



UNICUS
OLYMPIADS

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Sample Paper



Class 4

Unicus Mathematics Olympiad (UMO)

Time: 60 minutes

Pattern and Marking Scheme			
Section	Total Questions	Marks per Question	Total Marks
Classic Section	30	1	30
Scholar Section	10	2	20
Grand Total	40		50

Classic Section (Each Question is 1 Mark)

1. A tailor uses 250 cm of cloth for making one shirt. If he makes 3 shirts, then how much cloth will he use?

a. 7 m 50 cm
c. 6 m 50 cm

b. 7 m 25 cm
d. 6 m 25 cm

2. Fill in the blank:
The digit 8 in number 826 stands for _____.

a. 8 tens
c. 80 tens

b. 800 tens
d. 80 hundreds

- 3. Choose the expanded form of 679:**

a. $6 + 7 + 9$
c. $600 + 70 + 9$

b. $600 + 7 + 9$
d. $600 + 79$

4. If radius of the circle is first odd prime number, then find its diameter:

a. 6 units
c. 12 units

b. 9 units
d. 15 units

5. A jug can hold 2 L 450 mL of water. A mug can hold 700 mL of water. How much more quantity of water does the jug hold?

a. 1 L 750 mL
c. 2 L 250 mL

b. 1 L 650 mL
d. 2 L 750 mL

- 6.** Look at the image given below. How long did Ron jog?

Jogging starts



Jogging ends



a. 30 minutes
c. 40 minutes

b. 35 minutes
d. 45 minutes

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7. Richard started watching TV at 3:00 p.m. and switched it off at 5:45 p.m. How long did he watch TV?

- | | |
|-----------------------|-----------------------|
| a. 2 hours 45 minutes | b. 2 hours 35 minutes |
| c. 2 hours 25 minutes | d. 1 hours 55 minutes |
-

8. Peter drives a car from his home to the metro which is at a distance of 6 km 350 m from his home. He then travels the rest of the route to his office via the metro train. If his office is at a distance of 27 km from his home, then what distance did he cover by the metro journey?

- | | |
|----------------|----------------|
| a. 21 km 350 m | b. 20 km 650 m |
| c. 20 km 350 m | d. 19 km 650 m |
-

9. Out of a glass of milk, one-fifth was consumed. How much milk is left in the glass?

- | | |
|------------------|------------------|
| a. $\frac{1}{5}$ | b. $\frac{2}{5}$ |
| c. $\frac{3}{5}$ | d. $\frac{4}{5}$ |
-

10. The cost of a coffee mug is \$170 and the cost of a packet of choco pie is \$140. Hina bought 8 coffee mugs and 6 packets of choco pie. How much money did she pay to the shopkeeper?

- | | |
|-----------|-----------|
| a. \$1200 | b. \$1390 |
| c. \$2080 | d. \$2200 |
-

11. If each side of a rectangle is equal in length, then it is called a _____.

- | | |
|--------------|-------------|
| a. square | b. circle |
| c. rectangle | d. triangle |
-

12. Lisa went shopping and found a pair of soft socks that she wanted to buy. A pair of socks costs \$65.00. How much will six pairs of such socks cost?

- | | |
|----------|----------|
| a. \$390 | b. \$420 |
| c. \$470 | d. \$520 |
-

13. Alice purchased 36 kg 285 g of sugar from one shop and 48 kg 460 g from another shop. What is the total quantity of sugar purchased by him?

- | | |
|----------------|----------------|
| a. 12 kg 175 g | b. 24 kg 650 g |
| c. 68 kg 985 g | d. 84 kg 745 g |
-

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14. Sarah wants to divide 28 lollipops equally among her 3 friends. How many lollipops will remain with her if all friends receive maximum lollipops?

- | | |
|------|------|
| a. 1 | b. 3 |
| c. 0 | d. 2 |
-

15. A cricket match scheduled to start at 9:15 a.m. is delayed by 3 hours 25 minutes due to bad weather. At what time will the match begin?

- | | |
|---------------|---------------|
| a. 12:40 a.m. | b. 12:40 p.m. |
| c. 1:40 a.m. | d. 1:40 p.m. |
-

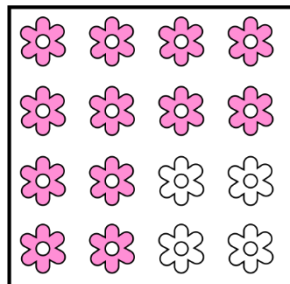
16. The cost of a tennis ball, cricket ball and football are \$35, \$55 and \$175 respectively. How much money will Arya have to pay if she buys 10 tennis balls, 10 cricket balls, and 3 footballs?

- | | |
|------------|------------|
| a. \$1325 | b. \$1,385 |
| c. \$1,425 | d. \$1,465 |
-

17. Jack took one-third of the time taken by Sam. If Sam took 24 minutes to jog in the park, what is the time taken by Jack to jog in the same park?

- | | |
|---------------|---------------|
| a. 72 minutes | b. 48 minutes |
| c. 27 minutes | d. 8 minutes |
-

18. Find the fraction of unshaded flowers in the given figure:



- | | |
|------------------|------------------|
| a. $\frac{1}{4}$ | b. $\frac{3}{4}$ |
| c. $\frac{1}{3}$ | d. $\frac{1}{2}$ |
-

19. There are 98 cows and 57 chickens on a farm. Find the total number of legs that are there on the farm:

- | | |
|--------|--------|
| a. 620 | b. 506 |
| c. 392 | d. 310 |
-

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20. Sarah exercises every day for 25 minutes. Find the total time that she spent on exercise during the month of August:

- a. 575 minutes
 - b. 700 minutes
 - c. 750 minutes
 - d. 775 minutes
-

21. Find the highest 4-digit number that can be formed using the digits 8, 1, 4 and 0 (using each digit only once):

- a. 8,014
 - b. 8,104
 - c. 8,410
 - d. 4,018
-

22. A car is filled with 18 L of petrol. How many mL is that?

- a. 18,000 mL
 - b. 1,80,000 mL
 - c. 1,800 mL
 - d. 180 mL
-

23. Anna and Amy went to pizza shop and ordered a pizza. Anna ate $\frac{1}{6}$ of it and her friend ate $\frac{2}{6}$ of it. What fraction of pizza is still left?

- a. $\frac{1}{2}$
 - b. $\frac{1}{4}$
 - c. $\frac{2}{6}$
 - d. $\frac{1}{6}$
-

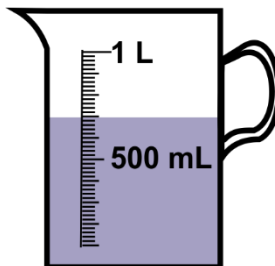
24. What is the geometric term used for the boundary of a circle?

- a. Circumference
 - b. Perimeter
 - c. Diameter
 - d. Chord
-

25. Robert's train is travelling at a speed of 98 km per hour. How much distance will the train cover in a day, if it travels at the same speed throughout the day?

- a. 2,352 km
 - b. 3,856 km
 - c. 240 km
 - d. 1,375 km
-

26. The given figure shows a measuring cup. If a bucket of water is filled by using the cup 9 times, then what will be the quantity of water in the bucket?



- a. 7800 mL
 - b. 6300 mL
 - c. 1000 mL
 - d. 5000 mL
-

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27. Harry drank 400 mL of juice from the jug. Jack drank 100 mL more juice than Harry. If the jug had 1 L of juice originally, then how much juice is left in it now?

- a. 400 mL
- b. 500 mL
- c. 100 mL
- d. 600 mL

28. Henry cycled 400 m from his house to his school. On his way home, he stopped at a bookshop. Find the distance between the bookshop and his school if he had to cycle another 120 m to reach home:

- a. 520 m
- b. 320 m
- c. 380 m
- d. 280 m

29. Peter travelled one-third of a distance. If the distance is 12 km, then find the remaining distance that he would have travelled (in km):

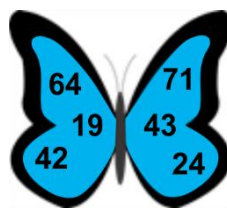
- a. 2
- b. 4
- c. 6
- d. 8

30. Henry started his journey at 18:40 and finished at 22:20. The time taken in completing the journey is:

- a. 3 hours 20 minutes
- b. 3 hours 40 minutes
- c. 3 hours 80 minutes
- d. 4 hours 40 minutes

Scholar Section (Each Question is 2 Marks)

31. Find the difference between the sum of odd numbers and sum of even numbers on the wings of the butterfly:



- a. 1
- b. 2
- c. 3
- d. 4

32. Which of these statements is correct regarding the picture given below?



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- a. Grapes are lighter than strawberries
c. Grapes are heavier than strawberries
- b. Strawberries are heavier than grapes
d. Both grapes and strawberries are equal in weight
-

33. Pam distributes one-fourth of the sweets among her friends. How many sweets did she distribute out of a total of 28?

- a. 5
c. 7
- b. 6
d. 8
-

34. The cost of a cricket bat and ball is \$730 and \$25 respectively. Ross buys 1 bat and 5 such balls. If he pays \$1000 at the shop, how much money will he get back?

- a. \$245
c. \$145
- b. \$125
d. \$165
-

35. Find the number if:

- The first and last digit of the number are even numbers, and the middle digit is an odd number.
- The unit's place digit is 5 more than the ten's place digit.
- Its one's place digit is the largest 1-digit even number.
- The hundred's place digit is one less than ten's place digit.

- a. 254
c. 472
- b. 616
d. 238
-

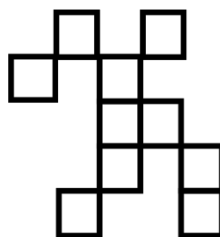
36. Manan is drawing a pattern. For every 7 rectangles, he makes 3 triangles. How many rectangles would be there in the pattern if there are 27 triangles?

- a. 3
c. 48
- b. 63
d. 57
-

37. If $P = 274 \times 63$, $Q = 7628 - 1265$ and $R = 2145 + 8627$, then find $P - Q + R$:

- a. 21,671
c. 26,429
- b. 28,304
d. 24,814
-

38. Find the perimeter of the given shape made up of same-sized squares, if each side of the square is of 10 cm:



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- a. 540 cm
c. 320 cm

- b. 460 cm
d. 100 cm
-

39. The table shows the mass of some objects.

Object	P	Q	R	S
Mass	3.6 kg	3600 g	360 g	3 kg 6 g

The objects with the same mass are:

- a. P and Q
c. Q and R

- b. R and S
d. P and S
-

40. The number of minutes in 15 days is equal to the number of seconds in:

- a. 5 hours
c. 4 hours

- b. 8 hours
d. 6 hours
-

Answer Key

1.	a	2.	c	3.	c	4.	a	5.	a	6.	c	7.	a
8.	b	9.	d	10.	d	11.	a	12.	a	13.	d	14.	a
15.	b	16.	c	17.	d	18.	a	19.	b	20.	d	21.	c
22.	a	23.	a	24.	a	25.	a	26.	b	27.	c	28.	d
29.	d	30.	b	31.	c	32.	c	33.	c	34.	c	35.	d
36.	b	37.	a	38.	c	39.	a	40.	d				