## ASIAN OLYMPIAD SOCIETY

## 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. Find the missing number in the sequence : $1,4,13,40,121$, $\qquad$ , 1093
a) 729
b) 364
c) 346
d) 243
2. A frog in an empty well 19.5 m deep, tries to come out. Every time it hops upwards, the frog jumps 1.2 m but slips back 0.4 m . in how many jumps would the frog be out of the well?
a) 25
b) 24
c) 23
d) 22
3. Sunil's father is thrice his age. The sum of their age is 72. What is Sunil's age?
a) 18
b) 36
c) 27
d) 24
4. A triangle with one side 3 and the other side 7 has perimeter $P$. what are the least and the greatest possible integer values of $P$ ?
a) 5 and 9
b) 5 and 15
c) 15 and 19
d) 9 and 19
5. Two three digit numbers have all digits different. What will be the largest sum?
a) 1894
b) 1839
c) 1999
d) none of these
6. Which of the following shapes cannot be the base of a pyramid?
a) Triangle
b) square
c) pentagon
d) circle
7. If $S I X+S I X+S I X+S I X+S I X+S I X=T R I$ and each letter stands for a digit, then the value of TRI is
a) 630
b) 762
c) 894
d) 1098
8. Which of the following number is divisible by 2,3 and 10 .
a) 2320
b) 23430
c) 20150
d) 12340
9. In a bee hive, there are thousands of worker bees performing number of day-to-day activities. Generally the worker bees are :
a) Sterile males
b) Fertile males
c) Fertile females
d) Sterile females
10. Which one of the following is a simple machine ?
a) Bottle
b) screw
c) pen
d) book
11. The broad green part of the leaf is called $\qquad$
a) Lamina
b) Midrib
c) Petiole
d) style
12. The north pole of a magnet can be identified by
a) Using iron filings
b) using an iron bar
c) another magnet with marked north and south poles.
d) Another magnet no matter whether the poles are known or not
13. Cartilage is present in:
a) Pinna of ears
b) Nails
c) Hair
d) wrist
14. Identify the natural magnet from the following
a) Cobalt
b) Nickel
c) magnetite
d) iron
15. Which of the following methods is used to separate soluble impurities?
a) Decantation
b) Sedimentation
c) Evaporation
d) Filtration

## Answer key

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

