

# AOS

## ASIAN OLYMPIAD SOCIETY

# ATHO

## ASIAN TALENT HUNT OLYMPIAD 2020-2021

CLASS

9

### 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.

ENROLLMENT NUMBER : \_\_\_\_\_ CLASS : \_\_\_\_\_

STUDENT NAME : \_\_\_\_\_ Contact No : \_\_\_\_\_

1. Find the value of  $\log_3 5 \times \log_{25} 9$ .
- a) 3                      b) 1                      c) 2                      d) 4
2. Sides of a triangle are in the ratio of 12 : 17 : 25 and its perimeter is 540 cm. then its area is :
- a)  $90 \text{ cm}^2$                       b)  $900 \text{ cm}^2$                       c)  $9000 \text{ cm}^2$                       d)  $90000 \text{ cm}^2$
3. If a sector is converted into a cone by joining its two bounding radii, which of the following statements are correct?
- a) Radius of sector of circle is equal to radius of cone.  
 b) Radius of sector of circle is equal to slant height of a cone.  
 c) Area of sector of circle is equal to curved surface area of cone.  
 d) All of these
4. The sum of first 'n' natural numbers is 528. Find 'n'.
- a) 33                      b) 32                      c) -32                      d) -33
5. The probability of an arrow reaching a target is 0.85. How many times the arrow must be shot in order to hit the target 340 times?
- a) 400                      b) 410                      c) 500                      d) 450
6. The HCF of 111111111 and 111111 is
- a) 11                      b) 111                      c) 111111                      d) None
7. Which equation is true for all the values in the table?
- |   |      |   |   |     |
|---|------|---|---|-----|
| X | - 2  | 2 | 4 | 0   |
| y | - 11 | 1 | 7 | - 5 |
- a)  $Y = x - 9$                       b)  $y = x - 5$                       c)  $y = 3x - 5$                       d)  $y = 2x - 7$
8. A 25 m ladder is placed against a vertical wall of a building. The foot of the ladder is 7 m from the base of the building. If the top of the ladder slips 4m, when the foot of the ladder will slide?
- a) 5m                      b) 8m                      c) 9m                      d) 15m
9. A boy pushes a toy box 2.0 m along the floor by means of a force of 10 N directed in the direction of motion. The work done by the boy is
- a) 88 J                      b) 16 J                      c) 20 J                      d) 12 J

10. Which part of human brain controls body temperature?  
a) Pituitary                      b) Diencephalon                      c) Hypothalamus                      d) None of these
11. Which among the following is an artificial ecosystem?  
a) River                      b) Ocean                      c) crop field                      d) Forest
12. Medications like rifampicin, INH and pyrazinamide are associated with  
a) Tuberculosis                      b) AIDS                      c) Diarrhoea                      d) Measles
13. Among the statements given below select the statements that correctly describe the concept of sustainable development.
- i) Planned growth with minimum damage to the environment.
  - ii) Growth irrespective of the extent of damage caused to the environment.
  - iii) Stopping all developmental work to conserve the environment.
  - iv) Sustainable development is a long planned and persistent development.
- a) i and iv                      b) ii and iii                      c) ii and iv                      d) iii only
14. In which of the following examples concave mirror is used?  
a) Solar furnace                      b) Rear view mirror in vehicles                      c) Street lamps                      d) magnifying glass
15. The muscle of the iris control the :  
a) Focal length of eye lens  
b) Amount of light entering the eye.  
c) Shape of crystalline lens  
d) Movement of optic nerves

## Answer key

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