SMART SOCIETY INTERNATIONAL SCIENCE OLYMPIAD (SSISO)

Organized by

Department of Basic Science and Humanities INSTITUTE OF ENGINEERING & MANAGEMENT, IEM-UEM GROUP and SMART SOCIETY, USA



SMART

DURATION: 1 HOUR

TOTAL QUESTIONS: 35

INSTRUCTIONS TO THE CANDIDATES:

- 1. The question booklet is divided into 3 sections.
 - Section A Logical Reasoning (10 Questions)
 - Section B Science (10 Questions)
 - Section C Advanced Science (15 Questions)
- 2. In section A, each question carries 2 marks. In Section B, each question carries 2 marks. In section C, each question carries 4 marks.
- 3. All questions are compulsory. There is no negative marking. Use of a calculator is not permitted.
- 4. There is only one correct answer.
- 5. To mark your choice of correct answer, tick it by using an HB pencil.
- 6. Submit the question booklet to the invigilator.
- 7. Rough work should be done in the blank space provided at the end of the booklet.
- 8. Please fill in your personal details in the space provided below.

NAME:
SCHOOL NAME:
CONTACT DETAILS OF GUARDIAN:

SECTION A

LOGICAL REASONING

- 1. How many days are between January 1st and December 31st in leap year?
 - a) 365
- b) 366
- c) 364
- d) 363
- 2. What is the next day after yesterday?
 - a) Today
- b) Tomorrow
- c) Yesterday
- d) Day
- 3. Complete the pattern: DEF, GHI, MNO,
 - a) POR
- b) ACB
- c) SRT
- d) PQR
- 4. Identify the next number: 1,4,9,16,25,
 - a) 30
- b) 40
- c) 45
- d) 36
- 5. If each letter is shifted 1 place backward decode: BY CX
 - a) AZBY
- b) ACDX
- c) AXBW
- d) WRYT
- 6. If 1=Red,3=Yellow,2=Blue,: decode -- 123
 - a) Blue Yellow Red
 - b) Red Yellow Blue
 - c) Yellow Blue Red
 - d) Red Blue Yellow
- 7. Complete the sequence: X, V, T, R,
 - a) Q
- b) P
- c) S
- d) N

- 8. Identify the next number: 1,4,9,16,25,
 - a) 30
- b) 40
- c) 45
- d) 36
- 9. If you are facing north, what direction is to your left?
 - a) East
- b) West
- c) North
- d) South
- 10. If a calendar starts on Sunday what day will 14th be?
 - a) Sunday
- b) Saturday
- c) Monday
- d) Wednesday

SECTION B

SCIENCE

- 11. What type of plants grow, bloom, and die in one season?
 - a) Annuals
- b) Perennials
- c) Deciduous
- d) Biennials
- 12. Which part of the digestive system is responsible for absorbing nutrients?
 - a) Stomach
- b) Liver
- c) Small intestine d) Large intestine
- 13. Which of the following plants has no true roots?
 - a) Fern
- b) Moss
- c) Bamboo
- d) Cactus
- 14. What is matter made up of?
 - a) Atoms
- b) Cells
- c) Heat
- d) Air
- 15. What happens when you mix water and oil?
 - a) They form a solution
 - b) They mix completely
 - c) They form layers
 - d) They evaporate

16. What is the primary source of energy for 22. How do some animals adapt to survive in cold humans? environments? b) Sunlight a) By growing bright colors a) Water d) Air b) By hibernating c) Food c) By flying south 17. Which of these is an example of a balanced diet? d) By eating more a) Only fruits b) Only proteins 23. What adaptation helps desert plants conserve water? c) A mix of carbohydrates, proteins, fats, and vitamins a) Large leaves b) Thick stems d) Only junk food c) Shallow roots d) Bright flowers 18. Which of these is a major cause of air pollution? 24. What feature helps birds fly? a) Planting trees a) Sharp beaks b) Hollow bones b) Using electric cars Strong legs d) Colourful feathers c) Burning fossil fuels d) Riding bicycles Why is fiber important in our diet? a) It provides energy 19. Which of the following is a renewable resource? b) It helps digestion b) Oil c) It makes food taste better a) Coal c) Wind energy d) Natural gas d) It is a source of protein Why is clean water essential for humans? 20. Which of the following changes can be reversed? a) For cooking only a) Burning paper b) Melting ice b) For washing hands c) Cooking food d) Rusting iron c) For survival and hygiene d) For swimming **SECTION C** 27. Why is it important to have a balanced diet? a) To eat more junk food ADVANCED SCIENCE b) To get all necessary nutrients for growth c) To save money 21. If a plant is exposed to light from only one side, d) To eat less how will it grow? a) Straight up

b) Towards the light

d) In circles

c) Away from the light

- a) Wood
- b) Plastic
- c) Metal
- d) Glass

- 29. What is the main characteristic of gases?
 - a) They have a fixed shape
 - b) They fill the container they are in
 - c) They are always visible
 - d) They have a definite volume
- 30. Which of the following is an example of work being done?
 - a) Lifting a box
 - b) Holding a book still
 - c) Sitting on a chair
 - d) Watching a movie
- 31. Why are wetlands important for the environment?
 - a) They provide land for construction
 - b) They help control flooding
 - c) They have no significant value
 - d) They are difficult to access
- 32. Why do we see different phases of the Moon?
 - a) Because the Moon changes shape
 - b) Because of the Earth's position relative to the Moon and Sun
 - c) Because the Moon is rotating
 - d) Because of weather changes od Education, Good Jobs
- 33. How do migration patterns benefit animals?
 - a) They help animals avoid competition
 - b) They allow access to food and better climates
 - c) They increase the chance of reproduction
 - d) All of the above
- 34. What happens to the particles of a substance when it changes from solid to liquid?
 - a) They move closer together
 - b) They move farther apart

- c) They remain still
- d) They disappear
- 35. How does the body use carbohydrates from food?
 - a) To build muscles
 - b) To provide immediate energy
 - c) To produce hormones
 - d) To store fat