

**CST - Finishing, Fitting
and Wood Treatment**

T040

**Thursday, 31/10/2013
8:30 - 11:30 AM**

WORKFORCE DEVELOPMENT AUTHORITY



P.O. BOX 2707 Kigali, Rwanda Tel: (+250) 255113365

**ADVANCED LEVEL NATIONAL EXAMINATIONS, 2013,
TECHNICAL AND PROFESSIONAL TRADES**

EXAM TITLE: Finishing, Fitting and Wood Treatment

OPTION: Construction (CST)

DURATION: 3hours

INSTRUCTIONS:

The paper contains **three (3)** Sections :

Section I: Sixteen **(16)** questions, all **Compulsory**. **55marks**

Section II: Five **(5)** questions, **Choose any Three (3)**. **30marks**

Section III: Three **(3)** questions, **Choose any one (1)**. **15marks**

Section A. All the 16 questions are compulsory. 55marks

- 01. a)** Give a proper definition of the door. **1mark**
b) Why do we need a door and what are the two main parts of the door? **2marks**
- 02. a)** How can you define a window? **1mark**
b) Identify four probable functions of the window. **2marks**
- 03. a)** Give with short explanation, three points of good location of the door. **1.5mark**
b) Also provide with explanation, four points to look at while locating the window. **2marks**
- 04. a)** What do you understand by a paint? **1mark**
b) List down any four characteristics of an ideal paint. **2marks**
- 05.** Coloring pigments are added to the base to have desired colors of paints. Provide any four divisions of pigments with two examples for each division. **2marks**
- 06.** The desired tint or shade of paint can be obtained by combining coloring pigments. Give at least four tints with two involved pigments for each. **2marks**
- 07. a)** Varnishing is one of the finishing works; how can you define a varnish? **1mark**
b) Give four purposes of varnishing the wood surface. **2marks**
- 08. a)** Clearly give the meaning of a partition wall. **1mark**
b) Name and discuss very shortly two main types of partition walls according to load bearing ability. **2marks**
- 09.** Describe at least six requirements to be fulfilled by an efficient partition wall. **3marks**
- 10. a)** Chart out your understanding about the term "House drainage". **1mark**
b) List down the main four aims of house drainage. **2marks**
- 11. a)** Describe any five objectives of plastering. **2.5marks**
b) Identify at least five factors of plaster selection. **2.5marks**
- 12.** Explain cracking and describe five reasons of cracking for a plaster. **2.5marks**
- 13. a)** Explain clearly the difference between the bench work and fitting work. **2marks**
b) Give any six classes of tools used in fitting workshop. **3marks**

14. a) Discuss three types of micrometers based on where they can be used. **3marks**
 b) The ceiling of a house room is made of various rectangles of plywood. Consider one rectangle touching the wall and name its four visible parts. **2marks**
15. a) Draw a typical ball peen hammer and mention its four parts. **2marks**
 b) Draw a typical standard screw driver and name three main parts. **2marks**
16. a) Identify four main factors to be based on when choosing a good insulating material. **2marks**
 b) It is generally known that low density insulating materials give better thermal insulations than high density materials. Indicate the six properties required for good insulating materials. **3marks**

Section II. Choose and answer any three questions 30marks

17. a) Draw clearly a typical window and name its fourteen (14) main parts. **7marks**
 b) Some varnishes are good while others are bad. Write down six characteristics of good varnish. **3marks**
18. a) Write down the two famous relationships between Height and Width of doors. **2marks**
 b) As a good technician, give the used standard sizes of door for the following types of buildings:
 i. Doors of residential buildings (External, internal, bathrooms and toilets, garages) **4marks**
 ii. Doors of public buildings (External, internal, bathrooms and toilets, garages) **4marks**
19. a) Name four main types of timber defects. **2marks**
 b) Draw the file used if fitting works and present the main parts of this tool. **4marks**
 c) Explain the cement mortar and the lime cement mortar for plastering purpose. **4marks**
 Give also the mix proportions for the two types of mortar. **4marks**

20. Complete the following table from the basic knowledge that you have in fitting.

10marks

Linear measurement tools		Angular measurement tools	
Precision	Non precision	Precision	Non precision
1.	1.	1.	1.
2.	2.	2.	2.
	3.		3.

✓ 21. a) What do you understand by the term "External rendering".

2marks

b) List three functions of rendering.

3marks

c) Enumerate any five types of render which are common in construction.

5marks

Section III. Choose and answer one question 15marks

22. a) Explain the following types of stone surface finishes:

5marks

i) Rock faced or Quarry faced

ii) Hammer dressed finish

iii) Axed finish

b) Identify any other ten types of stone finish apart from the three types given below to be explained.

10marks

23. a) Describe and provide drawings of eight types of pointing.

8marks

b) Draw a well cased revolving door and mention five parts on it.

7marks

24. Identify and slightly talk about any fifteen types of paints.

15marks