# CHRISTIAN SOCIAL SERVICES COMMISSION (CSSC) NORTHERN ZONE JOINT EXAMINATIONS SYNDICATE (NZ-JES)



#### FORM TWO PRE-NATIONAL ASSESSMENT AUG 2025

# WOOD WORK MARKING SCHEME SECTION A (15 MARKS)

#### 1. ANSWERS

	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	
C	·	С	D	С	С	A	A	A	В	В	

#### 2. ANSWERS

List A	(i)	(ii)	(iii)	(iv)	(v)
List B	D	С	В	A	Е

#### SECTION B (70 MARKS) Answer all questions.

- 3. (a) Five important characteristics of paints that affect their uses.
  - i) Opacity of the paint- paint hide what is behind it
  - ii) Spreading Capacity of paint coverage of paint per coat
  - iii)**Drying rate of paint** reasonable time designed to dry
  - iv)Durability of paint withstand the adverser condition for a long time
  - v)Flexibility paint should work smoothly without cracking
  - vi)Consistency refer to viscosity or fluidity of the paint that help spreading

- 4. Patterns are the models used in tie and dyeing for textile production:
- (a) Analyze any four (4) steps that involved in the process of producing tie and dying products
  - i) Soaking of fabrics
  - ii) Pattern design
  - iii) Applying the dye to the fabric
  - vi) Rinse and drying dyed fabric

#### (b) Four (4) materials which are used for tie and dye

- i) Fabrics
- ii) Binding
- iii) Dye
- iv) Old newspapers
- v)Jick
- vi) Matches
- vii) Plastic gloves
- viii) Pair of scissor
- ix) Measuring tape
- x) Scale
- xi)Plastic bucket/basin
- xii) Worktable
- xiii) Iron

#### (c) Two (2) pattern designs

- i) Spiral pattern design
- ii) Lattice pleats
- iii) Circle pattern design
- iv) Diamond, ovals, and squares pattern design

#### 5. (i) Mention four (4) importance of painting application to the surroundings.

i)provide an appealing appearance

- ii) Provide a protective coating
- iii) Increases a property value
- iv) Provide health benefits

#### (ii) Analyze three (3) forms that paint can be found when purchased before application.

- i) Solid form
- ii) Liquid form
- iii) Gaseous suspension (aerosol) form

- iii) Suggest three (3) composition of paints that acts as ingredients.
  - i) Pigment
  - ii) Binder
  - iii) Solvent
  - iv) Base
  - v) Driers
  - vi) Inert extender
- (a) Analyze six (6) hand tools safety that supposed to be considered during handling and uses of hand tools.
  - i) don't carry many tools at once
  - ii) Don't carry sharp object, pointed tools in apron
  - iii) Store tool in toolkit or correct place immediate after use
  - iv) When carry sharp edge or pointed edge hold close to the body pointed down
  - v) When passing sharp/pointed tool to your fellow, pass them handle first
  - vi) Don't use blunt tools
- (b) Identify four (4) categories of safety signs with example each
  - i)Prohibition sign. eg no entry, no smoking, no exit
  - ii) Mandatory eg. Ear protective, safety helmet, safety boots
  - iii) Warning eg Danger-high voltage, Danger slippery surface, Danger-high flammable gasses
  - iv) Emergency sign eg. Fire exit, assembly point, First aid
- 7. Workshop practice gives the basic working knowledge required for the production of various engineering products. As a form two student who studies woodwork and painting engineering:
  - (a) Briefly explain any five (5) activities which are practiced in woodwork and painting workshop
    - i) Carpentry this is the skilled trade and a craft work.
    - ii) Wood turning the art of fashioning or ornamenting objects of wood by cutting with hand implement by means of lathe
    - iii) Sanding refer to the process of abrading wood fibers so that they are rendered uniformly rough or smooth
    - iv) Varnishing refer to liquid preparation that applied to the surface to form a hard lustrous typically transparent coating.

(b) Differentiate between woodwork workshop and painting workshop.

Sn	Woodwork Workshop	Painting workshop
1	Used for manufacturing	Used for finishing
2	Material used are wood	Material used are colors, pigment, oil, water and powder
3	Tools and machine used are hammer, tape measure, utility knife, band saw, planer, jointer	Tools and machine used are; painting brushes, rollers, tray, sleeve, step ladder and compressor
4	Equipped with heavy duty machine	Equipped with simple machines

8.

- (a) Analyze five(5) effects of accident that may occurring in woodwork and painting workshop.
  - i) long term health
  - ii) loss of employment
  - iii) Productivity loss
  - iv) Increase organizations unnecessary costs, expenses, compensations
  - v) Temporary or permanent disability
  - vi) loss of income to dependent of the victim
  - vii) the demoralization of workers in the workshop

#### (b) Analyze five (5) causes of accident that may occurring in woodwork and painting workshop.

- i) lack of knowledge regarding the use of hand tools, machines, and equipment as well as safety guidelines
- ii) Poor working condition
- iii) Inappropriate method of operation
- iv) Improper use of tools
- v) Fatigue
- vi) Hazardous materials at workplace
- vii) Poor planning and execution of work
- viii)Sabotage
- ix) Natural disasters

9.	(a) Seven	(7) possible paint	defects that may	occur during	and after	applying pain	t materials
	on the sui	rface.					

10. i) Blistering

iii) Flaking

vi) Wrinkling

ii) Sagging

iv) Running

vii) Ginning

v) Flashing

viii) Chalking

- (b) Three (3) techniques that are used for application of paints.
- i) Brushing
- ii) Roller
- iii) Air spraying

### **SECTION C (15 MARKS)**

#### Answer question number ten (10)

## 11. **a) Data given**

Size of the wall paper roll 10.5m x 0.55m

Bedroom Height = 2.1m

Bedroom width=3.5m

Bedroom length=4.5m

Size of window=1.2m wide x 1.2m long

Size of door = 0.90m wide x 1.8m long

2marks

#### b)Area of the bedroom

(Width 3.5 m x height 2.1 m) x 2 sides = 14.7 sqm

(length 4.5m x height 2.1m) x 2 sides = + 18.9sqm

Total area 33.6sqm 3marks

#### c)Area of the door and window

Door 0.90m wide x 1.8m long x 1 door = 1.62sqm

Window 1.2m wide x 1.2m long x 2 windows =  $\underline{2.88sqm}$ 

Total <u>4.5 sqm</u> 3marks

#### d)Subtract area of the bedroom from area of door and windows

Bedroom area 33.6 sqm - Door and windows 4.5 sqm = 29.1 sqm 3marks

# e)Calculate the area of the wall paper per roll and number of rolls.

Size of wall paper  $10.5 \text{m} \times 0.55 \text{m} = 5.527 \text{ sqm}$ 

Therefore 1 roll = 5.53 sqm

1roll= 5.53sqm

x = 29.1 sqm

#### 5.262 rolls approximate 6 rolls

4mark