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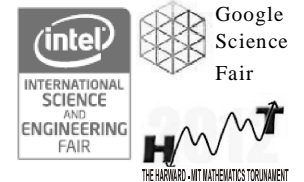
**NATIONAL
INTERACTIVE
SCIENCE
OLYMPIAD**

N I S O

**9
Class** **A1
Paper
Code**

L E V E L - 1

Academic Partner — WWW.EDUSYS.IN



ICO INTERNATIONAL CYBER OLYMPIAD	NISO NATIONAL INTERACTIVE SCIENCE OLYMPIAD	NIMO NATIONAL INTERACTIVE MATHS OLYMPIAD	NBTO NATIONAL BIOTECHNOLOGY OLYMPIAD	IEO INTERNATIONAL ENGLISH OLYMPIAD	IGO INTERNATIONAL G.K. OLYMPIAD	BIFO BSE INTERNATIONAL FINANCE OLYMPIAD
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Level - 1 : All Level-1 successful* participants will get certificate, aptitude report and online subscription, and school toppers will be eligible for school hero medals.

Level - 2 : School toppers* will be selected for level-2-National level - online computer based interactive test held at exam centres all over India. Besides selection for level-3, winner will get merit certificate, medals, educational CDs, laptop, scholarship and other prizes. There is no level 2 in G.K. and Biotech.

Level - 3 : Toppers will qualify# for level 3-International level-where you will compete with students globally. Get selected for EHF's International Olympiad training camp. Only Indian organization giving students exposure to global competitions. Represent India & win laurels. Guidance by top scientists. Prizes ranges from cash (millions of \$), gadgets, foreign trips, publicity, fame, scholarships, Internships, conference participation and more. Level 3 is in Maths, Science & Cyber only.

* # See prospectus/website for details

- You are allowed additional 10 minutes to fill the required details in the **RESPONSE SHEET (OMR)**. **STUDENTS OF CLASS 1 & 2 HAVE TO UNDERLINE** THE CORRECT ANSWER IN THE QUESTION PAPER ITSELF. THEY ARE NOT REQUIRED TO USE THE RESPONSE SHEET (OMR). THEY HAVE TO FILL THEIR NAME, ROLL NUMBER, CLASS, SCHOOL NAME IN THE SPACE PROVIDED IN THE QUESTION PAPER.
- The question paper is made as per syllabus guidelines & pattern given in the information Booklet. The Question Paper for Classes 1 to 6 contains 25 Questions each to be answered in 40 minutes. The Question paper for classes 7 to 12 contains 50 Questions each to be answered in 60 minutes. All questions are compulsory. Further instructions are given in the instruction letter to the teacher.
- Use the response sheet to mark your responses by darkening the required circle. The response sheet has to be returned to the foundation, duly filled in. The student can retain the Question Paper except for classes 1 and 2.

GENERAL IQ

- One morning after sunrise Raj and Deepak were standing in a lawn with their back towards each other. Raj's shadow fell exactly towards the left-hand side. Which direction was Deepak facing ?
(1) North (2) South
(3) West (4) None of these
- If COURAGE is coded as RECGOAU how is ADVENTURE coded in that code ?
(1) NEARDUVTE (2) MRHQCPVWQ
(3) RSKMQRKLM (4) None of these
- Manish ranked 16th from the top and 29th from the bottom among those who passed an examination. 6 boys did not participate in the competition and 5 failed in the examination. How many boys were there in that class ?
(1) 40 (2) 50
(3) 55 (4) None of these
- Kilogram is related to Quintal in the same way as Paisa is related to ?
(1) Money (2) Rupee
(3) Coin (4) None of these
- X is Y's brother, S is T's mother and X's aunt. How is T related to X ?
(1) Cousin (2) Aunt
(3) Sister (4) None of these
- A father said to his son, "I was as old as you are at the present at the time of your birth." If the father's age is 38 years now, the son's age five years back was
(1) 14 years (2) 19 years
(3) 33 years (4) None of these
- A clock is started at noon. By 10 minutes past 5, the hour hand has turned through
(1) 145° (2) 150°
(3) 155° (4) None of these
- 3 pumps working 8 hours a day can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day ?
(1) 10 (2) 11
(3) 12 (4) None of these

9. In the given series which number should come next ?
7, 10, 8, 11, 9, 12, ____ ?
(1) 10 (2) 12
(3) 13 (4) None of these

10. Shilpa is older than Sheweta
Mohan is older than Shilpa
Sheweta is older than Mohan
If the first two statements are true, the third statement is
(1) True (2) False
(3) Can't say (4) None of these

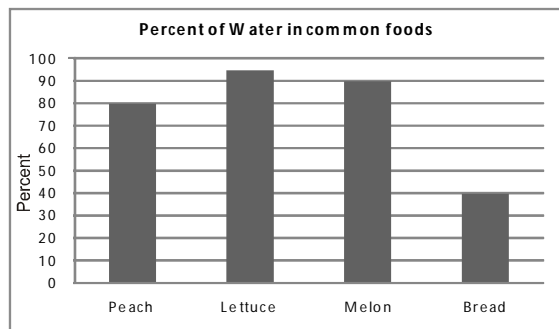
GENERAL SCIENCE

11. Which of the following is a kharif crop ?
(1) Maize (2) Pulses
(3) Pea (4) None of these
12. The largest cell is
(1) Human egg cell (2) Cheek cell
(3) Ostrich egg (4) None of these
13. How many cells are formed during binary fission of an amoeba ?
(1) One (2) Two
(3) Four (4) None of these
14. Stoppage of menstruation is called
(1) Puberty (2) Menarche
(3) Menopause (4) None of these
15. The decomposition of an electrolyte when electricity is passed through it is called
(1) Electroplating (2) Electrolysis
(3) Conduction (4) None of these
16. Earthing is
(1) Transferring of charge from a charged body to earth.
(2) Transferring of charge from earth to a charged body.
(3) Transferring of charge from a charged body to an uncharged body.
(4) None of these
17. The angle between reflected ray and normal is known as
(1) Angle of reflection (2) Angle of incidence
(3) Angle of refraction (4) None of these
18. Halley's comet appears after every
(1) 75 years (2) 73 years
(3) 76 years (4) None of these
19. Growth of excessive amount of algae in ponds, lakes etc is called
(1) Ammonification (2) Algal growth
(3) Eutrophication (4) None of these

20. Which non-metal is used by plants to manufacture proteins?
(1) Oxygen (2) Sulphur
(3) Carbon (4) None of these
21. Which element is stored in kerosene ?
(1) Sulphur (2) Phosphorous
(3) Sodium (4) None of these
22. Dry grasses in forest can catch fire in summer when
(1) Their temperature is lower than their ignition temperature
(2) Their temperature is reached near their ignition temperature.
(3) Both 1 and 2 (4) None of these
23. Living organisms and non living components of an area constitute a/an
(1) Biosphere (2) Ecosystem
(3) Flora (4) None of these
24. Waves of frequency greater than 20,000 Hz are called
(1) Ultrasonic (2) Sonic
(3) Infrasonic (4) None of these
25. If an object makes 10 oscillations in 1 second, then what is its time period ?
(1) 1 sec (2) 0.1 sec
(3) 0.01 sec (4) None of these
26. Battery is having
(1) Two or more cells connected to each other in any manner
(2) Positive terminal of one cell is connected to the positive terminal of the next cell
(3) Two or more cells connected in such a way that the positive terminal of one cell is connected to the negative terminal of the next
(4) None of these
27. Which irrigation system is the best technique for watering fruit plants ?
(1) Drip system (2) Lever system
(3) Pulley system (4) None of these
28. Female Aedes mosquito acts as carrier of
(1) Dengue virus (2) Malaria parasite
(3) Chicken pox virus (4) None of these
29. Synthetic fibre which resembles silk is
(1) Nylon (2) Polyester
(3) Rayon (4) None of these
30. Petroleum product used for surfacing the roads is
(1) Paraffin wax (2) Coal tar
(3) Coal (4) None of these

31. A burner of a gas stove gives yellow flame, this indicates
- (1) Incomplete combustion
 - (2) Complete combustion
 - (3) Both 1 and 2
 - (4) None of these
32. Minimum temperature of the day normally occurs
- (1) In the evening
 - (2) In the afternoon
 - (3) At night
 - (4) None of these
33. Wind moves from an
- (1) Area of high pressure to the area of low pressure
 - (2) Area of low pressure to the area of high pressure
 - (3) Area of high temperature to low temperature
 - (4) None of these
34. The melting point of ice is
- (1) 273°C
 - (2) 273 K
 - (3) 100°C
 - (4) None of these
35. Base turns
- (1) Blue litmus paper to red
 - (2) Red litmus paper to blue
 - (3) White litmus paper to red and blue
 - (4) None of these
36. Which of the following can regulate cell division ?
- (1) Centrosomes
 - (2) Ribosomes
 - (3) Lysosomes
 - (4) None of these
37. The central dense round body in the centre of the cell is
- (1) Vacuole
 - (2) Nucleolus
 - (3) Nucleus
 - (4) None of these
38. Thyroxin helps in the metamorphosis of
- (1) Silkworm
 - (2) Frog
 - (3) Humans
 - (4) None of these

39.



What conclusion can be drawn from this graph ?

- (1) Peach contains a lower percent of water than lettuce
- (2) Lettuce contains a lower percent of water than bread
- (3) A melon contains a higher percent of water than the other foods
- (4) None of these

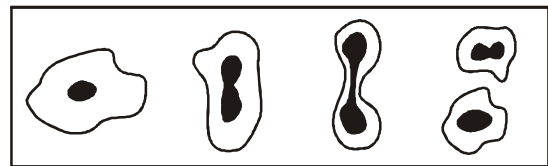
40. When a glass jar is placed over a lighted candle, the flame goes out. Why does this happen ?



- (1) Carbon dioxide is trapped in the glass
- (2) The oxygen will be used up
- (3) It gets too hot in the glass
- (4) None of these

EtG INTERACTIVE SECTION

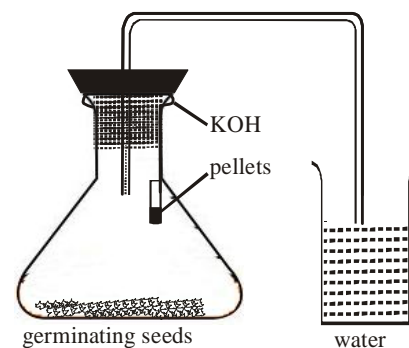
41. The process represented in the diagram below is the



- (1) Formation of spores in amoeba
- (2) Formation of bud taking place in amoeba
- (3) Identical gametes being formed in amoeba
- (4) None of these

42. The following experiment is set up to show that a gas is released during respiration.

In this set up, the small test tube containing pellets of KOH is kept in the conical flask to absorb



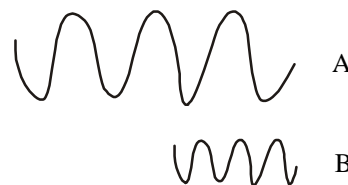
- (1) CO_2 released by the germinating seeds
- (2) O_2 in the air in the flask
- (3) Moisture in the flask
- (4) None of these

43. When calcium metal (Ca) changes to calcium ion (Ca^{2+}) the
- (1) Number of neutrons remains the same while the number of both protons and electrons changes.
 - (2) Number of neutrons and protons remains the same while the number electrons decreases by 2.
 - (3) All the three particles remain unchanged.
 - (4) None of these
44. A ball hangs from a string inside a railroad car moving along a horizontal straight track. The string is observed to be inclined towards the rear of the car, making a constant small angle with the vertical. It shows that the car is
- (1) Moving with a uniform acceleration
 - (2) Moving with a uniform velocity
 - (3) Moving with a uniform retardation
 - (4) None of these.
45. The correct procedure to prepare a temporary mount of a stained leaf epidermis is

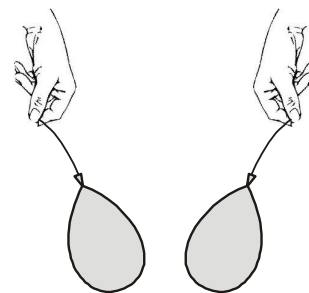
A	B	C	D
Take a peel of a leaf, Stain it with safranin. Transfer the peel to the slide. Remove the excess stain; Put a cover slip on it	Take a peel of a leaf, Wash it in water. Place it on the slide. Add a drop of glycerin on it Put a cover slip gently	Stain the leaf, Take a peel. Wash the peel in water Place on a slide Put a cover on it	Take a peel, Stain it with iodine; Transfer the peel to the slide. Remove excess stain with blotting paper. Put a cover slip on it.

- (1) A
 - (2) B
 - (3) C
 - (4) None of these
46. A student was given three samples containing ethanoic acid, sodium bicarbonate solution and water in test tubes I, II and III respectively. On dipping a pH paper in them, he observed that the colour turned orange in I, blue in II and green in III. If arranged in increasing order of their pH, the sequence of these bottles would be
- (1) I, II, III
 - (2) III, I, II
 - (3) I, III, II
 - (4) None of these

47. How do you compare the pitch of wave A and wave B ?

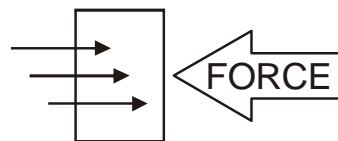


- (1) Frequency of wave A < Frequency of wave B
 - (2) Frequency of wave A > Frequency of wave B
 - (3) Frequency of wave A = Frequency of wave B
 - (4) None of these
48. Two suspended balloons attract as shown when brought close together.



Which of the following conclusion must be true ?

- (1) Both balloons have similar charges
 - (2) One of the balloons is neutral
 - (3) At least one of the balloons has a charge
 - (4) None of these.
49. Why do the police use dogs for detective work ?
- (1) Because they can run very fast
 - (2) Because they can hear ultrasonic waves
 - (3) Because they can hear infrasonic waves
 - (4) None of these
50. What will be the impact of force on the motion of the object shown in the picture ?



- (1) It will accelerate the object
- (2) It will speed up the object
- (3) It will slow down the object
- (4) None of these



END OF THE EXAM