## AOS

### **ASIAN OLYMPIAD SOCIETY**

### **ARAO**

# ASIAN REASONING & APTITUDE OLYMPIAD 2020-2021

CLASS 10

#### 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. If three times the larger of two numbers is divided by the smaller, we get the quotient 6 and remainder 6. If five times the smaller is divided by the larger we get the quotient 2 and remainder 3. Find the numbers.
  - a) (16,17)
- b) (7, 16)
- c) (25, 16)
- d) (16,7)
- 2. Which number should come next in the following series?
  - 8, 9, 17, 44, 108, \_\_\_\_\_.
  - a) 148
- b) 233
- c) 236
- d) 176
- 3. If actual time in a clock is 3:00, then what time you will see in water image of clock?
  - a) 9:00
- b) 3:30
- c) 12:30
- d)9:30

- 4. Find the set which is similar to the given set.
  - 63, 49, 35
  - a) 72, 40, 24
- b) 72, 48, 24
- c) 64, 40, 28
- d) 81, 63, 45
- 5. Find the wrong number in the following number series:
  - 8, 12, 24, 64, 180, 630
  - a) 180
- b) 64

c) 24

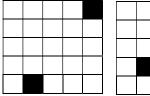
- d) 8
- 6. A two digit number is seven times the sum of its digits and is also equal to 12 less than three times of its digits product. Find the number.
  - a) 84
- b) 36

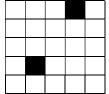
c) 34

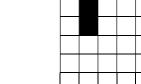
?

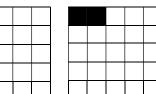
- d) 93
- 7. Museum is related to Curator in the same way as Prison is related to :
  - a) Manager
- b) Monitor
- c) Warden
- d) Jailor

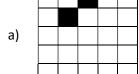
8. Find the missing term in the given series.

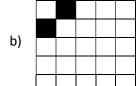




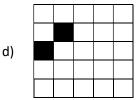












- 9. How many such pair of letters are there in the word 'DAREDEVIL' each of which has as many letters between them in the word as in the English alphabetical series? (both forward and backward directions)
  - a) Nine
- b) Four
- c) Six

d) Sever

10. Count the number of triangles



- a) 17
- b) 19

c) 21

- d) > 21
- 11. If North is changed to South-West and East to North –West and so on, then what will come in place of South West
  - a) North-East
- b) East
- c) South-East
- d) West
- 12. Since my birth I have had a birthday cake with candles, one for each year of my birthday, each year. To date, I have had 325 candles. How old am I?
  - a) 25
- b) 20

c) 35

- d) 30
- 13. A regular hexagonal shape is made on the design with the help of coins of equal size as shown in figure. If the first figure has two coins along each side of the design and second figure has three coins along each side of the figure, then find the number of coins required to make a figure of regular hexagon using 33 coins along each side of the hexagon.



- a) 3169
- b) 2884
- c) 2820
- d) 3441
- 14. Four persons Piyush, Karan, Rohan, Sunit went to four different cities; Mumbai, Delhi, Kolkata and Chennai by different transport: car, train, bus and aeroplane. If Rohan travelled by car to Chennai. Piyush went to Mumbai by train, Sumit travelled by bus and the person who travelled to Delhi did not travelled by bus, then who went to Kolkata?
  - a) Sumit
- b) Rohan
- c) Karan
- d) Piyush
- 15. Find the missing number, if certain rule is followed either row-wise or column-wise
  - a) 64
- b) 54

c) 63

d) 52

7	21	42
9	27	?
14	42	84

Answer key

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