Multiple-choice section

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Question | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Answer | C | A | B | D | C | A | C | A |

Question 1 [1.1]

C

= 60%

Question 2 [1.2]

A

0.4 × $270 = $108

$270 – $108 = $162

Question 3 [1.3]

B

$16 000 + $11 999 = $27 999

$27 999 × 0.028 = $783.97

$783.97 + $180 = $963.97

Question 4 [1.4]

D

$10 × 12 = $120

$115 + $120 = $235

Question 5 [1.5]

C

*I* = *PrT*

$950 × 0.049 × 8 = $372.40

Question 6 [1.6]

A

fees = $5.00 + (4 × $0.10) + (8 × $0.90) + (5 × $1.80) + (2 × $0.50) + (3 × $0.10)

= $22.90

Question 7 [1.7]

C

4020 W = 4.02 kW

4.02 kW × 3 = 12.06 kWh

12.06 kWh × $0.142 = $1.71

Question 8 [1.8]

A

24 – 4 = 20 months remaining on contract

$58 × 20 = $1160

$11 060 + $110 = $1270

Multiple-choice total marks: 8

Short answer section

Question 9 2 marks [1.4]

Some stores allow customers to buy on terms. Under this arrangement, customers are often given an interest-free period. After this time, if the loan has not been fully paid off, customers are expected to pay a high rate of interest. To avoid potentially paying interest, some people choose to use cash or EFTPOS to pay for goods rather than a credit card.

Question 10 2 marks [1.1]

(a) 0.45 × $200 = $90

(b) 0.85 × 80 = $68

Question 11 2 marks [1.1]

original price = $2.29 + $0.20

original price = $2.49

therefore,  = 8%

Question 12 2 marks [1.2]

100% + 60% = 160%

= 1.6

1.6 × original price = $2.20

cost price = 

= $1.38

Question 13 4 marks [1.3]

Monday to Friday: 20 × $15 = $300.00

Saturday: $15.00 × 1.5 = $22.50 per hour

$22.50 × 4 = $90

Sunday: $15.00 × 2 = $30 per hour

$30 × 5 = $150

total = $300 + $90 + $150

= $540

Question 14 3 marks [1.3]

1700 × 0.03 = $51.00 per day

$51.00 × 5 = $255.00 per week

$255 × 5 = $1275.00 for 5 weeks

Question 15 3 marks [1.4]

(a) income = $75 000

bracket = $37 001 – $80 000

(b) income = $75 000

bracket = $37 001 – $80 000

tax = $3572 + 32.5c for each dollar over $37 000

75 000 – 37 000 = 38 000

tax = $3572 + 32.5c × 38 000

= $15 922

(c) income = $92 000

bracket = $80 001 – $180 000

(d) income = $92 000

bracket = $80 001 – $180 000

tax = $17 547 + 37c for each dollar over $80 000

92 000 – 80 000 = 12 000

tax = $17 547 + 37c × 12 000

= $21 987

Question 16 3 marks [1.4]

12 × $25 = $300

0.09 × $45 000 = $4050

$4050 + $300 = $4350

Question 17 3 marks [1.5]

(a) $6000 × 0.17 × 0.25 = $255

(b) $6000 × 0.17 ×  = $4760

In total, Belinda repaid $6000 + $4760 = $10 760.

Question 18 3 marks [1.6]

(a) $450 – $120 = $330

$330 ÷ $20 = 16.5 payments

It will take Mary 17 weeks to pay for the outfit. She can wear it to the races.

(b) 16 × $20 = $320

$330 – $320 = $10

Her last payment will be $10.

Question 19 3 marks [1.7]

(a) 3 500 000 L

(b) 90.232 kW

(c) 3 000 000 J

Question 20 3 marks [1.7]

**(a)** 14 × 3 = 42 L of water per shower

**(b)** 42 L × 365 = 15 330 L in a year

**(c)** 15 330 L ÷ 1000 = 15.33 kL

15.33 × $1.29 = $19.78

Question 21 2 marks [1.7]

(a) 1.1 × $210.65 = $231.715

$231.715 – $113.91 = $117.81

(b) 13 380 = *V* × 28.23 × 1.003

*V* = 

*V* = 472.55 m3

Question 22 1 mark [1.8]

$120 × 24 = $2880

Question 23 4 marks [1.8]

(a) 2-minute call: $0.20 + ($0.92 × 2) = $2.04

3-minute call: $0.20 + ($0.92 × 3) = $2.96

10-minute call: $0.20 + ($0.92 × 10) = $9.40

text messages: 23 × $0.25 = $5.75

total: $2.04 + $2.96 + $9.40 + $5.75 = $20.15

(b) $25.00 – $20.15 = $4.85

Yes. He would have $4.85 credit remaining.

Short answer total marks: 40

Extended answer section

Question 24 7 marks [1.6]

(a) 12 × $3.50 = $42.00; $30.00 + $42.00 = $72.00

(b) After the initial fee of $30.00 and a deposit of $200, there is still $1200 + $42 of fees left to pay. Therefore, $1242 ÷ 12 = $103.50 monthly repayment.

(c) 0.05 × $1200 = $60.00; $60.00 + $3.50 (fee) = $63.50

(d) $63.50 × 12 = $762

$1242 – $762 = $480.00 left owing

(e) *P* = $480.00

*r* = 32% = 0.32

*T* = 

*I* = *PrT*

= 480 × 0.32 × 

= $12.62

Extended answer total marks: 7

TOTAL test marks: 55