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EDUHEAL FOUNDATION CONDUCTS 8 OLYMPIADS ANNUALLY REACHING OUT TO 3,500 + SCHOOLS

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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.

**NATIONAL
INTERACTIVE
SCIENCE
OLYMPIAD**

N I S O

**8
Class**

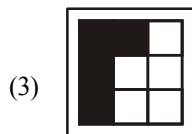
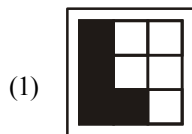
**A1
Paper
Code**

LEVEL - 1



GENERAL IQ

1. Find out which figure will continue in the given series?



(4) None of these

2. Introducing a man, a woman says, "He is the only son of my mother's mother." How is the man related to the woman?
- (1) Uncle (2) Father
(3) Maternal uncle (4) None of these

3. As 'plateau is related to 'mountain', 'bush' is related to what?
- (1) Plants (2) Trees
(3) Forest (4) None of these
4. CTPN : DSQM :: MUSK : ?
- (1) NVTL (2) NITJ
(3) NTTL (4) None of these
5. If MAGIC is coded as PXJFF, then how will LEASH be coded ?
- (1) OBDPK (2) OBDVL
(3) OHEOK (4) None of these
6. If pen is coded as pencil, pencil as chalk, chalk as slate, and slate as paper, then by which do you write mostly ?
- (1) Pen (2) Pencil
(3) Chalk (4) None of these
7. Pointing to Manju, Deepak said, "She is the wife of the only son of my father's father." How is Manju related to Deepak ?

- (1) Mother (2) Sister
(3) Sister-in-law (4) None of these
8. In the given question two statements and four conclusions are given. The statements may be contrary to the universal opinion even when you have to assume them as true. Decide which conclusion on the basis of the given statements is logically valid ?
- Statements: All kings are clever.
 Some foolish persons are kings.
- Conclusion: i) All foolish persons are clever
 ii) Some foolish persons are clever
 iii) Some clever persons are foolish
 iv) Some kings are foolish
- (1) Only (i) and (ii) (2) Only (ii), (iii) and (iv)
(3) All of these (4) None of these
9. In the given question one word is different from the rest. Find out the word which does not belong to the group ?
- (1) Ginger (2) Tomato
(3) Potato (4) None of these
10. Ramesh starting from a fixed point goes 15km towards North and then turning to his right he goes 15 km. Then he goes 10, 15 and 15 metres after turning to his left each time. How far is he from his starting point ?
- (1) 5 metres (2) 10 metres
(3) 20 metres (4) None of these

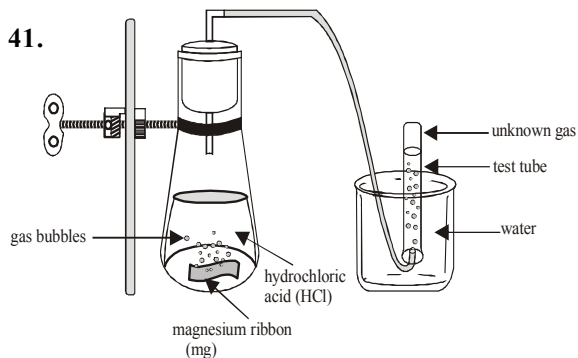
GENERAL SCIENCE

11. The nucleus is surrounded by a jelly like substance in a cell which is called
- (1) Cytoplasm (2) Cell membrane
(3) Protoplasm (4) None of these
12. Seasonal changes occur because
- (1) Of green house gases.
(2) Earth's rotation on its axis.
(3) Earth's axis of rotation is tilted at an angle to the normal
(4) None of these
13. The salivary glands secrete
- (1) Pepsin (2) Trypsin
(3) Ptyalin (4) None of these
14. Which of the following contains maximum amount of humus?
- (1) Desert soil (2) Mountain soil
(3) Laterite soil (4) None of these
15. Which cells are involved in respiration ?
- (1) WBC (2) RBC
(3) Blood plasma (4) None of these

16. Rhythmic contraction and relaxation of heart is called
- (1) Heart beat (2) Pulse rate
(3) Resting pulse (4) None of these
17. Female reproductive part of a flower is called
- (1) Carpel (2) Sepal
(3) Petal (4) None of these
18. Which of the following is the worst conductor of heat in the group ?
- (1) Copper (2) Plastic
(3) Aluminium (4) None of these
19. In which of the following modes of heat transfer does the molecule travel from the hotter part of the body to the colder part ?
- (1) Conduction (2) Convection
(3) Radiation (4) None of these
20. Acids when reacting with carbon and bicarbonate will liberate
- (1) Oxygen (2) Carbon monoxide
(3) Carbon dioxide (4) None of these.
21. Caustic soda is
- (1) An acid (2) A base
(3) A salt (4) None of these
22. White vitriol is the common name of
- (1) Copper sulphate (2) Copper oxide
(3) Zinc sulphate (4) None of these
23. Wind speed is measured by
- (1) Hygrometer (2) Anemometer
(3) Manometer (4) None of these
24. Which of the following prevents tungsten filament from burning ?
- (1) Neon (2) Helium
(3) Argon (4) None of these
25. A body with excess of electrons is
- (1) Negatively charged (2) Positively charged
(3) Neutral (4) None of these
26. The image formed by a plane mirror is always
- (1) Real and erect (2) Virtual and erect
(3) Real and inverted (4) Virtual and inverted
27. When materials are placed in the path of a light beam various things can happen. Which word describes materials that neither bounce light off nor allow light to pass through ?
- (1) Translucent (2) Transparent
(3) Absorber (4) None of these
28. Where do you use button cells ?
- (1) In car battery (2) In coal mine torches
(3) In wrist watches (4) None of these

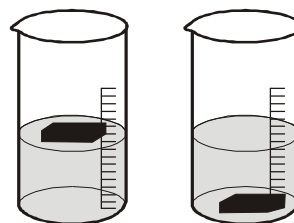
29. The pressure exerted by a liquid
 (1) Increases with depth (2) Decreases with depth
 (3) Does not change with depth (4) None of these
30. Which acid is responsible for the 'fizz' in soft drink ?
 (1) Acetic acid
 (2) Citric acid
 (3) Carbonic acid
 (4) None of these
31. The bending of the stem of a plant towards a source of light is called
 (1) Phototropism (2) Photorespiration
 (3) Solar bending (4) None of these
32. Pure water is
 (1) An atom (2) A compound
 (3) A mixture (4) None of these
33. Micro organism feeds upon dead plants and animal tissue and converts them into dark coloured substance called
 (1) Fertilizers (2) Manures
 (3) Humus (4) None of these
34. Which of the following matches the word sterilisation ?
 (1) Drinking water is treated with chlorine before domestic use
 (2) The result of being injected with a dead or weakened form of a micro organism to stimulate antibody production
 (3) Using yeast and sugar solution to make alcohol
 (4) None of these
35. Tissue culture is used for the propagation of
 (1) Potato (2) Spirogyra
 (3) Jasmine (4) None of these
36. Blood does not clot in a person suffering from
 (1) Leukaemia (2) Anaemia
 (3) Haemophilia (4) None of these
37. The end product of glycolysis is
 (1) Glucose (2) Pyruvic acid
 (3) Carbon dioxide (4) None of these
38. The prime constituent of urine is
 (1) Water (2) Urea
 (3) Uric acid (4) None of these
39. Lemon juice contains
 (1) Acetic acid (2) Citric acid
 (3) Amino acid (4) None of these
40. Which is the mode of storage of food in plants
 (1) Starch (2) Glycogen
 (3) Glucose (4) None of these

41.



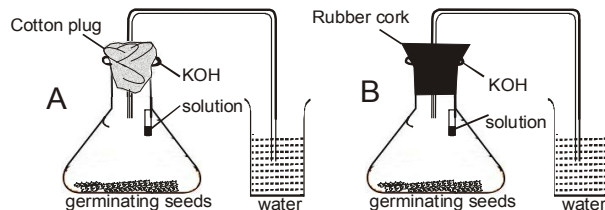
What are the reactants in the demonstration shown above?

- (1) Mg and H₂ (2) Mg and H₂O
 (3) Mg and HCl (4) None of these
42. Which gas is collected in the test tube ?
 (1) O₂ (2) H₂
 (3) Cl₂ (4) None of these
43. Students have two blocks of same size. They drop each block into a beaker of water. Why does block 1 float and block 2 sink ?



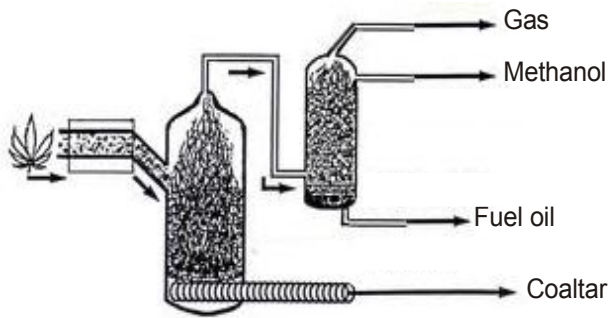
Block 1 Block 2

- (1) Block 1 is a different material than block 2
 (2) Block 2 weighs less than block 1
 (3) Block 2 repels more water than block 1
 (4) None of these.
44. Using the same number of given germinating gram seeds, two students A and B set up the experiment separately. Student A used a cotton plug to hold the bent tube in the mouth of the flask. Student B used a rubber cork. After 4 hours they noticed that



- (1) Water level is increased in the bent tube only of A
 (2) Water level is increased in the bent tube only of B
 (3) The cotton plug was wet
 (4) None of these

45.



Heat powdered coal in a boiling tube as shown above. Black drops of coal tar collected at the bottom of the tube containing ammoniacal liquor reacts to give which gas ?

- (1) Petroleum gas (2) Gasoline
 (3) Coal gas (4) None of these

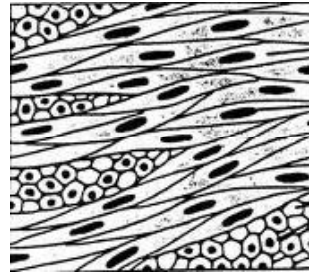
46. To show that zinc is more reactive than copper, the correct procedure is to

- (1) Prepare copper sulphate solution and dip zinc strip in it
 (2) Prepare zinc sulphate solution and dip copper in it
 (3) Heat zinc and copper strips
 (4) None of these

47. The site of detoxification in liver cells is

- (1) Lysosome (2) RER
 (3) Ribosome (4) SER

48.



This is the picture of which type of cells ?

- (1) Cheek cells (2) Muscle cells
 (3) Nerve cells (4) None of these.

49. What can a Genetic Engineer do ?

- (i) He can create a clone
 (ii) He can combine the genes of variety of individual in the same individual
 (iii) He can grow two coloured flowers on a single plant
 (1) All (i), (ii) and (iii) (2) Only (i) and (ii)
 (3) Only (ii) and (iii) (4) None of these.

50. Take a rubber sucker and press it hard against a smooth surface such as a window pane. This expels the air from it. We will find it difficult to pull it away. This is because

- (1) Atmospheric pressure pushes it from inside
 (2) Atmospheric pressure pushes it from outside
 (3) Atmospheric pressure acts equally in all directions
 (4) None of these



END OF THE EXAM