## ASIAN OLYMPIAD SOCIETY

## AMO

## ASIAN MATHEMATICS OLYMPIAD

 2020-2021
## INSTRUCTIONS AND INFORMATION FOR THE CANDIDATE

## GENERAL

1. Do not open the booklet until told to do so by your teacher.
2. No calculators maths stencils, mobile phones or other calculating devices are permitted. Scribbling paper, graph paper, ruler and compasses are permitted, but are not essential.
3. Read the instructions on the answer sheet carefully. Ensure your name, school name and class are entered. It is your responsibility to correctly code your answer sheet.

## THE ANSWER SHEET

1. Use an HB pencil or a Blue/Black ball point pen only to record your choice of answer in the Answer sheet.
2. Your answer sheet will be scanned. The optical scanner will attempt to read all markings even if they are in the wrong places, so please be careful not to write anything extra on the answer sheet.
3. If you want to change an answer or remove any marks, use a plastic eraser and be sure to remove all marks and smudges.
4. Fill your enrollment number clearly, improper enrollment number may lead to unavailability of result.
5. Please fill your Mobile Number clearly on the Answer Sheet, we will share your marks / result and other information related to AOS exams on your mobile number.
6. All questions are compulsory and there is no negative marking.
7. Return the ANSWER SHEET to the invigilator at the end of the exam.

## INTEGRITY OF THE COMPETITION

The AOS reserves the right to re-examine students before deciding whether to grant official status to their score.
$\qquad$ CLASS : $\qquad$
$\qquad$
$\qquad$

1. The LCM of two numbers is 495 and their HCF is 5 . If the sum of the numbers is 100 , then their difference is :
a) 10
b) 46
c) 70
d) 90
2. How many triangles are there in the given figure?
a) 21
b) 22
c) 23

3. Every Rhombus is a -
a) Square
b) parallelogram
c) rectangle
d) kite
4. Find the sum of the first 1000 positive integers.
a) 50055
b) 555500
c) 500555
d) 500500
5. Every integer is a $\qquad$ number.
a) Natural
b) positive
c) whole
d) rational
6. There are 20 animals on a farm. Some of the animals are goats and the rest are chickens. The total number of legs for the 20 animals is 64 . How many chickens are on the farm?
a) 4
b) 8
c) 9
d) 10
7. The sum of two numbers is 16 and the sum of their reciprocals is $\frac{1}{3}$. Find the numbers.
a) 14 and 12
b) 12 and 4
c) 1 and 2
d) 11 and 5
8. If two times of a number is subtracted from its four times, then the new number will be :
a) Number itself
b) Two times of the number
c) three times of the number
d) five times of the number
9. How many diagonals are there in a hexagon?
a) 14
b) 7
c) 9
d) 11
10. Radha was facing East. She walked 20 metres. Turning left she moved 15 metres and then turning right moved 25 metres. Finally she turned right and moved 15 metres more. How far is she from her starting point?
a) $\mathbf{2 5}$ metres
b) 50 metres
c) 35 metres
d) 45 metres
11. The HCF of two numbers is 12 and their difference is 12 . Find the sum of the numbers .
a) 94,85
b) 82,96
c) 84,96
d) 80,84
12. The given figure is made up of five identical rectangles. If the area of the whole figure is $240 \mathrm{~cm}^{2}$, then the perimeter of each small rectangle is :

a) 24 cm
b) 27 cm
c) 32 cm
d) 30 cm
13. Which of the given number is a perfect number ?
a) 4
b) 9
c) 24
d) 28
14. The sum of three consecutive numbers are 108. What is the value of the largest number among the three numbers?
a) 37
b) 28
c) 40
d) 36
15. The sum of the measures of all the angles of a 7 - sided regular polygon is :
a) $700^{\circ}$
b) $360^{\circ}$
c) $900^{\circ}$
d) $720^{\circ}$

Answer key

| $1-a-b$ | $2-b$ | $3-b$ | $4-d$ | $5-d$ | $6-b$ | $7-b$ | $8-b$ | $9-c$ | $10-d$ | $11-c$ | $12-c$ | $13-d$ | $14-a$ | $15-c$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

