. respiration

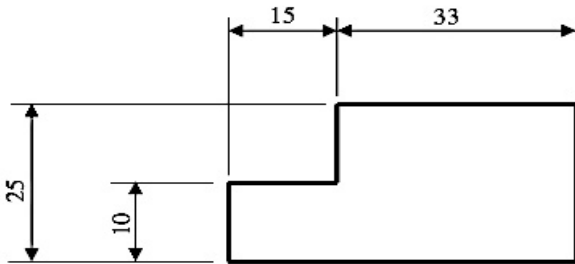
**QUESTION 12**

What is the name given to the process whereby moisture is removed from timber?

- A. Sun dry                      B. Conversion                      C. Seasoning                      D. Respiration

**QUESTION 13**

Below is a drawing being dimensioned.

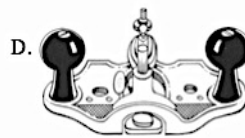
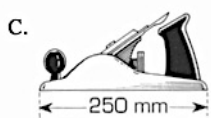
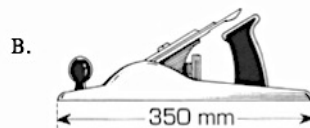
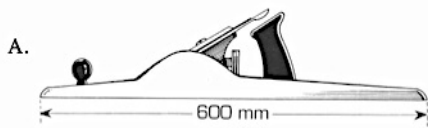


How many types of lines are involved in dimensioning of the drawing?

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

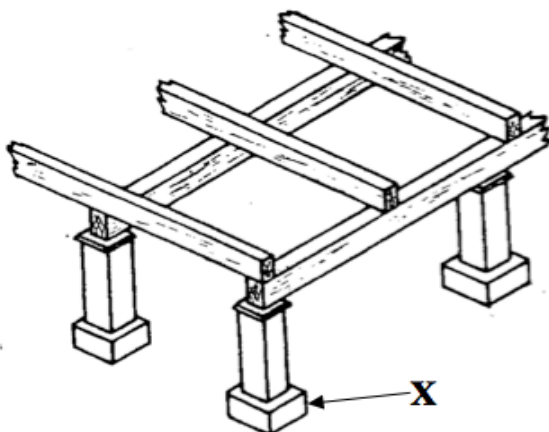
**QUESTION 14**

Which of the following plane below is used to plane long edge or large flat surfaces?



**QUESTION 15**

Below is a building structure.

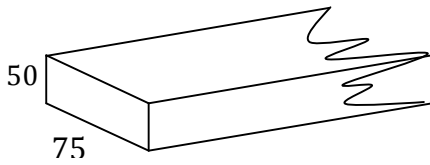


The building member labelled X is

- A. pier                      B. footing  
C. foundation                      D. fearer

**QUESTION 16**

Below is a piece of timber measured along its width and thickness.



In order to get the measurement of the timber which of the following calculation must be made?

- A.  $50 \times \text{length} \times 75$
- B.  $50 \times 75 \times \text{length}$
- C.  $\text{length} \times 75 \times 50$
- D.  $75 \times \text{length} \times 50$

**QUESTION 17**

Which is an example of a physical hazard?

- A. Toxic chemicals
- B. Noise pollution
- C. Micro-organism
- D. Excessive overtime

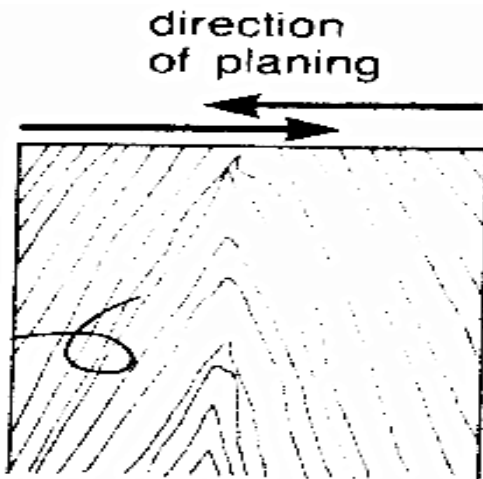
**QUESTION 18**

The colour code red on the fire extinguisher indicate \_\_\_\_\_.

- A. caution
- B. safety
- C. danger
- D. information

**QUESTION 19**

The process below illustrates the planing of a wide board.



The planing to the centre of the wide board is to avoid \_\_\_\_\_.

- A. centre creaks
- B. heart shakes
- C. splitting at the edge
- D. coarseness when finished

**QUESTION 20**

Which nail is best used in fastening corrugated iron roof?

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

**PART B: SHORT ANSWER**

**(QUESTION 21 to 35)**

**15 Marks**

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**

The stock of T-square is often flushed to which side of the technical drawing board while working?

**QUESTION 22**

What is the name of the tool shown below?



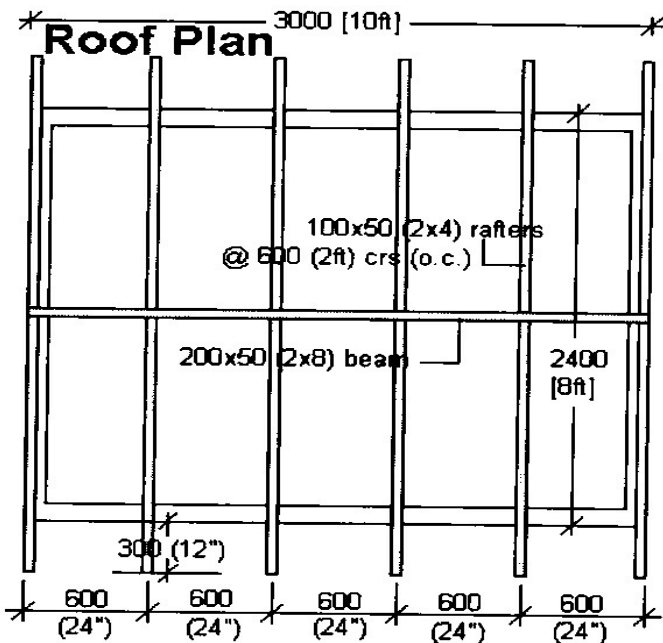
**QUESTION 23**

A clear surface finish consisting of resin combine with vegetable oil or spirit is called \_\_\_\_\_.

**QUESTION 24**

Name the protective gear used to protect the eyes when working in the workshop.

For questions 25 to 27, refer to the roof plan below.



**QUESTION 25**

How many rafters are used?

**QUESTION 26**

What is the dimension between each rafter?

**QUESTION 27**

What is the dimension of the overhang?

**QUESTION 28**

Which member of the floor construction supports the flooring?

**QUESTION 29**

For better printing of lower and upper case letters on the drawing print. The letters must be printed within the line called \_\_\_\_\_ lines.

**QUESTION 30**

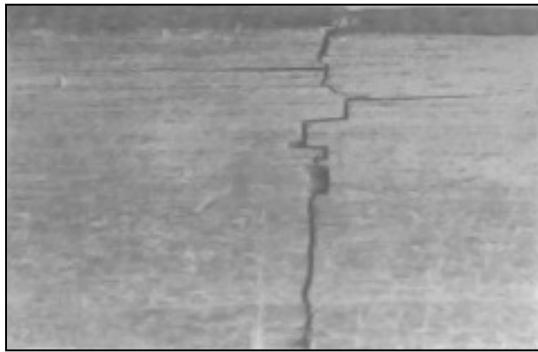
The line used to indicate the visible outline of a shape is \_\_\_\_\_.

**QUESTION 31**

What is the type of pencil that can be obtained easily from any retailing outlet and can be also used to do all types of lines in technical drawing?

**QUESTION 32**

The defect shown below is caused by timber falling on uneven surfaces.



What is the name of this defect?

**QUESTION 33**

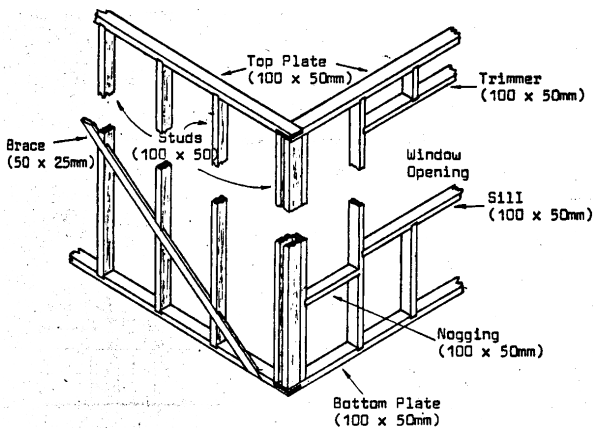
Define the initials 'P2S1E' that is normally used in timber yards.

**QUESTION 34**

What is the initial(s) given to a timber that is dressed all round?

**QUESTION 35**

Below is a detailed diagram of a wall structure.



Calculate the total length of the studs needed for the wall structure if the height of the wall is 2400 mm.

**PART C: EXTENDED RESPONSE****(Question 36)****5 MARKS**

**For Question 36, work out the answer for the question and write the answer in the space provided on the Answer Sheet.**

**QUESTION 36**

Below are general gluing procedures. They are not organised in their correct order. Arrange the Roman numerals in front of each procedure in their correct operational order by writing them in the spaces provided on the answer sheet.

- I. Clamp all the parts together.
- II. Apply glue to all the parts to be glued.
- III. Assemble project to check all parts fit.
- IV. Clean all parts from dust and grease.
- V. Apply pressure to press glue into the wood.

**END OF EXAMINATION**



**LOWER SECONDARY**  
**SCHOOL CERTIFICATE EXAMINATION – 2014**  
**PRACTICAL SKILLS – ANSWER SHEET**



**MARKER 1**

YEAR		PROV.		SCHOOL			CAND No.		
<b>1</b>	<b>4</b>								
<b>NAME</b>									
<b>SCHOOL</b>									

**PART A: (QUESTION 1 TO 20)**

Write the letter of your answer next to each question number below.

<b>1</b>	
<b>2</b>	
<b>3</b>	
<b>4</b>	
<b>5</b>	

<b>6</b>	
<b>7</b>	
<b>8</b>	
<b>9</b>	
<b>10</b>	

<b>11</b>	
<b>12</b>	
<b>13</b>	
<b>14</b>	
<b>15</b>	

<b>16</b>	
<b>17</b>	
<b>18</b>	
<b>19</b>	
<b>20</b>	

**PART B (QUESTION 21 TO 35)**

Write your answer next to each question number below.

<b>21</b>	
<b>22</b>	
<b>23</b>	
<b>24</b>	
<b>25</b>	

<b>26</b>	
<b>27</b>	
<b>28</b>	
<b>29</b>	
<b>30</b>	

<b>31</b>	
<b>32</b>	
<b>33</b>	
<b>34</b>	
<b>35</b>	

**PART C (QUESTION 36)**

Write your answer in the spaces below.

<b>36</b>	1 <sup>st</sup> Step	
	2 <sup>nd</sup> Step	
	3 <sup>rd</sup> Step	
	4 <sup>th</sup> Step	
	5 <sup>th</sup> Step	



**MARKER 2**

**DO NOT WRITE ON THIS PAGE**

**YOU MAY DO YOUR ROUGH WORK ON THIS PAGE**

**CAREFULLY TEAR ALONG THIS PERFORATION**

**YOU MAY DO YOUR ROUGH WORK ON THIS PAGE**