UNICUS OLYMPIADS

Sample Paper
(2020-21)

Class 3 & 4

Unicus Non-Routine Mathematics Olympiad

Section – Class* *Syllabus covered	Total Questions	Marks per Question	Total Marks
Classic Section – Class 3 & 4	10	3	30
Scholar Section – Class 3 & 4	10	6	60
Grand Total	**20**		**90**

Note: There will be negative marking of 1/3rd of the marks allotted for that question if the answer is incorrect.

1. If Sunita wanted to number her house as the smallest 5-digit number which can be formed by using the digits 2,4,5,1,0,9. What will be her house number if any one number can be repeated twice?
   a) 12341
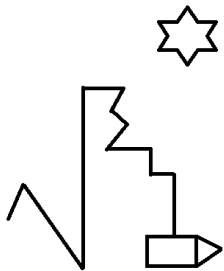   b) 11234
   c) 10024
   d) 11024

   Correct Answer: c   *3 Marks*

2. 504 can be expressed as a product of primes numbers as:
   a) 2 x 2 x 2 x 3 x 3 x 7
   b) 2 x 2 x 2 x 2 x 3 x 7
   c) 2 x 2 x 3 x 3 x 3 x 7
   d) 2 x 3 x 3 x 3 x 3 x 7

   Correct Answer: a   *3 Marks*

3. The difference between the number of horizontal and vertical lines in the figure is?

   a) 5
   b) 3
   c) 4
   d) 0

   Correct Answer: c   *3 Marks*

4. 4 pies of equal sizes were cut as follows: pie 1 was cut into 12 pieces, pie 2 was cut into 8 pieces, pie 3 was cut into 14 pieces while pie 4 was cut into 6 pieces. From which pie should you eat so that you get the smallest piece?
a) Pie 1
b) Pie 2
c) Pie 3
d) Pie 4

Correct Answer: c   *3 Marks*

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5. A small bottle of oil can hold 130ml of oil. How many oil bottles will be required to fill an oil can of capacity 5l 200 ml?
a) 40
b) 38
c) 30
d) 42

Correct Answer: a   *3 Marks*

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6. Pulkit is 10 years old and Hari is four years younger to Pulkit. How old will Pulkit be when Hari is 25 years old?
a) 21
b) 15
c) 19
d) 29

Correct Answer: d   *3 Marks*

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7. Aarav jogged 2 rounds around a square field. If the total distance covered was 1km 800m, find the distance of one side of the square field?
a) 200m
b) 450m
c) 600m
d) 225m

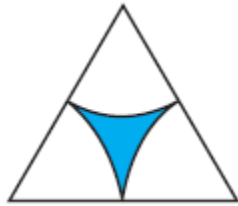**Correct Answer: d**   *3 Marks*

8. Rahul purchased 11 balloons to share with his classmates. If it cost him 1320p to buy them, then the price of one balloon is?
a) Rs.12
b) Rs.1.2
c) Rs.11
d) Rs.1.1

Correct Answer: b   *3 Marks*

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9. How many lines of symmetry is/are there in the given figure?

a) 1
b) 6
c) 3
d) 4

Correct Answer: c   *3 Marks*

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10. The sum of 2009 and a 3-digit number is a square number. What will be the smallest possible value of the 3-digit number?
a) 116
b) 107
c) 110
d) 114

Correct Answer: b   *3 Marks*

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11. The simplest form of
1/5th of the product of 333 thousands and 33 hundreds is?
a) 336300
b) 7320
c) 67260
d) 36600

Correct Answer: c   *6 Marks*

12. Shanaya bought a new Harry Potter book which had 234 pages. What is the total of all the page numbers of her book?
a) 27495
b) 27261
c) 54990
d) 54522

Correct Answer: a   *6 Marks*

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13. What is the maximum number of pieces a pizza can be cut into by using 3 straight cuts? (note: the pieces need not be of equal sizes)
a) 5
b) 6
c) 7
d) 4

Correct Answer: c   *6 Marks*

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14. Three friends shared a pizza. If Hari ate 5/12th of the pizza while Sara ate 1/3rd of the remaining pizza, what fraction of the pizza did Ali eat?
a) 3/12
b) 6/12
c) 7/18
d) 10/18

Correct Answer: c   *6 Marks*

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15. The street vendor sells 153.97 litres of milk on Monday and 16.03 litres more than this quantity on Tuesday. The following day, 12.14 litres less milk was sold than the quantity sold on Tuesday. How many litres was sold on Wednesday?
a) 1578.6 litres
b) 157.86 litres
c) 156.68 litres
d) 156.12 litres

Correct Answer: b *6 Marks*

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16. Savita's vacations started on 30th November 2018 till the end of next month. If 8th January 2019 was a Tuesday on which day did Savita's vacation start?
a) Friday
b) Saturday
c) Sunday
d) Thursday

Correct Answer: a *6 Marks*

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17. The perimeters of two squares ae 24cm and 32cm. Find the perimeter of the third square whose area is equal to the sum of areas of the two squares.
a) 40cm
b) 160cm
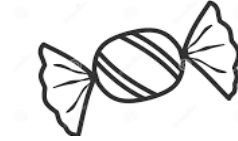c) 224cm
d) 200cm

Correct Answer: a *6 Marks*

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18. Radha got rs.500 on her birthday. She wanted to spend as much money as she could. If she buys at least one of every item in the shop, how much money is left with her?

Rs. 15   Rs. 300   Rs.3

a) 182
b) 2
c) 128
d) 1

Correct Answer: b   *6 Marks*

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19. Parul had 45_ _ sequences. If she can divide the sequences into groups of 2,3,4,5, and 9. Find the missing digits.
a) 4,0
b) 2,0
c) 0,0
d) 8,0

Correct Answer: c   *6 Marks*

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20. The diagram is divided into 3 smaller rectangles and a square. If the perimeter of the unshaded rectangle is 42cm and the area of the square is $16cm^2$, find the total area of the shaded region.

a) $42cm^2$
b) $84cm^2$
c) $60cm^2$
d) $72cm^2$

Correct Answer: b   *6 Marks*