

DEPARTMENT OF  
EDUCATION

LOWER  
SECONDARY  
SCHOOL  
CERTIFICATE  
EXAMINATION  
(LSSCE)

PRACTICAL  
SKILLS

Wednesday

12<sup>th</sup> October 2016

Time allowed

1 hour 30 minutes

12:30 pm – 2:00 pm

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 is the part of a file that fits into the handle?

- A. point                      B. face                      C. thread                      D. tang

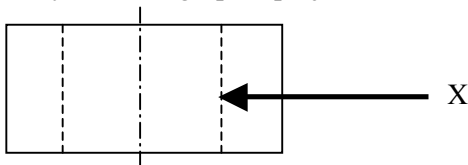
**QUESTION 2**

The size of a hammer is determined by its

- A. claw.                      B. head.                      C. face.                      D. handle.

**QUESTION 3**

Study the orthographic projection below.



What is the name of the line labeled X?

- A. Construction line                      B. Dash line                      C. Hidden line                      D. Center line

**QUESTION 4**

What does the diagram below illustrates?



- A. Timber grain                      B. Timber defect  
C. Sawing method                      D. Timber style

**QUESTION 5**

Where would you normally find the 'Facia Board' on a building?

- A. Wall                      B. Roof                      C. Foundation                      D. Floor

**QUESTION 6**

What is the correct file to enlarge a drilled hole?

- A. Circular file      B. Round file      C. Triangular file      D. Half-round file

**QUESTION 7**

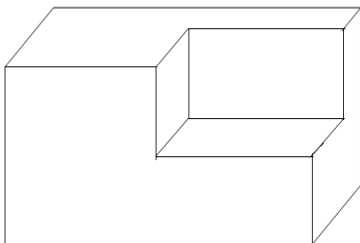
What is the name of the screw shown below?



- A. Countersunk head      B. Flat head  
C. Philips head      D. Straight head

**QUESTION 8**

The diagram shows an isometric drawing.

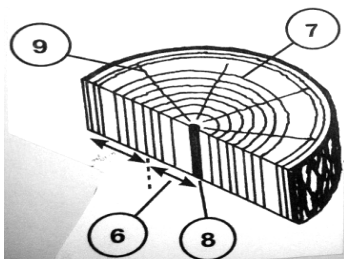


The vertical lines must be draw with the aid of a T-Square and

- A. Drawing Board.      B. Ruler.      C. Square.      D. Set Squares.

**QUESTION 9**

The diagram below illustrates the cross-section of a log.



Which number indicates the medullary ray?

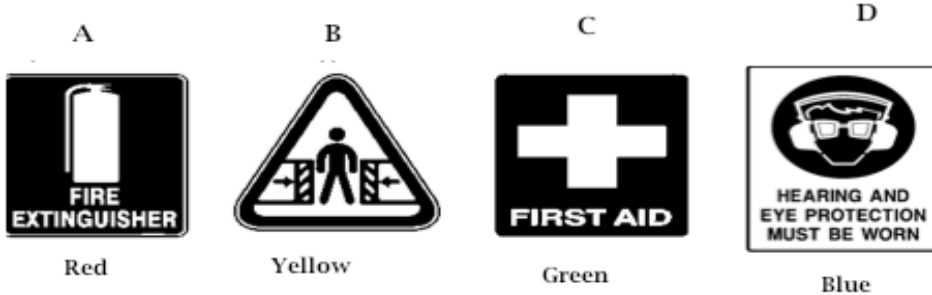
- A. 6      B. 7      C. 8      D. 9

**QUESTION 10**

The standard cement-mixing ratio for general purpose concrete is\_\_\_\_\_.

- A. 3:1:2                      B. 3:4:5                      C. 4:2:1                      D. 4:1:2

*For Questions 11 and 12 identify the correct safety signs.*



**QUESTION 11**

Which safety sign indicates danger?

**QUESTION 12**

Which safety sign indicates caution?

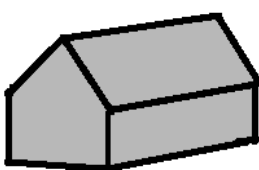
**QUESTION 13**

Which of the following is a torsion tool?

- A. Mallet                      B. Claw Hammer                      C. Pliers                      D. Screw driver

**QUESTION 14**

The diagram below illustrates a type of roof.



What is the name of this type of roof?

- A. Skillion                      B. Hip  
C. Buterfy                      D. Gable

**QUESTION 15**

The double floor joists put on buildings are to

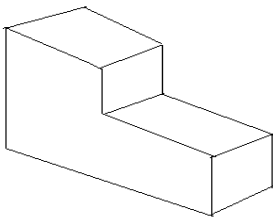
- A. have the greater strength to support the walls and or partitions.  
B. make use of many joists already cut.  
C. help support the weights of the roof.  
D. help carry the weight of the doors.

**QUESTION 16**

In PNG, the standard size of Stump Holes used to fix stumps or piers for houses built on stumps is

- A. 6 mm x 5 mm
- B. 60 mm x 50 mm
- C. 600 mm x 500 mm
- D. 6000 mm x 5000 mm

**QUESTION 17**



Which drawing below clearly illustrates the isometric drawing shown above?

Four sets of orthographic projections (top and front views) are shown, labeled A, B, C, and D. Each set consists of a top view (a rectangle divided into two sections) and a front view (a stepped profile). Option A shows a top view with a taller left section and a shorter right section, and a front view with a taller left section and a shorter right section. Option B shows a top view with a taller left section and a shorter right section, and a front view with a taller left section and a shorter right section. Option C shows a top view with a taller left section and a shorter right section, and a front view with a taller left section and a shorter right section. Option D shows a top view with a taller left section and a shorter right section, and a front view with a taller left section and a shorter right section.

**QUESTION 18**

During filing, tiny chips tend to get wedged between the teeth of the file. They can be removed by brushing with a

- A. wire brush.
- B. file card .
- C. paint brush .
- D. sandpaper.

**QUESTION 19**

Piers are also referred to as\_\_\_\_\_.

- A. slap floor
- B. footings
- C. struts
- D. stumps

**QUESTION 20**

What is the standard measurement used for spacing floor joists in buildings?

- A. 6000 mm
- B. 600 mm
- C. 60 mm
- D. 6 mm

**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**

Accidents that occur in the workshop are caused by the factors of ignorance, disobedience and carelessness. What do we call these factors?

**QUESTION 22**

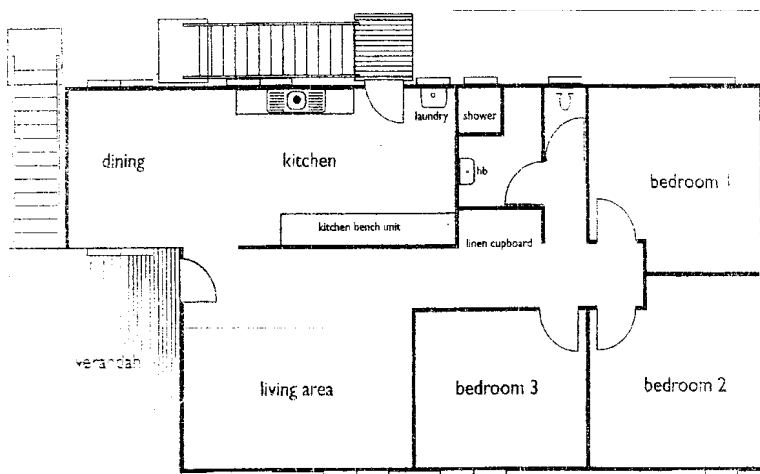


What is the name given to this type of hardware?

**QUESTION 23**

In technical drawing, what is the most appropriate drawing instrument used to draw a 45° sloping or inclined line?

**QUESTION 24**



What do we call this type of building plan?

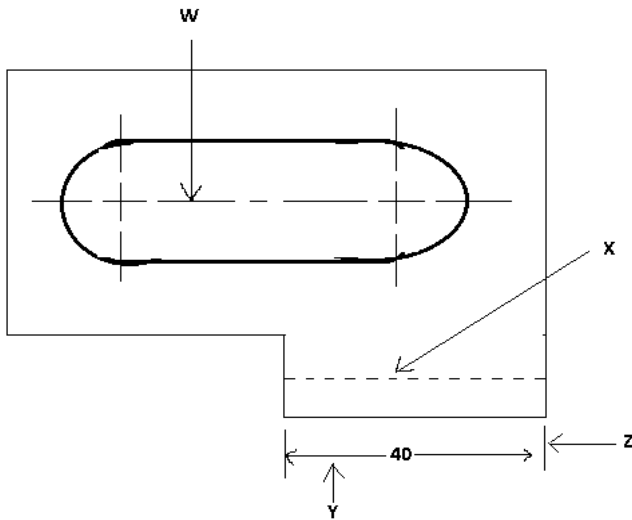
**QUESTION 25**



In what activity in building construction is this tool mainly used for?

For Question 26 and 27, refer to the diagram below

The figure below shows different types of lines used in drawing.



**QUESTION 26**

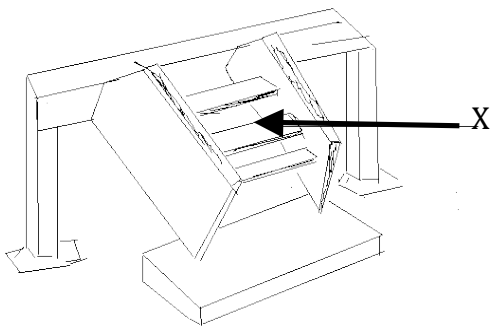
What is the type of line labeled W?

**QUESTION 27**

What type of line is labeled X?

**QUESTION 28**

Below is a diagram of the flaps of a building.



What are the parts labeled X called?

**QUESTION 29**

Below is an example of a nail order.

*2kg, 150 mm x 5.6mm bullet head steel-wire nails.*

What is the diameter of the shank?

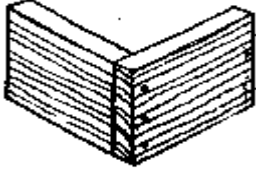
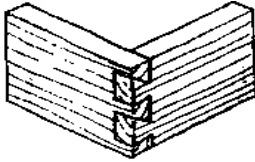
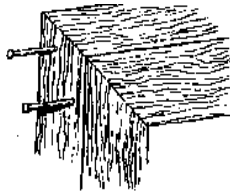
**QUESTION 30**

Symbols and numbers or abbreviations are often used in many drawings. For example, floor and sectional plans.

What does EXT stand for?

For Questions 31 to 35, refer to the following information.

Below is a table on classification of woodwork joints that needs to be completed. For each question, write the correct name on the answer sheet.

Groups	Name /Type	Uses
Carcase	 <p>QUESTION 31 _____</p>	Used on corners or as partitions
	 <p>QUESTIONS 32 _____</p>	Used mostly in cabinet work
QUESTION 33 _____	 <p>QUESTION 34 _____</p>	Used on pictures and window frames
QUESTION 35 _____	Tongue and Groove	Used in wall paneling or flooring

**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**

Every material has a set of properties, which affects the appearance of the materials and how it can be used. Match each property in List X with its correct definition in List Y. Use the letters to write your answers in the spaces provided on the answer sheet.

**List X**

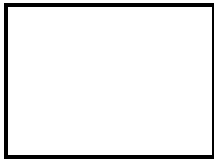
- i. Elastic
- ii. Density
- iii. Hardness
- iv. Toughness
- v. Durability

**List Y**

- A. able to absorb and impact without breaking
- B. able to resist density or scratching
- C. how heavy or light an object is
- D. able to resist environmental stresses
- E. able to return to its original shape and size

**END OF EXAMINATION**





MARKER 1

**PRACTICAL SKILLS - ANSWER SHEET**

YEAR		PROV.		SCHOOL			CAND No.		
1	6								
NAME									
SCHOOL									

**PART A:** (Questions 1 to 20)

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

1	
2	
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**PART B** (Questions 21 to 35)

Write your answer next to each question number below.

21	
22	
23	
24	
25	

26	
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31	
32	
33	
34	
35	

**PART C** (Question 36)

Write your answer next to each question number below.

36	(i)	
	(ii)	
	(iii)	
	(iv)	
	(v)	



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**