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)
- **1.** A number when rounded off to the nearest thousand is 600 000. What is the number?

(S)

- (1) 599 499
- (2) 599 999
- (3) 600 999
- (4) 604 999
- ***2.** 24 : 27 = 32 : _____

What is the missing number?

(S)

- (1) 33
- (2) 35
- (3) 36
- (4) 38
- ***3.** Express 2 tens and 45 thousandths as a decimal.

(S)

- (1) 2.045
- (2) 2.45
- (3) 20.045
- (4) 20.45

4. Which of the following does not have the value of 5y?

(S)

- (1) $5y \div 1$
- $(2) \quad 2y+3y$
- (3) 5 x y
- (4) 5 + y

*5. How many eighths are there in $4\frac{3}{4}$?

(S)

- (1) 6
- (2) 16
- (3) 19
- (4) 38
- **6.** Find the perimeter of the shape below in terms of π .



- (1) $(6 \pi + 8)$ cm
- (2) $(6 \pi + 16)$ cm
- (3) $(12 \pi + 8)$ cm
- (4) $(12 \pi + 16) \text{ cm}$
- ***7.** Adam cycled 24km in 40 min. What was his cycling speed?

(S)

- (1) 0.6 km/h
- (2) 36 km/h
- (3) 60 km/h
- (4) 96 km/h

8. What fraction of the figure below is unshaded?



***9.** There are 40 pupils in a class. 30% of them are girls. How many boys are there in the class?

(S)

- (1) 10
- (2) 12
- (3) 18
- (4) 28
- **10.** A container was half-filled with water. 4 cups of water were added to completely fill the container. What was the ratio of the volume of a cup of water to the volume of the container?

(S)

- (1) 1:8
- (2) 8:1
- (3) 1:4
- (4) 4:1

- **11.** The figure below is made up of a semicircle and two squares of sides 10 cm and 4 cm. Find the area of the figure. Give your answer in terms of π .
- (M)



- (1) $(34 + 7 \pi) \text{ cm}^2$
- (2) $(34 + 14 \pi) \text{ cm}^2$
- (3) $(116 + 24.5 \pi) \text{ cm}^2$
- (4) $(16 + 98 \pi) \text{ cm}^2$
- *12. 50 boys in a class was given some marbles to share equally. When 15 of them gave away all their marbles to the rest of the boys, the rest of the boys had 12 extra marbles each. How many marbles did each of the remaining boys receive?
- (M)
- (1) 16
- (2) 28
- (3) 35
- (4) 40

- *13. Two classes participated at a Swimming Festival. Each class had the same number of students. The ratio of number of boys to girls in Class 6A is 2 : 3. The ratio of the number of boys to the number of girls in class 6B is 3: 7. What is the ratio of the number of girls to the number of boys at the Swimming Festival?
- (M)
- (1) 1:2
- (2) 3:7
- (3) 13:7
- (4) 14:9
- *14. A number of identical cubes are joined as shown in the figure below. The total surface area is 550 cm². What is the volume of 1 cube?



(M)

- (1) 25 cm^3
- (2) 110 cm^3
- (3) 125 cm^3
- (4) 625 cm^3
- *15. Yakub had some coins. After spending 48 of them on Wednesday and $\frac{2}{9}$ of the remaining coins on Thursday, he was left with $\frac{1}{3}$ of his coins. How many coins did he spend altogether?

(M)

- (1) 21
- (2) 36
- (3) 56
- (4) 72

Questions **16** to **25** carry 1 mark each. Write your answers in the spaces provided. For questions which requires units, give your answers in the units stated.

(10 marks)

- **16.** Simplify $20y + 9 + 2y 5y \times 3$.
- (S)

Answer: _____

*17. $\frac{2}{5}$ of Noor's salary is $\frac{1}{4}$ of Daud's salary. What is the ratio of Daud's salary to Noors's salary?

Answer: _____

18. Express $4\frac{1}{4}$ % as a decimal. **(S)**

Answer:

- *19. Express the difference between $3\frac{8}{50}$ and $1\frac{12}{25}$ as a decimal to the nearest tenth.
- (S)

- *20. Yusof spent $\frac{1}{4}$ of his allowance on food and \$50 on transport. He then had $\frac{1}{3}$ of his allowance left. How much was his allowance?
- (S)

Answer: \$_____

- **21.** A jar filled with 300 identical marbles weighed 6.15 kg. The same jar when filled with 100 such marbles weighed 2550 g. Find the mass of the empty jar.
- (S)

Answer: _____kg

- ***22.** The average of 6 consecutive odd numbers is 54. Find the largest of the 6 numbers.
- (S)

Answer: _____

- **23.** 10 jugs of water can fill $\frac{5}{7}$ of a tank. How many of such jugs of water are required to fill the whole tank?
- (S)

24. The diagram below shows a net of a cuboid. Find the volume of the cuboid.



Answer: _____cm³

- **25.** What is the greatest number of 2-cm cubes that can be cut out from a rectangular block of wood with dimension 20 cm by 15 cm by 16 cm?
- (S)

Questions **26** to **30** carry 2 marks each. Show your working clearly in the spaces space provided. For questions which require units, give your answers in the units stated.

(10 marks)

26. The diagram below shows two identical quadrants within a rectangle measuring 14 cm by 10 cm. Find the perimeter of the shaded region. (Take $\pi = \frac{22}{7}$)

(M)



Answer: _____cm

***27.** Sulaiman was asked to form a square with 56 pots of flowers placed at equal intervals between each other. How many pots of flowers should he place on any one side of the square?

(M)

- *28. In a quiz, there were a total of 30 questions. For each correct answer, 3 marks were awarded. For each incorrect answer, 1 mark was deducted. Musa scored 54 marks for the quiz. How many questions did he answer correctly?
- (M)

Answer: _____

- *29. A wheel, with radius 10 cm, made exactly 2 complete revolutions between wall A and wall B. Find the distance between the 2 walls. (Take π = 3.14)
- (M)



Answer: _____cm

*30. I am thinking of a fraction. The sum of the numerator and denominator is 19. When I add 8 to the denominator, the fraction becomes $\frac{1}{2}$. What is the fraction am I thinking of?

(M)

Answer: _____

- END OF PAPER 1 -