I AIO

SCO INTERNATIONAL AI OLYMPIAD 2023-24

CLASS 2

QUESTION PAPER SET **S**

Guidelines for the Candidate

1. Before the exam begins, you will have an additional 20 minutes to complete the OMR Sheet with personal information.

2. On the OMR Sheet, clearly write your name, **school code, class, roll number, and mobile number**..

   Total Questions - 35

3. Every inquiry must be answered. There are no failing grades. Calculator use is not allowed.

4. There is just ONE right response. Select ONE response choice only.

5. Use only an HB pencil or a blue or black ballpoint pen to indicate your choice of responses by darkening the corresponding circles on the OMR Sheet. E.g.

   Q.1: What is the capital of India?

   A. Kolkata B. Mumbai C. Delhi D. Chennai

   You must shade the circle next to option C on the OMR Sheet since that is the right response.

   Q.1.Ⓐ Ⓑ ● Ⓓ

6. At the conclusion of the test, hand over the OMR Sheet to the Invigilator.

7. Before attempting the paper, kindly provide your personal information in the box provided on this page. .

School Connect Online

Name:..

Registration ID.:.. Contact No.:..

Section 1 – Basic Concepts (Introduction to AI in Daily Life)

1. **What does AI stand for?**
   A. Air Intelligence
   B. Artificial Intelligence
   C. Amazing Intelligence
   D. Active Intelligence
   Answer: B
   Explanation: AI means machines that can think and learn like humans.

2. **Which of these is an example of AI in daily life?**
   A. A washing machine without a timer
   B. A robot vacuum that cleans on its own
   C. A regular fan
   D. A pencil
   Answer: B
   Explanation: AI devices like robot vacuums work automatically by learning and deciding when to clean.

3. **What helps AI learn things?**
   A. Magic
   B. Data
   C. Food
   D. Paper
   Answer: B
   Explanation: AI uses data to learn and make decisions.

4. **Which of these is NOT an AI technology?**
   A. Siri on an iPhone
   B. A toaster
   C. Google Maps
   D. Alexa
   Answer: B
   Explanation: Toasters don't use AI, but Siri, Alexa, and Google Maps do.

5. **AI helps us by...**
   A. Drawing pictures
   B. Making smarter decisions
   C. Sleeping for us
   D. Reading our minds
   Answer: B
   Explanation: AI helps in decision-making by processing data.

Section 2 – Examples of AI (Voice Assistants, Robots, Simple Apps)

6. **Which app uses AI to help you find directions?**
   A. Google Maps

B. Clock
C. Camera
D. Calculator
Answer: A
Explanation: Google Maps uses AI to show routes and traffic.

7. **What can a robot do?**
   A. Eat food
   B. Sing and talk with you
   C. Sleep like a human
   D. Cry tears
   Answer: B
   Explanation: Robots can be programmed to sing, talk, and perform tasks.

8. **Which of these is an AI voice assistant?**
   A. Siri
   B. Chalkboard
   C. Doorbell
   D. Lamp
   Answer: A
   Explanation: Siri is a voice assistant that uses AI.

9. **Which AI system helps you play songs?**
   A. Alexa
   B. Table
   C. Fridge
   D. Paper
   Answer: A
   Explanation: Alexa is a voice-controlled AI system.

10. **Robots are often used to...**
    A. Play games with friends
    B. Help in factories and homes
    C. Eat dinner
    D. Sleep in a bed
    Answer: B
    Explanation: Robots assist in tasks like assembly, cleaning, and more.

Section 3 – Pattern Recognition Games (Recognizing Objects and Colors)
11. **What shape comes next? Circle, Square, Circle, Square, _____**
    A. Rectangle
    B. Circle
    C. Square
    D. Triangle
    Answer: B
    Explanation: The pattern alternates between a circle and a square.

12. **Which of these is the odd one out?**
    A. Red Apple
    B. Green Apple
    C. Blue Banana
    D. Yellow Banana
    Answer: C
    Explanation: Bananas are not naturally blue.

13. **AI can recognize objects by using...**
    A. Smell
    B. Pictures
    C. Books
    D. Magic
    Answer: B
    Explanation: AI uses pictures or cameras to identify objects.

14. **What comes after this color sequence? Red, Green, Red, Green, _____**
    A. Blue
    B. Red
    C. Yellow
    D. Green
    Answer: B
    Explanation: The pattern alternates between red and green.

15. **Which tool helps AI recognize colors?**
    A. Microphone
    B. Camera
    C. Book
    D. Spoon
    Answer: B
    Explanation: A camera captures images that AI can analyze.

Section 4 – Achievers Section (Logical Puzzles, Fun with Matching Patterns)

16. **If a robot cleans 2 rooms in 1 hour, how many rooms will it clean in 3 hours?**
    A. 5
    B. 6
    C. 3
    D. 9
    Answer: B
    Explanation: 2 rooms × 3 hours = 6 rooms.

17. **What comes next in this number pattern? 2, 4, 6, 8, _____**
    A. 10
    B. 12
    C. 14
    D. 16

Answer: A
Explanation: The pattern increases by 2 each time.

18. **Match the pair: Robot is to Clean as Siri is to _____.**
    A. Talk
    B. Walk
    C. Cook
    D. Dance
    Answer: A
    Explanation: Siri is designed to talk and assist.

19. **Which one does not belong in this group?**
    A. Refrigerator
    B. Alexa
    C. Fan
    D. Google Assistant
    Answer: C
    Explanation: Fans are not AI devices.

20. **If AI recognizes a car, what would it most likely see?**
    A. Wheels and windows
    B. A book and pen
    C. A tree and grass
    D. A dog and bone
    Answer: A
    Explanation: AI identifies objects by features like wheels and windows for a car.

21. **A robot sees this pattern:** 🟦 🟥 🟦 🟥 **. What comes next?**
    A. 🟧
    B. 🟦
    C. 🟥
    D. 🟨
    Answer: B
    Explanation: The pattern alternates between 🟦 and 🟥 .

22. **Which AI device would help you make a list?**
    A. Calculator
    B. Alexa
    C. Torch
    D. Calendar
    Answer: B
    Explanation: Alexa can help create and manage lists.

23. **If 1 robot does 10 tasks in 1 day, how many tasks will 2 robots do in 2 days?**
    A. 20
    B. 30
    C. 40
    D. 50

Answer: C
Explanation: 10 tasks × 2 robots × 2 days = 40 tasks.

24. **AI can help a camera find...**
    A. Stars
    B. People's faces
    C. Colors only
    D. Shadows only
    Answer: B
    Explanation: AI in cameras helps recognize faces.

25. **If AI recognizes a zebra, what pattern will it notice?**
    A. Dots
    B. Stripes
    C. Circles
    D. Plain
    Answer: B
    Explanation: Zebras are recognized by their stripes.

26. **Match the shapes: Triangle is to 3 sides as Square is to _____.**
    A. 4 sides
    B. 5 sides
    C. 6 sides
    D. 2 sides
    Answer: A
    Explanation: Squares have 4 sides.

27. **What is the missing part?** 🟥 🟩 🟦 🟥 🟩 _____
    A. 🟦
    B. 🟧
    C. 🟧
    D. 🟫
    Answer: A
    Explanation: The sequence repeats: 🟥 🟩 🟦.

28. **AI uses patterns to solve puzzles like...**
    A. Matching objects
    B. Writing essays
    C. Flying planes
    D. Cooking food
    Answer: A
    Explanation: AI recognizes patterns to solve puzzles.

29. **What does a self-driving car use to stay on the road?**
    A. Music
    B. Cameras and AI
    C. Paint
    D. A map

Answer: B
Explanation: Cameras and AI help the car see and navigate.

30. **Which is a matching pair? Dog is to Bark as Cat is to _____.**
    A. Meow
    B. Roar
    C. Sing
    D. Dance
    Answer: A
    Explanation: Cats meow, just as dogs bark.

31. **What comes next in this shape pattern?** 🟧 , 🟦 , 🟧 , 🟦 , 🟧 , _____
    A. 🟥
    B. 🟦
    C. 🟩
    D. 🟧
    Answer: B
    Explanation: The pattern alternates between 🟧 and 🟦 .

32. **If an AI robot finds a triangle and then a square, what shape might come next if it repeats?**
    A. Circle
    B. Rectangle
    C. Triangle
    D. Hexagon
    Answer: C
    Explanation: The sequence repeats: triangle, square, triangle.

33. **If you see: 1, 3, 5, 7, _____, what is the next number?**
    A. 8
    B. 9
    C. 10
    D. 11
    Answer: B
    Explanation: The pattern increases by 2: 1, 3, 5, 7, 9.

34. **Which robot would help clean your room?**
    A. A vacuum robot
    B. A cooking robot
    C. A music robot
    D. A swimming robot
    Answer: A
    Explanation: Vacuum robots are designed to clean.

35. **AI can recognize animals by...**
    A. Smelling them
    B. Seeing their shapes and patterns

C. Hearing their voices
D. Reading about them
Answer: B
Explanation: AI uses cameras to detect shapes and patterns to identify animals.

SPACE FOR ROUGH WORK