## Primary Five <br> Mathematics <br> Semestral Assessment Two

## Section A

Questions 1 to 5 carry 1 mark each. Questions 6 to 15 carry two marks each.
Choose the correct answer for each question and write its number ( $1,2,3$ or 4 ) in the boxes provided.

1. In 469 185, the digit " 6 " is in the $\qquad$ place.
(1) hundreds
(2) thousands
(3) ten thousands
(4) hundred thousands
$\square$
2. Find the missing value.
$8 \div 4+5 \times 3-(9+2)=$ $\qquad$ .
(1) 1
(2) 6
(3) 10
(4) 14
3. Which one of the following has half of its figure shaded?
(1)

(2)

(3)

(4)

4. $23 / 8$ expressed as a decimal is $\qquad$ .
(1) 2.375
(2) 2.38
(3) 2.803
(4) 2.83
5. Which one of the following shapes cannot tessellate?
(1)

(2)

(3)

(4)

6. In the figure, not drawn to scale, $A X C$ is a straight line and $X A=X B=B C$ Find the value of $\angle X B C$.
A

c
(1) $26^{\circ}$
(2) $52^{\circ}$
(3) $64^{\circ}$
(4) $76^{\circ}$
$\square$
7. Tom puts $\$ 840$ in a bank. The interest rate is $4 \%$ in one year. How much will he have in the bank after one year?
(1) $\$ 33.60$
(2) $\$ 873.60$
(3) $\$ 897.40$
(4) $\$ 1176.00$

8. How many cubes, each of side 5 cm , are equivalent in volume to a cube of side 15 cm ?
(1) 3 cubes
(2) 15 cubes
(3) 27 cubes
(4) 75 cubes

9. Ah Meng poured $1 / 620 \mathrm{~cm}^{3}$ of water into a rectangular container, 18 cm long, 15 cm wide and 12 cm high. How high was the water level in this container?
(1) 6 cm
(2) 7.5 cm
(3) 9 cm
(4) 10.5
10. $A B C D$ is a rectangle. Find the area of the shaded portion in the rectangle.

(1) $264 \mathrm{~cm}^{2}$
(2) $444 \mathrm{~cm}^{2}$
(3) $484 \mathrm{~cm}^{2}$
(4) $504 \mathrm{~cm}^{2}$

11. A machine can produce 360 screws in 9 minutes. How many screws can it produce in one hour?
(1) 400
(2) 2400
(3) 3240
(4) 194400
12. The cost of tiling a living room of floor area $32 \mathrm{~m}^{2}$ is $\$ 2400$. How much will it cost to tile a room with a floor area of $42 \mathrm{~m}^{2}$ ?
(1) $\$ 3050$
(2) $\$ 3150$
(3) $\$ 4125$
(4) $\$ 4200$ $\square$
13. At a Carnival, the number of men was 20 more than the number of women. If there were 140 men, what was the ratio of the number of men to the number of women?
(1) $7: 6$
(2) $6: 7$
(3) $7: 8$
(4) $8: 7$ $\qquad$
14. Simon had 400 coupons to sell. He sold $1 / 4$ of them on Sunday and $1 / 5$ of the remainder on Monday. How many coupons did he sell altogether?
(1) 80
(2) 100
(3) 160
(4) 180
15. 36 pupils in a class passed a test. The rest of the 4 pupils failed the test. What percentage of the pupils passed the test?
(1) $10 \%$
(2) $80 \%$
(3) $90 \%$
(4) $96 \%$
$\square$

## Section B (20 marks)

Questions 16 to 35 carry 1 mark each. Write your answers in the space provided.
Leave your answer in the lowest terms when necessary.
16. Express $13 / 20$ as a percentage.
$\square$
17. A remote-controlled toy car cost $\$ 90$. Ali bought it at a $22 \%$ discount. How much did he pay for the toy car?
18. Siti had 56 used telephone cards. Jack had 7 cards fewer than her. How many cards did they have altogether?
19. Peter and Paul had $\$ 120$ altogether. Paul had $\$ 25$ more than Peter. How much money did Peter have?
20. What is the sum of $70,7,0.5$ and 0.007 ? Round off the answer to the nearest hundredths.
$\square$
21. Susan wanted to buy a computer which cost $\$ 3750$. If she saved $\$ 150$ a month, how many months would she have to save before she could buy the computer?
22. How many litres of water can a rectangular container, 80 cm by 50 cm by 40 cm hold?
litre
23. Triangle $A B C$ is not drawn to scale. Find the length of $A B$.

24. A sum of money was shared between Tom and Jerry in the ratio 5:9. If Tom received \$20, how much did Jerry get?

25. Find the area of the shaded figure.

$\square$
26. There were 1200 pupils in the school. If $40 \%$ of them were girls, how many more boys than girls were there in the school?
27. What is the total surface area of a cube with side 5 cm ?

28. The area of a triangle is $28 \mathrm{~cm}^{2}$. If the base of the triangle is 7 cm , find the height of the triangle.
cm
29. The room rate at the Supreme Hotel is $\$ 160$ a day. At this rate, how many days did Mr Sam stay at the hotel if he paid $\$ 960$ ?
30. The average height of three boys is 157 cm . Find the last digit of Sam's height.

| John | 148 cm |
| :--- | :--- |
| Peter | 170 cm |
| Sam | $15 ? \mathrm{~cm}$ |

31. Mrs Tan has 80 kg of rice. Every week she uses $1 / 5$ of it. How much rice will she use in 4 weeks?

## kg

32. In the diagram below. $\angle \mathrm{a}+\angle \mathrm{b}+\angle \mathrm{c}=$ $\square$

$\qquad$
33. ABCD is a rhombus, not drawn to scale. Find $\angle \mathrm{x}$.

34. Express $2 \frac{3}{7}$ as a decimal. Correct your answer to 2 decimal places.

35. Find the value of $\mathbf{P}$.


## Section C (55 Marks)

For each question, show your working clearly in the space below each question and write your answers in the spaces provided. The mark for each question is given in the brackets.
36. What is the area of the shaded part in the figure below?


Ans:
37. The figure below is not drawn to scale. $A B C D$ is a parallelogram. ECF is an isosceles triangle. Find $\angle \mathrm{c}$.


Ans:
(2)
38. The cost of 2 mangoes and 2 durians is $\$ 32$. The cost of 1 durian is thrice the cost of 1 mango. What is the cost of 1 mango?

Ans:
(2)
39. At a school soccer match, $3 / 4$ of the spectators were students. $2 / 3$ of the remainders were teachers and the rest were parents. If there were 80 parents, what was the total number of spectators at the match?

Ans: $\qquad$ (3)
40. Mrs Tan is 40 years old and her daughter is 6 years old. In how many years' time will Mrs Tan be thrice as old as her daughter?

Ans:
41. A box with 15 balls bearings in it weighs 820 g . The same box with 3 ball bearings weighs 220 g . What is the weight of the box?

Ans:
42. Andy and Roy had 360 beads. Andy lost $\frac{1}{3}$ of his beads and Roy threw away 40 beads. Andy and Roy had the same number of beads left. How many beads did Andy had at first?

Ans:
43. Samy bought a box of sweets. He put half of the sweets equally into 4 tins and the other half equally into 10 jars. There were 33 sweets in 2 tins and 6 jars altogether. How many sweets did he buy?

Ans:
44. Mr Ng had a total number of 650 goats and cows in his farm. Out of the total number, $30 \%$ were goats. He bought some more goats until the number of goats had increased to $35 \%$. How many more goats did he buy?

Ans: $\qquad$ (4)
45. Rosnah paid $\$ 11.90$ for 5 pens and 2 key-chains. Her brother bought 3 pens and 4 key-chains from the same shop ad he paid $\$ 10.50$ for them.
a) What was the cost of 1 pen?
b) What was the cost of 1 key-chain?

Ans: a)
Ans: b)
46. The bar graph shows the enrolment in a school from 1998 to 2002.

a) Which year had the greatest increase of the number of pupils?
b) In the year 2000, $2 / 5$ of the pupils wore spectacles. How many did not wear spectacles?
c) Find the average enrolment per year for the 5 years.

Ans: a)
Ans: b) $\qquad$
Ans: c)
47. The ratio of boys to girls in a competition is $2: 3$. All the boys do not wear spectacles. Among the girls, the ratio of those who do not wear spectacles to those who wear spectacles is $1: 5$.
a) What fraction of the girls wear spectacles?
b) There were 30 more boys than girls who do not wear spectacles. How many pupils in the competition do not wear spectacles?

Ans: $\qquad$
Ans:
48. The perimeter of square $P$ is twice that of square $Q$. The area of square $R$ is 4 times that of square P . If the side of square R is 1.2 m ,
a) find the side of square $P$
b) find the ratio of the area of square $P$ to the total area of squares $Q$ and $R$.


Ans: a)
49. A box contain black, white and red buttons. $10 \%$ of the buttons are black. The ratio of the number of white buttons to the number of red buttons is 20:7. There are 169 more white buttons than the red buttons.
a) How many black buttons are there in the box?
b) How many buttons are there altogether in the box?

Ans: b)
50. The height of a rectangular wooden block is 4 cm . Its width is the sum of its height and half its length. Its length is the sum of its height and width.
a) What is the length of the wooden block?
b) What is the volume of the wooden block?

Ans: a)
Ans: b)

