NANYANG PRIMARY SCHOOL

# FIRST SEMESTRAL ASSESSMENT
# 2019

## PRIMARY 5

## MATHEMATICS
## PAPER 1
## (BOOKLET A)

Total Duration for Booklets A and B: 1 hour

Additional materials: Optical Answer Sheet (OAS)

## INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Shade your answers in the Optical Answer Sheet (OAS) provided.
5. The use of calculators is **NOT** allowed.

Name: _____ (        )

Class: Primary 5 (            )

Questions 1 to 10 carry 1 mark each.   Questions 11 to 15 carry 2 marks each.
For each question, four options are given.   One of them is the correct answer.
Make your choice (1, 2, 3 or 4) and shade your answer on the Optical Answer
Sheet.                                                                        (20 marks)

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1    In 47 186, the digit 7 stands for _____.

     (1)    7 ten thousands

     (2)    7 thousands

     (3)    7 hundreds

     (4)    7 tens

2    Find the value of $26 + (12 - 9 \div 3) \times 4 - 2$.

     (1)    28

     (2)    54

     (3)    60

     (4)    138

3   Express $\dfrac{7}{20}$ as a decimal.

    (1)   0.07

    (2)   0.14

    (3)   0.28

    (4)   0.35

4   $13.798 = 10 + 3 + \dfrac{7}{10} + \dfrac{9}{100} + \dfrac{8}{\square}$

What is the missing number in the $\square$ ?

    (1)   10

    (2)   100

    (3)   1000

    (4)   10 000

5   Express 3015.cm in metres.

    (1)   3.015 m

    (2)   30.15 m

    (3)   301.5 m

    (4)   301 500 m

6    Express 0.72 as a fraction in its simplest form.

(1)    $\dfrac{3}{4}$

(2)    $\dfrac{18}{25}$

(3)    $\dfrac{36}{50}$

(4)    $\dfrac{72}{100}$
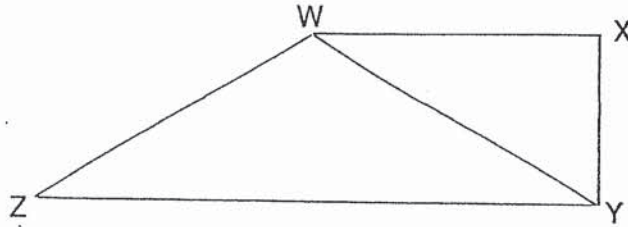
7    Find the value of 20.1 × 100.
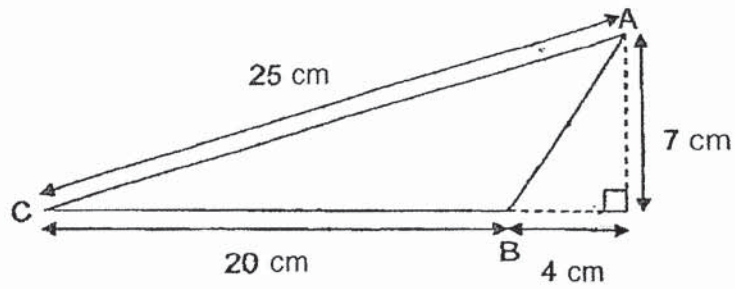
(1)    0.201

(2)    2.01

(3)    201

(4)    2010

8    The figure below is made up of triangle WYZ and triangle WXY. Given that the base of triangle WYZ is YZ, find its height.



(1)    XY

(2)    WX

(3)    WY

(4)    WZ


9    Find the area of triangle ABC.



(1)    14 cm²

(2)    70 cm²

(3)    84 cm²

(4)    87.5 cm²

4

**10**   Express 4000ml in cm³

   (1)   4000 cm³

   (2)   400 cm³

   (3)   40 cm³

   (4)   4 cm³

**11**   Mr Lee sold 1256 egg tarts in May.   He sold 131 more egg tarts in May than in June.   How many egg tarts did he sell in both months?

   (1)   1125

   (2)   1387

   (3)   2381

   (4)   2643

**12**   A total of $320 000 was collected by a school during a fund-raising campaign. There were 10 classes in the school and there 20 pupils in each class. Each pupil in the school collected the same amount of money. How much money was collected from each pupil?
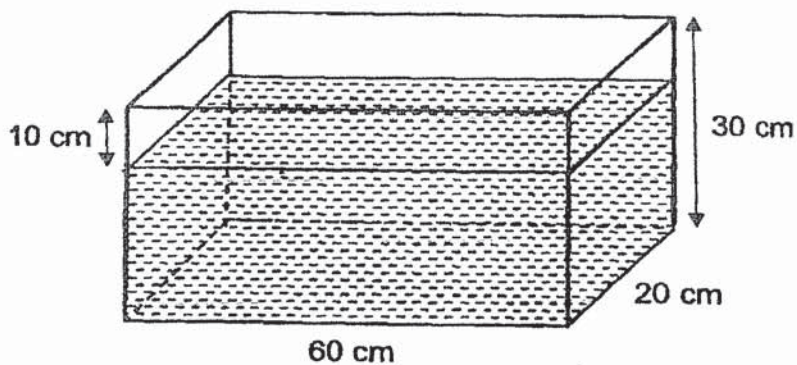
   (1)   $1600

   (2)   $3200

   (3)   $16 000

   (4)   $32 000

5

**13** The total mass of 3 identical tennis balls and 4 identical golf balls is 0.352kg. The total mass of 3 such tennis balls and 3 such golf balls is 0.306 kg. What is the mass of 1 golf ball?

    (1)    0.046 kg

    (2)    0.054 kg

    (3)    0.056 kg

    (4)    0.094 kg

**14** A rectangular tank measuring 60 cm by 20 cm by 30 cm contains some water as shown below.



Find the volume of water in the tank.

    (1)    12 000 cm³

    (2)    24 000 cm³

    (3)    36 600 cm³

    (4)    48 000 cm³

15   There were 216 pupils in a school hall. $\frac{1}{3}$ of the pupils wore spectacles. $\frac{5}{6}$ of the pupils who wore spectacles were boys.   How many boys wore spectacles?

    (1)   12

    (2)   60

    (3)   72

    (4)   180

NANYANG PRIMARY SCHOOL

# FIRST SEMESTRAL ASSESSMENT
## 2019

## PRIMARY 5

## MATHEMATICS
## PAPER 1
### (BOOKLET B)

Total Duration for Booklets A and B: 1 hour

## INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of calculators is **NOT** allowed.

Name: _____ (        )

Class: Primary 5 (        )

| Booklet B | / 25 |
|---|---|

Any query on marks awarded should be raised by 24 May 2019. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

Questions **16** to **20** carry **1** mark each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(5 marks)

16 Write three million, four hundred and two thousand and five hundred in numerals.

Ans: _____

17 What is the value of $2 \times 12 + 15 \div 3 - 2$?
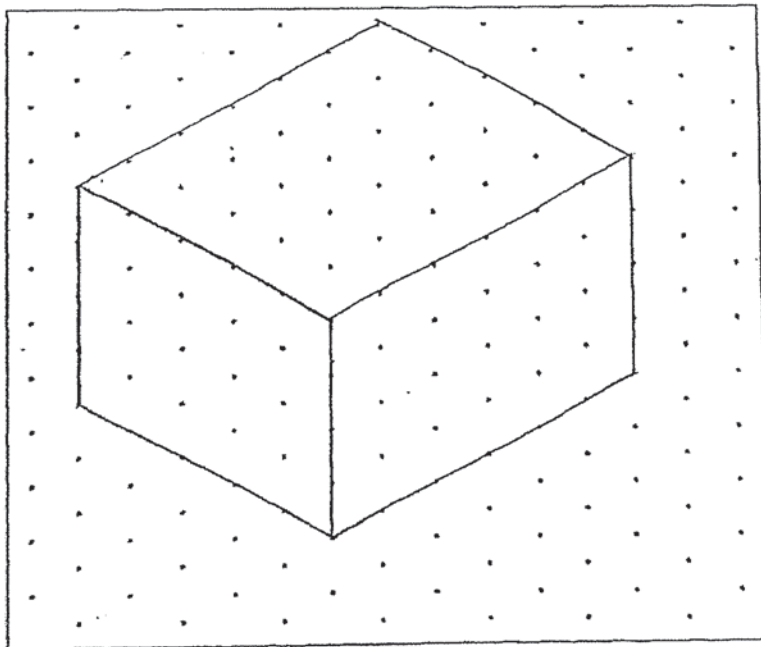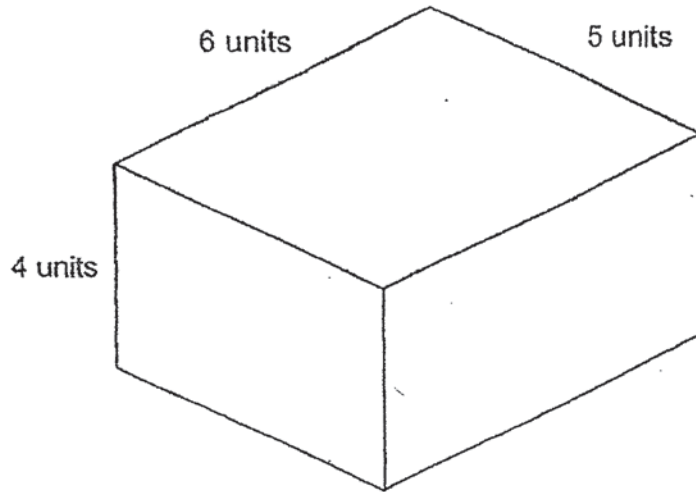
Ans: _____

18 What is the value of $16.84 + 4$?

Ans: _____

1

**19** Find the product of $\frac{7}{8}$ and $\frac{4}{7}$.

Express your answer as a fraction in its simplest form.

Ans: _____

**20**   Draw the solid shown below on the given isometric grid.

6 units        5 units

4 units

Questions **21** to **30** carry 2 marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)

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**21** Jun Xi took 45 min to travel from his house to his school. He left his house at 06 45. What time did he reach his school? Express your answer in 24-hour clock.

Ans: _____

---

**22** 10 identical chocolate bars were shared equally among 12 children. What fraction of a chocolate bar did each child get?

Ans: _____

---

**23** At a plantation, there are 40 rows of banana plants. There are 150 banana plants in each row. How many banana plants are there at the plantation?
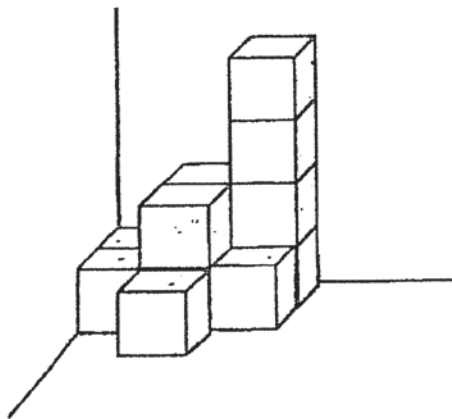
Ans: _____

4

**24** A number when rounded to the nearest hundred is 9700. What is the smallest possible value of the number?

Ans: _____

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**25** The total mass of 50 identical marbles is 0.65 kg. What is the mass of a marble?
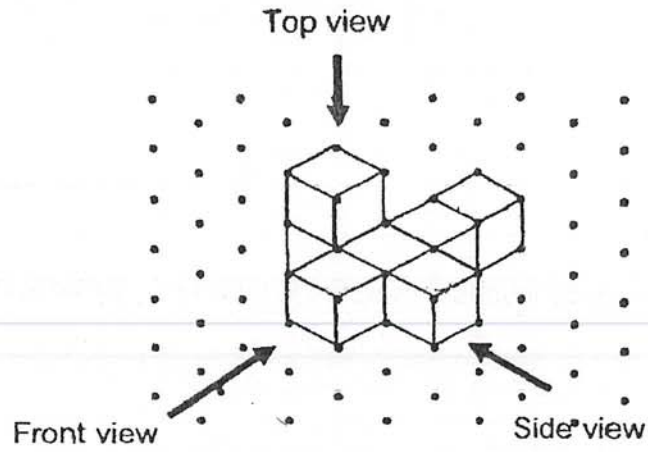
Ans: _____ kg
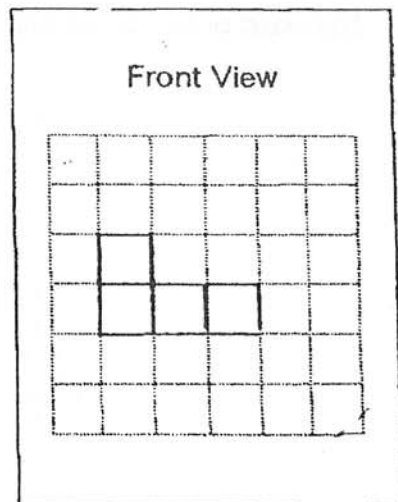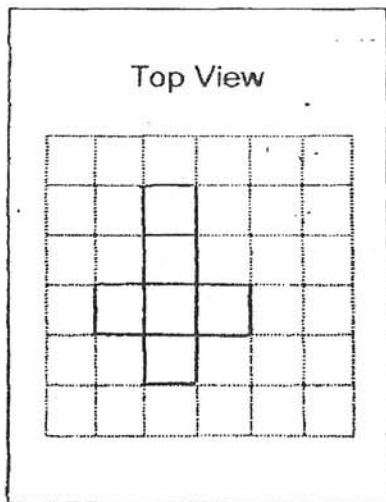
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**26** The solid below is built using unit cubes.



How many unit cubes are used to build the solid?

Ans: _____

**27** The solid below is built using unit cubes.



Top view

Front view                    Side view

Draw the top view and front view of the solid on the square grids provided below.



Top View



Front View

28    A beaker is $\frac{1}{3}$-filled with water at first.   After pouring 360 ml of water into

the beaker, the beaker is $\frac{1}{2}$-filled with water.   What is the capacity of

the beaker?   Give your answer in litres.

Ans: _____ $\ell$

29    Polly had equal lengths of orange and green ropes. After using 18.5 m
of orange rope and 35.5 m of green rope, the length of the remaining
orange rope was 5 times the length of the remaining green rope. What
was the length of the remaining green rope?

Ans: _____ m

**30** The figure below is made up of a square and a triangle. JKMN is a square. KLN is a triangle. LMN is a straight line. Given that JK = 12 cm and LN is twice as long as JK, what is the area of the figure?
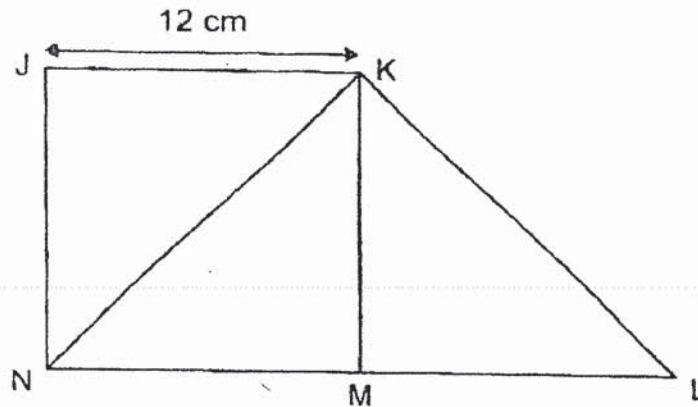


Ans: _____ cm²

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End of Paper

NANYANG PRIMARY SCHOOL

# FIRST SEMESTRAL ASSESSMENT
# 2019

## PRIMARY 5

## MATHEMATICS
## PAPER 2

Duration: 1 hour 30 minutes

## INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.
2. Follow all instructions carefully.
3. Answer all questions.
4. Write your answers in this booklet.
5. The use of an approved calculator is expected, where appropriate.

Name: _____ (     )

Class: Primary 5 (        )

Parent's Signature: _____

| Booklet A | / 20 |
|-----------|------|
| Booklet B | / 25 |
| Paper 2 | / 55 |
| Total | / 100 |

Any query on marks awarded should be raised by 24 May 2019. We seek your understanding in this matter as any delay in the confirmation of marks will lead to delays in the generation of results.

Questions **1** to **5** carry **2** marks each. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(10 marks)

1   There were 648 adults at a stadium. $\frac{4}{9}$ of the adults were men. How many men were there at the stadium?

Ans: _____

2   The masses of John, Gregory and Ethan are $38\frac{1}{5}$ kg, $41\frac{1}{3}$ kg and $52\frac{1}{4}$ kg respectively. Find the total mass of the 3 children. Give your answer as a mixed number in its simplest form.
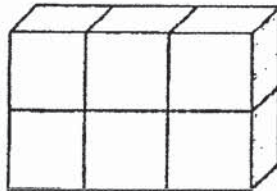
Ans: _____ kg

3   ABDE is a rectangle which is made up of 4 smaller identical rectangles. BCE is a shaded triangle. The length of BC is half that of AE. DE is 10 cm and AE is 8 cm. Find the total area of the unshaded parts.
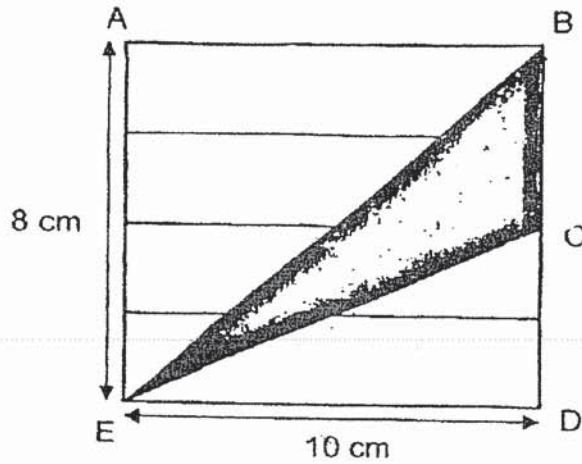


Ans: _____ em²

4   The solid below is made up of 6 identical cubes of edge 5 cm. What is the volume of the solid?



Ans: _____ cm³

2

5   The mass of a glass bottle filled with 10 identical erasers is 1200 g.   The mass of the same bottle when filled with 6 such erasers is 1040 g.   What is the mass of each eraser?

Ans: _____ g

For questions 6 to 17, show your working clearly and write your answers in the spaces provided. The number of marks available is shown in brackets [ ] at the end of each question or part-question. (45 marks)

6    The breadth of a rectangle is $\dfrac{37}{4}$ cm. Its length is $\dfrac{7}{2}$ cm longer than its breadth.

    (a)   What is the length of the rectangle? Express your answer as an improper fraction.

    (b)   What is the area of the rectangle? Express your answer as a mixed number in its simplest form.

Ans: (a) _____ [1]

        (b) _____ [2]

7    Mr Wang bought $2\dfrac{1}{4}$ kg of green beans and 3 times as much red beans as green beans. The cost of 1 kg of green beans was \$4 and the cost of 1 kg of red beans was \$5. What was the total amount of money Mr Wang spent on the green beans and red beans?

Ans: _____ [3]

4

**8**   There is a total of 8.4 kg of salt in 3 containers, X, Y and Z altogether. 0.4 kg of salt is moved from container X to container Y and 1.5 kg of salt is moved from container Z to container Y.   In the end, there is an equal amount of salt in each container.

(a)  How much salt is there in each container in the end?

(b)  How much salt is there in container Y at first?

Ans:  (a)  _____  [1]

(b)  _____  [2]

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**9**   The following figure is made up of a square, a rectangle and 2 identical triangles. AB and CD are straight lines.
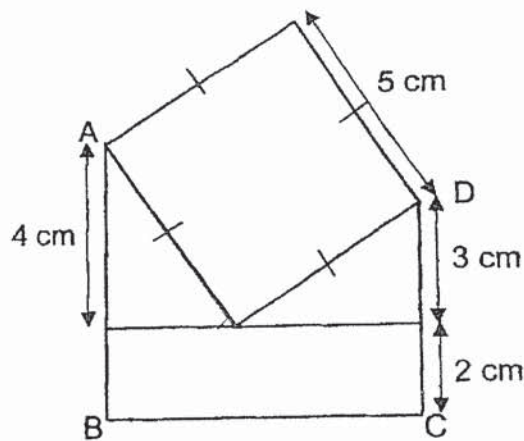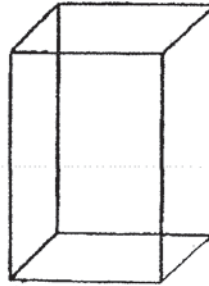


(a)  What is the length of the rectangle?

(b)  What is the area of the figure?

Ans:  (a)  _____  [1]

(b)  _____  [2]

10  Tank A, a cubical tank of edge 13 cm, was completely filled with water. Water was then poured from Tank A to an empty Tank B measuring 9 cm long by 11 cm wide by 13 cm high until Tank B was filled to its brim. How much water was left in Tank A?



Tank A

Tank B

Ans: _____ [3]

11  George has some red, blue and green stickers. $\frac{4}{9}$ of the stickers are
red. $\frac{2}{5}$ of the remaining stickers are blue and the rest are green. The
number of green stickers is 36 fewer than the number of red stickers.

(a) What fraction of the stickers are green?

(b) How many stickers does George have?

Ans: (a) _____ [2]

(b) _____ {2]

12    Sri and Devi had a total of 2160 g of flour at first.   Sri used twice as much flour as Devi.   Devi had twice as much flour left as Sri.   The mass of flour that Devi had left was 80 g more than what she had used.   How much flour did Sri have at first?

Ans: _____ [4]

13    Kay had a total of 13 two-dollar, five-dollar and ten-dollar notes.  The total value of the 13 notes was $89.  He then used all his ten-dollar notes to pay for a toy car.

(a)   How many five-dollar notes did Kay have?

(b)   How much did he pay for the toy car?

Ans:  (a)   _____ [3]

(b)   _____ [1]

14    During a sale, cooking pots and frying pans were sold at the prices shown in the table below.

| Cooking pot | Frying pan |
|---|---|
| Buy 1 at $810.90 | Buy 1 at $640 |
| Buy 2 or more at $800 each | Buy 2 or more at $630.50 each |

a)    Naomi bought 1 cooking pot and 4 frying pans during the sale. What was the smallest amount of money she paid?

(b)   Zechariah had $3000. What was the greatest number of cooking pots he could buy with $3000?

Ans: (a)  _____  [2]

(b)  _____ . [2]

15  In a chocolate shop, $\frac{3}{4}$ of the chocolates were white chocolates and the rest were dark chocolates. $\frac{1}{6}$ of the dark chocolates were sold. There were 75 pieces of dark chocolate left. How many pieces of chocolate were there in the shop at first?

Ans: _____ [4]

16    Jiemin has some orange juice.  If he fills 20 identical cups with the orange juice, he will have 600 ml of the orange juice left.  If he tries to fill 6 identical jugs with the orange juice instead, he will be short of 400 ml of the orange juice.  The capacity of a jug is the same as that of 4 such cups.

(a)  What is the capacity of a jug?

(b)  How much orange juice does Jiemin have?

Ans:  (a)  _____ [3]

        (b)  _____ [2]

12

17  Mrs Kwek bought a total of 576 red, blue and yellow buttons. $\frac{3}{4}$ of the buttons were red and blue buttons. $\frac{2}{3}$ of the buttons were blue and yellow buttons.

(a)  What fraction of the buttons were red?

(b)  Find the difference between the number of blue buttons and the number of yellow buttons.

Ans:  (a)  _____  [2]

(b)  _____  [3]

End of Paper

| | | |
|---|---|---|
| YEAR | : | 2019 |
| LEVEL | : | PRIMARY 5 |
| SCHOOL | : | NANYANG PRIMARY SCHOOL |
| SUBJECT | : | MATHEMATICS |
| TERM | : | SEMESTRAL ASSESSMENT 1 |

## PAPER 1
## BOOKLET A

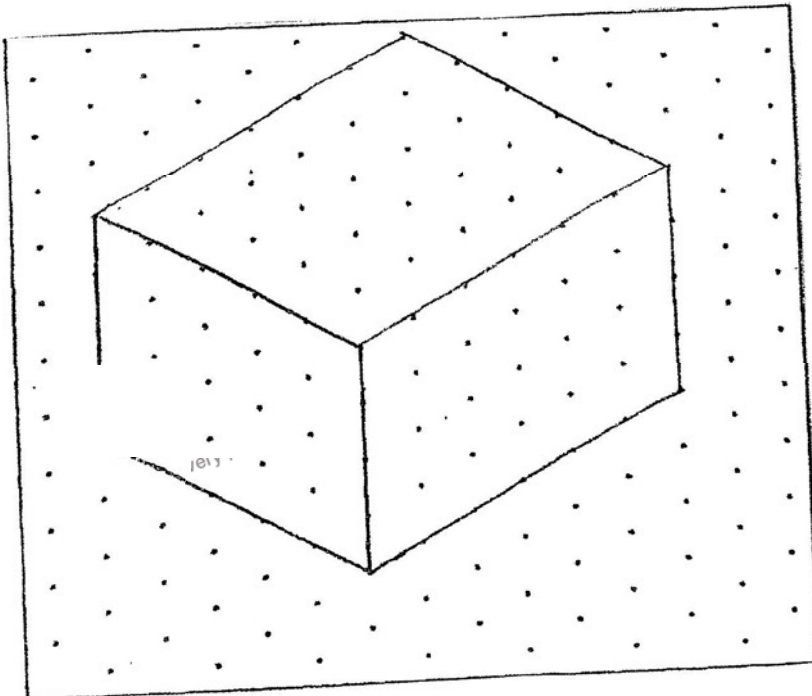| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 |
|----|----|----|----|----|----|----|----|----|-----|
| 2 | 3 | 4 | 3 | 2 | 2 | 4 | 1 | 2 | 1 |
| | | | | | | | | | |
| Q11 | Q12 | Q13 | Q14 | Q15 | | | | | |
| 3 | 1 | 1 | 2 | 2 | | | | | |

## BOOKLET B

Q16.  3402500

Q17.  27

Q18.  4.21

Q19.  $\frac{1}{2}$

Q20.



Q21.  07 30

Q22.  $\frac{5}{6}$

Q23.  6000 banana plants

Q24.  9650

Q25.  0.013kg

Q26.  12 unit cubes

**Q27.**



Front View | Top View
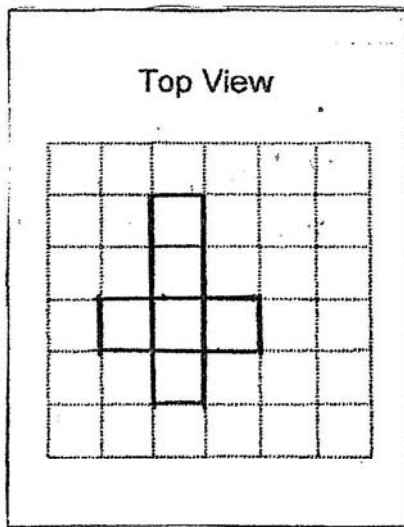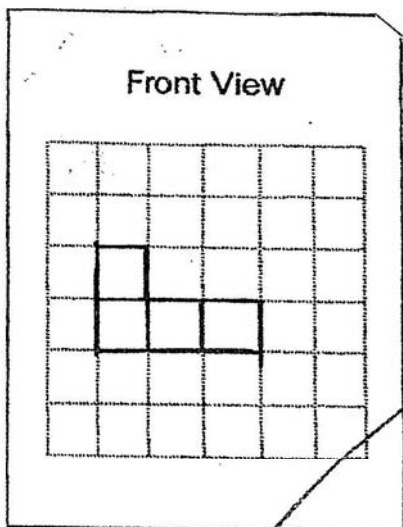
**Q28.** 2.16$l$

**Q29.** 4.25m

**Q30.** 216cm²

**PAPER 2**

**Q1.** $648 \times \frac{4}{9} = 288$

**Q2.** $38\frac{1}{5} + 41\frac{1}{3} + 52\frac{1}{4} = 131\frac{47}{60}$

**Q3.** $8 \times 10 = 80cm^2$

$\frac{1}{2} \times 4 \times 10 = 20cm^2$

Area of unshaded parts $\rightarrow 80 - 20$

$= 60cm^2$

**Q4.** Volume of 1 cube $\rightarrow 5 \times 5 \times 5$

$= 125cm^3$

Volume of solid $\rightarrow 125 \times 6$

$= 750cm^3$

**Q5.** Mass of 4 erasers $\rightarrow 1200 - 1040$

$= 160g$

Mass of 1 eraser $\rightarrow 160 \div 4$

$= 40g$

**Q6.** (a) $\frac{37}{4} + \frac{7}{2} = \frac{51}{4}$ cm

(b) $\frac{51}{4} \times \frac{37}{4} = 117\frac{15}{16}cm^2$

**Q7.** Mass of red beans bought $\rightarrow 2\frac{1}{4} \times 3$

$= 6\frac{3}{4}kg$

Total amount spent $\rightarrow \left(2\frac{1}{4} \times 4\right) + \left(6\frac{3}{4} \times 5\right)$

$= \$42.75$

**Q8.** (a) $\cdots = 2.8kg$

(b) $2.8 - 0.4 - 1.5 = 0.9kg$

**Q9.** (a) $3 + 4 = 7cm$

(b) Area of figure $\rightarrow (5 \times 5) + (7 \times 2) + \left(2 \times \frac{1}{2} \times 4 \times 3\right)$

$= 51cm^2$

**Q10.** Amount of water left in Tank A $\rightarrow (13 \times 13 \times 13) - (9 \times 11 \times 13)$

$= 910cm^2$

**Q11.** (a) $\dfrac{3}{5} \times \dfrac{5}{9} = \dfrac{1}{3}$

(b) $\dfrac{4}{9} - \dfrac{1}{3} = \dfrac{1}{9}$

$\dfrac{1}{9}$ of total → 36

Total → $36 \times 9$

       = 324

**Q12.** $60 \times 3 = 180g$

$2160 + 180 = 2340g$

$9u \to 2340g$

$1u \to 2340 \div 9$

   = 260g

$260 \times 2 = 520g$

$520 - 60 = 460g$

$460 + 460 + 260 = 1180g$

**Q13.**

| No. of $2 notes | Value of $2 notes | No. of $5 notes | Value of $5 notes | No. of $10 notes | Value of $10 notes | No. of notes | Total value | Check |
|---|---|---|---|---|---|---|---|---|
| 4 | $8 | 4 | $20 | 5 | $50 | 13 | $78 | X |
| 3 | $6 | 5 | $25 | 5 | $50 | 13 | $81 | X |
| 2 | $4 | 5 | $25 | 6 | $60 | 13 | $89 | √ |

(a) 5 $5 notes

(b) $60

**Q14.** (a) Amount spent → $810.90 + ($630.50 \times 4)$

        = $3332.90

(b) $3000 \div $800 = 3 r $600

∴ Ans: 3 cooking pots

**Q15.** $\dfrac{5}{6} \times \dfrac{1}{4} = \dfrac{5}{?}$

$\dfrac{5}{24}$ of tot

$\dfrac{1}{24}$ of total → $75 \div 5$

          = 15

Total → $15 \times 24$

       = 360

**Q16.** **(a)** Capacity of 6 jugs = capacity of 24 cups

To fill 20 cups → $600\,ml$ left

To fill 24 cups → short of $400\,ml$

Capacity of 4 cups → $600 + 400$

$$= 1000\,ml$$

Capacity of 1 jug = Capacity of 4 cups

$$= 1000\,ml$$

**(b)** Amount of orange juice → $(6 \times 1000) - 400$

$$= 5600\,ml$$

**Q17.** **(a)** Fraction of blue buttons → $\frac{3}{4} + \frac{2}{3} - 1$

$$= \frac{5}{12}$$

Fraction of red buttons → $\frac{3}{4} - \frac{5}{12}$

$$= \frac{1}{3}$$

**(b)** Fraction of yellow buttons → $\frac{2}{3} - \frac{5}{12}$

$$= \frac{3}{12}$$

Difference → $\frac{5}{12} - \frac{3}{12}$

$$= \frac{2}{12} \text{ of total}$$

$$= \frac{2}{12} \times 576$$

$$= 96$$