## AOS

### **ASIAN OLYMPIAD SOCIETY**

# ATHO

ASIAN TALENT HUNT OLYMPIAD 2020-2021

CLASS 7

#### 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. Each interior angle of a regular polygon is 144°, find the interior angle of a regular polygon which has double the number of sides as the first polygon.
  - a) 110<sup>0</sup>
- b) 150°
- c) 136<sup>0</sup>
- d) 162<sup>0</sup>
- 2. Between which of the following numbers does the value of  $\sqrt[3]{38.9}$  lies?
  - a) 1 and 2
- b) 2 and 3
- c) 3 and 4
- d) 4 and 5
- 3. The sum of two numbers is 45 and their difference is 1/9 of their sum. Find their L.C.M
  - a) 100
- b) 150
- c) 250
- d) 200
- 4. A sum of money becomes five times at simple interest of 8% per annum. At what rate percent will it become seven times?
  - a) 16%
- b) 9%

- c) 12%
- d) 14%
- 5. With how many zeros the product of the first 25 positive integers end?
  - a) 3

b) 4

c) 5

d) 6

- 6. Find the 16<sup>th</sup> term of the AP
  - 3, 5, 7, 9, 11, ......
  - a) 22
- b) 33

c) 44

- d) 32
- 7. 10% loss on selling price is what percent loss on the cost price?
  - a)  $9\frac{1}{11}$  %
- b) 9 %
- c)  $9\frac{2}{11}\%$
- d) 10%
- 8. The LCM and HCF of two numbers are 1530 and 51 respectively. Find how many such pairs are possible.
  - a) 5

b) 3

c) 4

- d) 6
- 9. The heat from the hot water in a metal radiator passes through the metal and then spreads around the room.

  What are the main processes by which the heat is transferred through the radiator and then spread around the room?

	Through the	Around the			
	metal radiator	room			
a)	Conduction	Conduction			
b)	Conduction	Convection			
c)	Radiation	Conduction			
d)	Radiation	Convection			

- 10. Identify the non metal which is lustrous
  - a) lodine
- b) Bromine
- c) Sulphur
- d) Chlorine

11. Study the chemical equation shown below

$$x N_2 + y H_2 \longrightarrow z NH_3$$

Which values of x, y and z could balance the above chemical reaction?

	Х	Υ	Z
a)	1	2	1
b)	2	3	2
c)	3	2	3
d)	1	3	2

- 12. Which of the following is a method of artificial propagation of plants?
  - a) Cutting
- b) Layering
- c) Grafting
- d) All of these
- 13. A white powder having an odour of chlorine is used to remove yellowness of white clothes in laundries. Identify the powder.
  - a) Graphite
- b) chalk
- c) Bleaching
- d) both a) and b)
- 14. Which of the following statement are correct about a physical change?
  - i. Atoms of the reacting materials rearrange
  - ii. The change can be reversed easily
  - iii. A substance undergoes a change in its physical state
  - a) Both I and ii
  - b) Both I and iii
  - c) Both II and III
  - d) All
- 15. In which component of blood is glucose mainly transported?
  - a) Plasma
- b) Platelets
- c) Red blood cells
- d) White blood cells

Answer key

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

<u>ATHO – cl 7</u> <u>pg - 3</u>