

**GAUTENG DEPARTMENT VAN ONDERWYS  
SENIOR SERTIFIKAAT EKSAMEN**

**HANDELSWISKUNDE SG**

POSSIBLE ANSWERS / MOONTLIKE ANTWOORDE SUPP 2007

**VRAAG 1  
VERHOUDINGS, MENGSELS EN STATISTIEK**

- 1.1 5 dele teen R6,66/kg = R33,30  
4 dele teen R7,20/kg = R28,80  
∴ 9 dele kos: R62,10  
∴ Koste van 1 kg van die mengsel:  $\frac{R62,10}{9}$   
= R6,90 (4)
- 1.2  $1\frac{7}{8} \div \frac{5}{7} - 3\frac{5}{8}$  of  $2\frac{1}{8} - 2\frac{9}{8}$   
=  $\frac{15}{8} \times \frac{7}{5} - 3\frac{5}{8}$  =  $\frac{21}{8} - 2\frac{9}{8}$   
=  $2\frac{5}{8} - 3\frac{5}{8}$  =  $-\frac{1}{8}$  (4)
- 1.3 1.3.1 die gemiddelde  $(0,3 + 0,9 + 2,6 + 27,8 + 67,5) \div 6$   
=  $100 \div 6$   
=  $16\frac{2}{3}$  (2)
- 1.3.2 die modus 0,9% (2)
- 1.3.3 die mediaan (0,3; 0,9; 2,6; 27,8%; 67,5%)  
Mediaan =  $\frac{0,3 + 2,6}{2}$   
=  $\frac{2,9}{2}$   
= 1,45 (3)
- 1.4  $\frac{1}{3} : \frac{1}{4} : \frac{1}{6} = 4 : 3 : 2$   
A se aandeel:  $\frac{4}{9} [\frac{1}{3} \div \frac{3}{4}] \times \frac{1375}{1} = R611,11$   
[  $0,3 \div 0,75$  ]  
B se aandeel:  $\frac{3}{9} [\frac{1}{4} \div \frac{3}{4}] \times \frac{1375}{1} = R458,33$   
C se aandeel:  $\frac{2}{9} [\frac{1}{6} \div \frac{3}{4}] \times \frac{1375}{1} = R305,56$  (5)

[20]

## VRAAG 2 INSOLVENSIE

2.1 Krediteure se eis

$$R14\,000 \div 33\frac{1}{3} \times 100$$

$$= 14\,000 \div \frac{1}{3} \text{ üüü}$$

$$= 14\,000 \times 3 \text{ ü}$$

$$= R42\,000 \text{ üü}$$

(6)

2.2 Realisering van bates:

Vaste eiendom	R150 000 ü
Kontant voorhande	R 2 700 ü
Boekskuld	<u>R8 690 ü</u>
	<u>R161 390 ü</u>

Minus voorkeur eise

Verband R6 000 ü

Rente 11 390 ü

Sekwestrasiekoste R11 390 ü

Bedrag beskikbaar vasaamloper krediteure R150 000 üü

Totale eise v krediteure R250 000

$$\text{Dividende} = \frac{150\,000}{250\,000} \times 100 \text{ üü}$$

$$= 60 \text{ c in die Rand üü}$$

(14)

**[20]**

## VRAAG 3 VENNOOTSKAPPE

3.1 Verhouding waarin wins verdeel word:  $80\,000 \times 12 : 60\,000 \times 10 \text{ üüüü}$

$$960\,000 : 600\,000 \text{ üü}$$

$$8 : 5 \text{ üü}$$

(8)

3.2 X : Rente op kap.  $60\,000 \times 10,5\% = R6\,300 \text{ ü}$

Y : Rente op kap.  $80\,000 \times 10,5\% = R8\,400 \text{ ü}$

Totale rente = R14 700 ü

Plus Bonus = R30 000

Totaal rente + bonus = R44 700 ü

$$\begin{aligned}
 \text{Oorblywende netto wins} & : \quad R68\,000 - 44\,700 \\
 & = \quad R23\,300 \\
 \text{Reserwe fonds} & = \quad 15\% \text{ of } R23\,300 \\
 & = \quad R3\,495 \\
 \text{Res van wins:} & R23\,300 - 3\,495 \\
 & = \quad R19\,805
 \end{aligned}$$

$$\begin{aligned}
 \text{X se aandeel van netto wins} & : \quad R^{\frac{2}{5}} \times \frac{19805}{1} \\
 & = \quad R7\,922
 \end{aligned}$$

(12)  
[20]

#### VRAAG 4 WINS EN VERLIES

$$\begin{aligned}
 4.1 \quad \text{Kosprys van artikel} & : \quad \frac{100 \times 22\,500}{112,5} \\
 & = \quad R20\,000
 \end{aligned}$$

(6)

$$\begin{aligned}
 4.2 \quad \text{KP} & = \quad R1254 \\
 \text{Wins} & : \quad 22,5\% \text{ of } R1254 \\
 & = \quad R282,15
 \end{aligned}$$

$$\begin{aligned}
 \text{VP voor afslag} & : \quad 1254 + 282,15 \\
 & = \quad R1536,15 \\
 \text{MP is} & 1536,15 \times \frac{100}{82} \times \frac{100}{95} \\
 & = \quad R1980,5
 \end{aligned}$$

(10)

$$\begin{aligned}
 4.3 \quad 4.3.1 \quad \text{Verkoopprys van artikel} & : \quad 1000 \times \frac{87,5}{100} \\
 & = \quad R875
 \end{aligned}$$

$$\begin{aligned}
 \text{KP van artikel} & R560 \times \frac{75}{100} \\
 & = \quad R420
 \end{aligned}$$

(10)

4.3.2 Nuwe markte prys:

$$\begin{aligned}
 & 640 \times \frac{85}{100} \\
 & = \quad R544 \\
 \text{KP van artikel} & R544 \times \frac{75}{100} \\
 & = \quad R408
 \end{aligned}$$

$$\begin{aligned}
 \text{Wins:} & R544 - 408 \\
 & = \quad R136
 \end{aligned}$$

$$\begin{aligned} \text{Wins \%: } & \frac{136}{408} \times \frac{100}{1} \% \ddot{u}\ddot{u} \\ & = 33 \frac{1}{3} \% \ddot{u} \end{aligned}$$

(14)  
[40]

### VRAAG 5 AANDELE EN EFFEKTE

5.1 5.1.1 R133 is die koste van R100 aandeel

$$\begin{aligned} \text{Daarom sal R2660 die koste wees van } & \frac{5320}{133} \times \frac{100}{1} \ddot{u}\ddot{u} \\ & = R4\,000 \ddot{u}\ddot{u} \end{aligned}$$

i.e. nominale waarde van aandeel gekoop is R100

(5)

5.1.2 Jaarlikse inkomste verkry uit aandeel

$$\begin{aligned} & 12.5\% \text{ of } 4\,000 \\ & = \frac{25}{200} \times \frac{4\,000}{1} \ddot{u}\ddot{u} \\ & = R500 \ddot{u}\ddot{u} \end{aligned}$$

(5)

5.1.3 Inkomstepersentasie op geld belê:

$$\begin{aligned} & \frac{R500 \times 100}{5320} \text{ of } \frac{25 \times 100}{200} \ddot{u}\ddot{u} \\ & = 9,4\% \ddot{u}\ddot{u} \end{aligned}$$

(5)

5.2 Totale waarde van aandeel: 5 000 x 75

$$= 18\,750$$

Inkomste

$$\frac{12}{100} \times \frac{18\,750}{1} \ddot{u}\ddot{u}$$

$$= R2\,250$$

(5)

5.3 5.3.1 % inkomste :  $\frac{2\,250}{13\,500} \times 100 = 16 \frac{2}{3} \% \ddot{u}\ddot{u}\ddot{u}$ 

(3)

5.3.2 Dividend : 15% of 75 = 11,25 sent

$$\text{Inkomste: } \frac{11,25}{90} \times \frac{100}{1} \% \ddot{u}\ddot{u}$$

$$= 12,5\% \ddot{u}$$

(4)

5.3.3 Opbrengs op staatseffekte:  $\frac{18}{90} \times \frac{100}{1} \ddot{u}\ddot{u}$ 

$$= 20\% \ddot{u}$$

(3)

5.3.4 Dividend : 15% of R3 ü  
 = 45 sent ü

% inkomste :  $\frac{45}{2,25} \times \frac{100}{1}$  % üü  
 = 20% ü

Beleggings 5.3.3 en 5.3.4 is die winsgewendsteü

(5)  
 [35]

**VRAAG 6  
 METING**

6.1 Oppv. Van sirkel :  $r^2 = 616$   
 $r^2 = 616 \times \frac{7}{22}$  üü  
 = 196  
 $r = 14$ üü

Omtrek v sirkel  $? \times 2 \times 14$   
 $= \frac{22}{7} \times 2 \times 14$  üüü  
 = 88

Omtrek v wiel:  $\frac{88}{176} = 0,5$ m üüü

(10)

6.2 Vol van sement gel...  
 Area van ring x lengte  
 $= ? (R + r) (\pi (R - r)) \times h$   
 $= \frac{22}{7} (.45 + 25) (15 - .25)$  üüüüü  
 $= \frac{22}{7} (7)(.2)2$   
 = 6 üü

(8)

6.3 Oppvite-oppv van sfeer  
 $4\pi r^2$   
 $= 4 \times \frac{22}{7} \times \frac{7}{1} \times \frac{7}{1}$  üüüü  
 = 616 üü

(6)

6.4 6.4.1  $l : b = 2 : 1$  i.e  $l = 2b$

$2b \cdot b = 800$  ( $l \times b = \text{area}$ )

$2b^2 = 800$  üü  $b = 20$  ü

Lengte van grasperk =  $2 \times 20 = 40$ m ü

Breedte van grasperk = 20m ü

(4)

$$\begin{aligned}
 6.4.2 \text{ Oppv van grasperk + paadjie} &= (40 + 3) (20 + 3) \text{ üü} \\
 &= 43 \times 23 \text{ üü} \\
 &= 989\text{m}^2 \text{ ü}
 \end{aligned}$$

$$\text{Area van grasperk: } 40 \times 20 = 800\text{m}^2$$

$$\text{Area van paadjie: } 989 - 800 = 189\text{m}^2 \text{ ü} \quad (7)$$

$$\begin{aligned}
 6.5 \text{ Vol van sirkelvormige reservoir} &: \pi r^2 h \\
 &= \frac{22}{7} \times 3 \times 3 \times 10,5 \text{ üü} \\
 &= 297\text{m}^3 \text{ üüü}
 \end{aligned}$$

$$1 \text{ liter} = 1000\text{cm}^3$$

$$1 \text{ kiloliter} = 1000000\text{cm}^3$$

$$= 1\text{m}^3 \text{ ü}$$

$$\text{Kapasiteit van sirkelvormige reservoir: } 297 \text{ kiloliter üü} \quad (10)$$

[45]

### VRAAG 7 RENTE, WAARDEVERMINDERING EN VERSEKERING

$$\begin{aligned}
 7.1 \text{ P} &= \frac{100 \times A}{100 \times rt} \\
 &= \frac{100 \times 100}{100 \times 24 \times (.25)} \text{ üüü} \\
 &= \frac{200}{106} \text{ ü} \\
 &= \frac{74200}{106} \text{ ü}
 \end{aligned}$$

$$= R700 \text{ üüü} \quad (10)$$

$$\begin{aligned}
 7.2 \text{ Res. waarde na 3 jaar} &= 12\,500 \times .67 \times .67 \text{ üüüüü} \\
 &= R5\,611,25 \text{ üü} \quad (6)
 \end{aligned}$$

$$\begin{aligned}
 7.3 \text{ Premie (p)} &= \frac{R40 \times 100\,000}{100} \text{ üü} \\
 &= R400 \text{ üü}
 \end{aligned}$$

Premie betaalbaar wat ook premie dek

$$\frac{Vp}{V-p}$$

$$= \frac{10\,000 \cdot 400}{100\,000 - 400} \text{ üü}$$

$$= \frac{40000000 \text{ ¤}}{99600 \text{ ¤}}$$

$$= R401,61 \text{ ¤¤} \quad (10)$$

7.4  $A = P (1 + r/200)^{2n}$

$$= 7\,000(1 + 13/200)^{2 \times 5/2} \text{ ¤¤¤¤¤}$$

$$= 7\,000(1 + 13/200)^5 \text{ ¤}$$

$$= 7\,000(1 + 0,065)^5 \text{ ¤}$$

$$= 9590,61 \text{ ¤¤¤}$$

Totale bedrag rente R9 590,61 – 7 000 ¤

$$= R2\,590,61 \text{ ¤¤}$$

(14)  
[40]

### VRAAG 8 MINUTEITE

8.1 Bedrag:  $\frac{A}{S_{10} \text{ at } 4\frac{1}{2}\%}$

$$= \frac{70\,000}{12,692 \text{ ¤}}$$

$$= 5\,596,52 \text{ ¤¤}$$

(4)

8.2 Huidige waarde van annuïteit van R 3000 vir 5 jaar

$$= \text{inst } (a_4 + 1) \text{ teen } 6\%$$

$$= 3000 (3,465) \text{ ¤¤¤¤¤}$$

$$= 3000 (4,465) \text{ ¤¤¤¤¤}$$

$$= R13395 \text{ ¤¤}$$

(6)

8.3 Jaarlikse opbuiement = bedrag verskuldig  
 $A_{21}$  teen  $3\frac{1}{2}\%$

$$= \frac{102\,886 \text{ ¤¤}}{14,698 \text{ ¤¤}}$$

$$= 7\,000 \text{ ¤¤}$$

(4)

8.4 Bedrag verskuldig na 20 jaar

$$= P(S_2 - 1) \text{ teen } 8\%$$

$$= 6\,000 (50,4229 - 1) \text{ ¤¤¤¤¤}$$

$$= 6\,000 (49,4229) \text{ ¤}$$

$$= R296\,537,40 \text{ ¤¤}$$

(6)  
[20]

**VRAAG 9**  
**WISSELKOERSE EN BELASTING**

9.1 Hoeveelheid Britse pond =  $1496,49/11,9057$  üü  
=  $£125,70$ üü (4)

9.2 Koste v VSA rekenaars:  $R200 \times 6,5005 = R1300,10$ üüüü

Koste v Japanse rekenaars:  $\frac{25\,000 \times 6,5005}{109,27}$ üüü

=  $R1487,27$ ü

Voer rekenaars in vanaf die VSA ü

(10)

9.3 Koste van elektrisiteit:  $938\text{kw} \times 23,67$ üüü =  $R222,02$  üüü

Koste van water (35kl = 6+4+5+5+15)

6kl Gratis ü

4 x 3,60 kl R14,40ü

5 x 4,80 per kl R24,00ü

5 x 6,00 per kl. 30,00ü

15 x 7,19 107,85ü

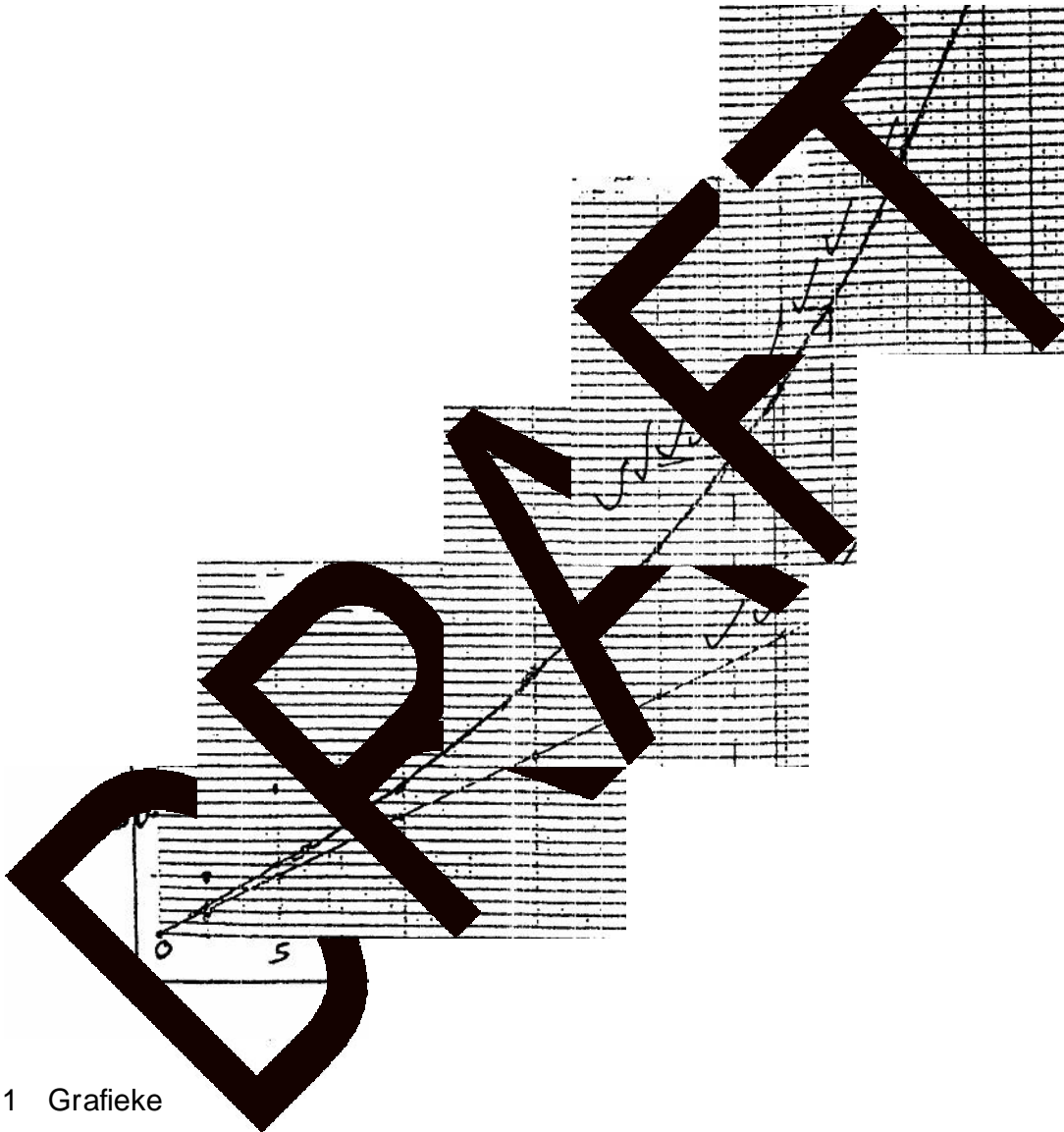
108,30 ü

Totale koste van v  $R222,02 + R108,25 = R330,27$  üü

(11)  
**[25]**



## VRAAG 10



- |      |          |                         |             |
|------|----------|-------------------------|-------------|
| 10.1 | Grafieke |                         | (20)        |
| 10.2 | 10.2.1   | Enkelvoudige rente R125 |             |
|      |          | Saamgestelde rente R239 | (3)         |
|      | 10.2.2   | 33 jaar                 | (3)         |
|      | 10.2.3   | $3(273 - 135) = 3(138)$ | (3)         |
|      |          | $= R414$                | (6)         |
|      |          |                         | <b>[35]</b> |

**TOTAL: 300**