GAUTENG DEPARTMENT OF EDUCATION
GAUTENGSE DEPARTEMENT VAN ONDERWYS

SENIOR CERTIFICATE EXAMINATION
SENIORSERTIFIKAAT-EKSAMEN

WOODWORK SG
HOUTWERK SG

POSSIBLE ANSWERS / MOONTLIKE ANTWOORDE SUPP 2007

QUESTION / *VRAAG* 1

1A

1.1	B	1.11	D	
1.2	C	1.12	C	
1.3	B	1.13	D	
1.4	C	1.14	D	
1.5	A	1.15	A	
1.6	B	1.16	C	
1.7	D	1.17	B	
1.8	C	1.18	D	
1.9	A	1.19	A	
1.10	A	1.20	A	(20)

1B

1.21	C	1.26	B	
1.22	A	1.27	B	
1.23	B	1.28	A	
1.24	C	1.29	C	
1.25	C	1.30	B	(10)

[30]

QUESTION / *VRAAG* 2

2.1

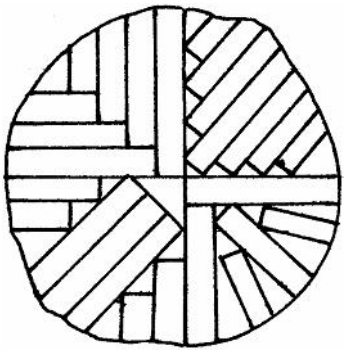
A	1 / 5	I	5	
B	5	J	1	
C	5	K	3	
D	4 / 8	L	2	
E	5 / 6	M	3	
F	1	N	2	
G	6	O	2	
H	3	P	3	(16)

2.2

2.2.1

(i)	Type of wood	*(i) Soort hout*
(ii)	Quality of the logs	*(ii) Kwaliteit van blokke*
(iii)	Sizes required	*(iii) Groottes wat verlang word*
(iv)	Purpose for which the timber should be used	*(iv) Doel waarvoor gebruik gaan word* (4)

2.2.2 Quarter-sawn method *Kwartsaagmetode*



(2)

2.2.3

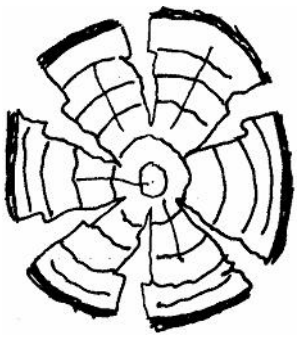
a) Frame saw *a) Raamsaag* (1)

b)
(i) Most economical method *(i) Mees ekonomiese metode*
(ii) Quickest method *(ii) Vinnigste metode*
(iii) An easy method *(iii) Maklikste metode*
(iv) Produces the most wood *(iv) Lewer meeste hout*
(v) Produces boards with maximum width (Any 3) *(v) Lewer planke van maksimum breedte. (Enige 3)* (3)

2.3

2.3.1

a)

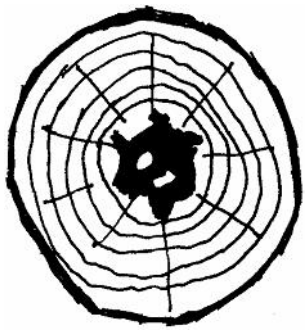


(1)

b) It occurs when logs are not converted into boards and seasoned immediately after felling has taken place *b) Blokke word nie dadelik na dit gevel is, opgesaag en gedroog nie.* (2)

2.3.2

a)



(1)

2.3.3 Shrinkage that starts at the pith causes cracks collecting water. The core becomes spongy and fungi develops

Inkrimping wat by die pit begin, veroorsaak openinge waarin water versamel. Die kern word sponsagtig en swamme ontwikkel (2)

2.3.4

(1)

2.3.5 When seasoning takes place the board starts to distort, away from the heart wood, because of tangential shrinkage

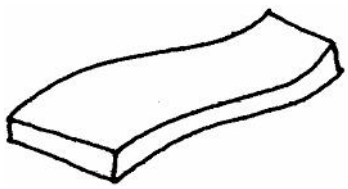
Tydens droging verwring die plank weg van die kernhout af a.g.v. tangensiale krimping. (2)

2.3.6 Bowing / *Boogtrek*

Springing / *Kanttrek*

Twisting / *Draaitrek*

Waving / *Golftrek*



Any 2 / *Enige 2* (4)

2.4 SANS (SABS) *SANS (SABS)* (1)

[40]

QUESTION / *VRAAG* 3

3.1.1 (i) Keep metal parts rust free by applying thin machine oil.
(ii) Use only for purpose intended.

(i) Hou metaaldele roesvry deur dun masjienolie aan te wend.
(ii) Gebruik slegs vir spesifiese doel (2)

3.1.2 (i) Always keep sharp and clean.
(ii) Keep rust free – apply oil
(iii) Protect blade when not in use

(i) Hou ten alle tye skerp en skoon
(ii) Hou roesvry – gebruik olie
(iii) Beskerm lem wanneer nie gebruik nie.

Any 2 *Enige 2* (2)

3.1.3	(i) Blade should always be sharp (ii) Lubricate sole with a light oil cloth or with wax polish to ease planing. (iii) Keep the plane clean (iv) Check adjustments before planing commences Any 2	*(i) Lem moet altyd skerp wees.* *(ii) Smeer sool met ligte olie-lappie of waspolitoer om skaafwerk te vergemaklik* *(iii) Hou skaaf skoon* *(iv) Kontroleer verstellings voor skaafwerk gedoen word.* *Enige 2*	(2)
3.2	Two squares can be placed against each other with the straight sides facing each other. or A line can be drawn and the square can be swung to the alternative side and checked against the line. Any 1	*Twee winkelhake kan teen mekaar op 'n suiwer reg uit kant geplaas word.* *of* *'n Lyn kan getrek word en die winkelhaak na die alternatiewe kant geswaai en vergelyk word met die lyn wat getrek is.* *Enige 1*	(2)
3.3 3.3.1 3.3.2 3.3.3 3.3.4	A C A, C, D, E B		(4)
3.4	Wearing rubber gloves or a plastic bag when administering first aid. Do not touch the blood.	*Dra rubberhandskoene of 'n plastiek sak as jy noodhulp toepas.* *Moet nie aan bloed raak nie.*	(2)
3.5 3.5.1	Board A and B must be equal in thickness and width. The boards must also be squared.	*Plank A en B se dikte en breedte moet dieselfde wees. Die hout moet haaks wees.*	(2)
3.5.2 (a)	Use a marking gauge and mark the width and length of the tongue on A.	*Gebruik 'n enkelpenkruishout en merk die breedte en lengte van die tong op A.*	
(b)	• Use board A to determine the width on board B. • Use a marking gauge and mark the depth of the groove. • Use a try square and draw square lines to show the width of the joint.	• *Gebruik plank A en merk breedte op plank B.* • *Gebruik enkelpenkruishout en merk diepte van groef.* • *Gebruik 'n winkelhaak en trek breedtelyne van voeg.*	(5)

3.5.3 (a)
- Use a tenon saw and cut on the inside of the width lines up to the depth line.
- Use a firmer chisel / paring chisel to remove excess material.

- *Gebruik rugsaag en saag aan binnekant van breedtelyne tot op dieptelyn*
- *Gebruik steekbeitel / skilbeitel en verwyder oortollige materiaal.* (5)

3.6

3.6.1
i) Relieve tension on fan belt. *Verlig spanning van dryfband*
ii) Adjust fan belt on four-step pulleys. *Verstel dryfband op viertap-katrolle.*
iii) Put tension on fan belt *Sit spanning op dryfband* (3)

3.6.2
i) Switch off the machine. *Skakel die masjien af.*
ii) Fasten the drill firmly in the chuck. *Draai boorpunt stewig vas in klembus*
iii) Remove the chuck key from the chuck *Verwyder die klembus-sleutel* (3)

3.7

3.7.1
- Release lock knob of the blade tilt crank. — *Draai sluitknop van kantelwiel los.*
- Put try square on the table — *Plaas winkelhaak op tafel.*
- Turn the blade tilt wheel until the blade is square according to the table. — *Draai kantelwiel totdat lem haaks is met tafel.*
- lock the lock knob of the blade tilt crank — *Draai sluit knop van kantelwiel vas.* (5)

3.7.2
- Release fence clamp. — *Maak leiblokklamp los.*
- Use micro-set knob to reset the fence. — *Gebruik stelknop en verstel leiblok.*
- Use a ruler to adjust the distance between the blade and the fence — *Gebruik meetstok en stel afstand tussen lem en leiblok*
- Lock the fence clamp. — *Sluit leiblokklamp* (4)

3.8

3.8.1 Wait until the machine operates at full speed. *Die masjien moet eers teen volle spoed loop.* (1)

3.8.2 (a) A (1)

(b) Planning should be done with the grain. *Daar moet saam met die grein geskaaf word.* (2)

(c)
• In feed roller *In voerroller*
ƒ Out feed roller *Uit voerroller* (2)

3.9	i)	Keep power cord out of the way of the blade.	*Hou kragkoord uit pad van lem*	
	ii)	Put machine in saw position before switching on the power	*Plaas masjien in saagposisie voordat kragtoevoer aangeskakel word.*	
	iii)	Plan cuts carefully	*Beplan snitte sorgvuldig*	
	iv)	Choose the correct type of blade for the specific work.	*Kies regte lem vir bepaalde werk.*	
	v)	Adjustments must be secured before work is started.	*Verstellings moet vasgesluit wees voordat werk begin word.*	
	vi)	Disconnect power supply when doing adjustments.	*Ontkoppel kragtoevoer wanneer verstellings gedoen word.*	
	vii)	Work must be securely fixed.	*Werk moet stewig vas wees.*	
	viii)	The machine must come to a stand-still before it is put down.	*Masjien moet tot stilstand kom voordat neergesit word.*	
		Any 3	*Enige 3*	(3)

[50]

QUESTION / *VRAAG* 4

4.1		Woodwork joints are made to:	*Houtwerkvoeë word gemaak om:*	
	i)	Enlarge the glueing surface	*die lym oppervlak te vergroot.*	
	ii)	Make the connection more sturdy.	*groter stewigheid aan die verbinding te gee*	
	iii)	Widen boards	*planke te verbreed.*	
	iv)	Lengthen boards	*planke te verleng*	
	v)	Form angles	*hoeke te vorm*	
	vi)	Form frames	*rame te vorm*	
		Any 3	*Enige 3*	(3)

4.2

4.2.1	Rubbed joint	*Vryflas*	(1)
4.2.2	The edges are short, square, butted together and held in place by means of glue and sash cramps. Excess glue and air bubbles must be rubbed out	*Die kante word reguit en haaks geskaaf en in posisie gehou met lym en raamklampe.* *Oortollige lym en lugborrels moet uitgevryf word*	(3)

4.2.3

Tongue and groove joint
Tong-en-groef-las

Feather and groove joint
Veer-en-groef-las

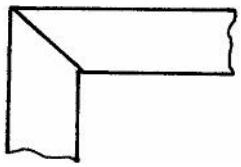
F–joint
F–las

Any 2 *Enige 2* (4)

4.2.4 Slot and screw joint *Gleuf-en-skroef-las* (1)

4.3

4.3.1 Mitre joint *Verstekvoeg*



(2)

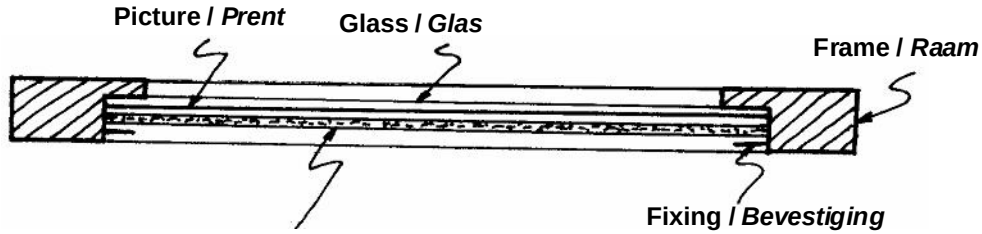
4.3.2
- Panel pins
- Feather and groove
- Staples

Any 1

- *Paneel spykers*
- *Veer-en-groef*
- *Krammetjies*

Enige 1 (1)

4.3.3



(5)

4.4

4.4.1
- Haunched mortice and tenon joint with groove.
- Long and short shouldered mortice and tenon joint

Any 1

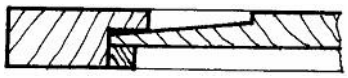
- *Skof-tap-en gatvoeg met groef.*
- *Lang-en-kortskouer-tap-en-gatvoeg.*

Enige 1 (2)

4.4.2

of

or



(4)

4.4.3 No *Nee* (1)

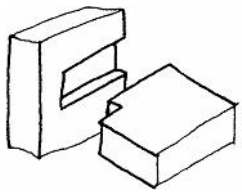
4.4.4 To provide for expansion and shrinkage. *Om voorsiening te maak vir uitsetting en inkrimping.* (2)

4.5

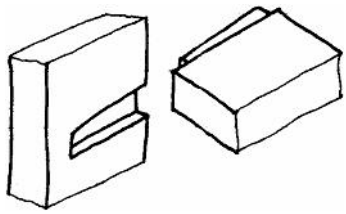
4.5.1 i) Butt joint — *Stuikvoeg*
ii) Rebate joint — *Spanningvoeg*
iii) Tongue and groove joint — *Tong-en-groef-voeg*
iv) Box pin joint — *Ratvoeg*
v) Through dovetail joint — *Saangestelde swaelstertvoeg.*

Any 4 — *Enige 4* (4)

4.5.2 i) Stopped housing joint — *Versteekte inlaatvoeg*

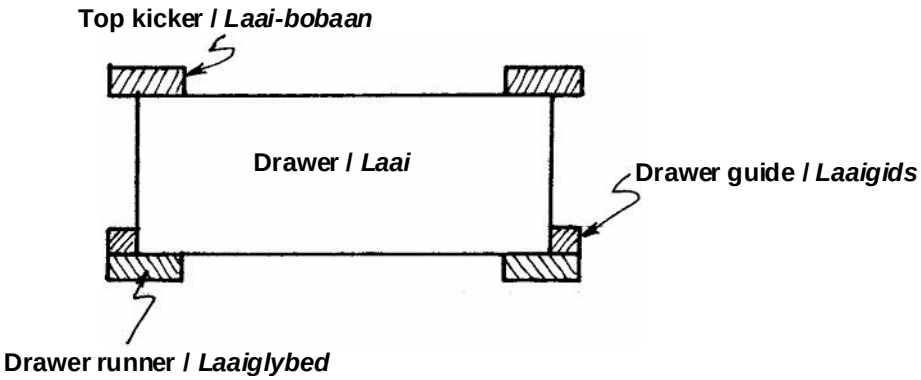


ii) Tapered dovetail housing joint — *Tapslopende swaelstert-inlaatvoeg*



Any 1 — *Enige 1* (3)

4.6



(4)
[40]

QUESTION / *VRAAG* 5

5.1

5.1.1 i) Enough moisture — *Genoeg vogtigheid*
ii) Enough oxygen — *Genoeg suurstof*
iii) Suitable temperature — *Geskikte temperatuur*
iv) Suitable food — *Geskikte voedsel*
v) Absence of toxic chemicals — *Afwesigheid van toksiese chemikalieë*

Any 3 — *Enige 3* (3)

5.1.2 To improve the natural durability of wood.
To protect wood against deterioration and destruction.

Dit verhoog die natuurlike duursaamheid van hout.
Om hout teen agteruitgang en vernietiging te beskerm (2)

5.1.3 i) Coal tar creosotes
ii) Aqueous solutions of metallic salts.
iii) Solutions in volatile organic solvents

Koolteerkreosote
Wateroplossings met metaalsoute
Oplossings in vlugtige organiese oplosmiddels.

Any 1 *Enige 1* (1)

5.1.4 Creosote *Kreosoot* (1)

5.1.5 Steps: *Stappe:*

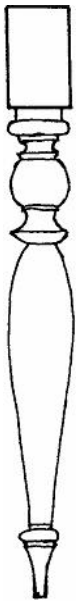
1. The timber is placed in the cylinder and the cylinder door is sealed. *Die hout word in die silinder geplaas en die silinder word verseël.*
2. A vacuum is applied. *Daar word 'n vakuum getrek.*
3. The cylinder is filled with hot preservatives. (Usually a creosote mixture) *Die silinder word met warm preserveermiddel gevul. (Gewoonlik 'n kreosootmengsel)*
4. More preservative is pumped into the cylinder to increase the pressure inside the cylinder. *Nog meer preserveermiddel word ingepomp om die druk binne die silinder te verhoog.*
5. The pressure is maintained until the desired absorption is attained. *Die druk word gehandhaaf tot voldoende absorpsie verkry is.*
6. The pressure is released. *Die druk word opgehef.*
7. The remaining preservative is pumped out. *Die oorblywende preserveermiddel word uitgepomp.*
8. A final vacuum is applied to prevent the later exuding of preservative. *Daar word weer 'n vakuum getrek om latere uitsypeling van preserveermiddel te beperk.*
9. The vacuum is released. *Die vakuum word opgehef.*
10. The timber is removed and re-dried, if necessary. *Die hout word verwyder en, indien nodig, herdroog.* (10)

5.2

5.2.1	i)	To keep moisture content in wood constant to prevent wood from twisting, cracking, expanding and shrinking.	*Om die voginhoud in die hout konstant te hou sodat die hout nie oormatig draai, kraak uitsit of krimp nie.*	
	ii)	Seal surface of wood.	*Verseël houtoppervlak.*	
	iii)	Bring out grain, figure and texture.	*Maak houtoppervlak glad.*	
	iv)	Make surface smoother	*Bring grein, vlamme en tekstuur uit*	
	v)	Bring out colour.	*Bring kleur uit*	
	vi)	Protect against wear.	*Beskerm teen slytasie*	
	vii)	To give gloss to the wood.	*Gee glans aan hout*	
		Any 3	*Enige 3*	(3)
5.2.2	i)	Manufacturing process completed	*Vervaardigingsproses voltoooi*	
	ii)	Defects repaired	*Alle defekte herstel*	
	iii)	Grain filling completed	*Handel greinvulling af.*	
	iv)	Bleaching or staining completed	*Handel bleiking of beitsing af.*	
	v)	All sanding completed	*Alle skuurwerk voltooi*	
	vi)	Pencil or other marks removed	*Alle potlood- of ander merke verwyder*	
	vii)	Glue flecks removed	*Lymvlekke verwyder*	
	viii)	Wood filler flecks removed	*Houtvullervlekke verwyder*	
	ix)	Dust must be removed	*Stof verwyder*	
		Any 3	*Enige 3*	(3)
5.2.3	i)	Wax polish	*Waspolitoer*	
	ii)	Oil polish	*Oliepolitoer*	
	iii)	Varnish	*Vernis*	
		Any 1	*Enige 1*	(1)
5.2.4		This is an open question. Marks will be allocated according to the coating used	*Hierdie is 'n oop vraag, punte word toegeken op grond van die tipe middel wat gebruik is.*	(3)

5.3

5.3.1



- Use at least 4 turning profiles
  Gebruik ten minste 4 draai vorms
- Look at ratio
  Kyk na verhouding

Example / *Voorbeeld* (8)

5.3.2	i)	Line	*Lyn*
	ii)	Form	*Vorm*
	iii)	Shape	*Fatsoen*
	iv)	Texture	*Tekstuur*
	v)	Colour	*Kleur*
	vi)	Contrast	*Kontras*

Any 2 *Enige 2* (2)

5.2.3	i)	Copied existing furniture styles	*Nagebootste bestaande meubels*
	ii)	Local woods	*Plaaslike houtsoorte*
	iii)	Mixing of existing styles	*Vermenging van bestaande style*
	iv)	Non-gilded brass escutcheon	*Onvergulde koperbeslag*
	v)	Solid wood	*Soliede hout*
	vi)	Clumsy and heavy	*Lamp en swaar*
	vii)	Fit in with local building styles	*Pas by plaaslike boustyle*
	viii)	Single clothes cupboard	*Jonkmanskas*
	ix)	Built-in cupboards	*Ingeboude muurkas*
	x)	Folding stool	*Voustoel*
	xi)	Wagon chest	*Wakis*
	xii)	Riempies chair and bench	*Riempiestoel en bank*
	xiii)	Larger furniture could be dismantled	*Groter meubelstukke kan uitmekaar haal.*
	xvi)	Casters under heavy furniture	*Wieletjies ander swaar meubels se pote.*

Any 3 *Enige 3* (3)

[40]

TOTAL / *TOTAAL*: 200÷2=100