



EHF
LEARNING FOR LIFE

**EDUHEAL
FOUNDATION**

**CLASS
8**

LEVEL - 1

Set A1

EHF OLYMPIADS

- 4000 schools • 6 lakh students
- 11 olympiads • Global reach



EHF

**NATIONAL INTERACTIVE
SCIENCE OLYMPIAD**

Name :

Roll No :

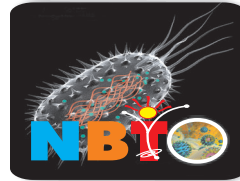
Class :

School :



art and sports clinic contest

**NATIONAL
BIOTECHNOLOGY
OLYMPIAD**



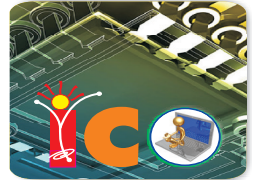
**NATIONAL
INTERACTIVE
MATHS
OLYMPIAD**



**NATIONAL
INTERACTIVE
SCIENCE
OLYMPIAD**



**INTERNATIONAL
CYBER
OLYMPIAD**



**INTERNATIONAL
ENGLISH
OLYMPIAD**



**INTERNATIONAL
GENERAL KNOWLEDGE
OLYMPIAD**



BSE
INVESTORS' PROTECTION FUND

BSE international finance olympiad (BIFO)



NATIONAL IIT-PMT OLYMPIAD (NIPO)

Instructions for the Candidate

1. You are allowed additional 10 minutes to fill the required details in the RESPONSE SHEET (OMR).
2. The question paper is made as per syllabus guidelines & pattern given in the information Booklet. The Question Paper for Classes 1 to 6 contains 40 Questions each to be answered in 60 minutes. The Question paper for classes 7 to 11 contains 60 Questions each to be answered in 60 minutes. All questions are compulsory. Further instructions are given in the instruction letter to the teacher.
3. 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.**

WEBSITE : WWW.EDUHEALFOUNDATION.ORG
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ROUGH WORK

GENERAL IQ

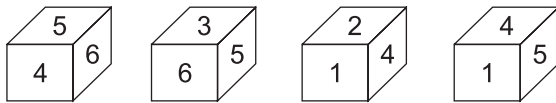
1. Look at the following words. No word should have more than 3 vowels. Which word does not confirm to this rule?

- (1) SCARCITY
- (2) PROGNOSIS
- (3) COMPLEXITY
- (4) CONVULSION

2. CLOCK is 42145, LEAN is 2068, CARE is 4690, then NECKLACE is:

- (1) 80546240
- (2) 6054842
- (3) 80452640
- (4) 50842604

3. Which number is on the face opposite to 3?



- (1) 4
- (2) 2
- (3) 1
- (4) 5

4. Snake : Reptile :: _____ : _____

- (1) Bat : Mammal
- (2) Cow : Calf
- (3) Fish : Pond
- (4) Soldier : Regiment

5. Some boys are standing in a queue. If the 10th boy from behind is 5 positions behind the 12th boy from the front, how many boys are there in the queue?

- (1) 27
- (2) 17
- (3) 26
- (4) 20




6. A cricket ball is lighter than a hockey ball. A volley ball is lighter than a football. A hockey ball is lighter than a football. Which among these four is the heaviest?





- (1) Cricket ball
- (2) Hockey ball
- (3) Football
- (4) Volley ball

7. Find the missing number.

3	6	8
4	5	5
10	3	?
120	90	240

- (1) 4
- (2) 6
- (3) 8
- (4) 10

8.  :  ::  : ?

- (1) 
- (2) 
- (3) 
- (4) 

9. If DINESHKU is written as 82517493 in the coded language, SHKNUDI will be written as

- (1) 7453298
- (2) 7495238
- (3) 7493582
- (4) 7495382

10. Vineet started walking towards west. Then he turned to the right. Once again he turned to the right and last of all, he turned to the left. Towards which direction is he going now?

- (1) North
- (2) South
- (3) East
- (4) West

GENERAL SCIENCE

11. Which of the following statement is not true for organic manure?

- (1) It enhances water holding capacity of soil.
- (2) It has a balance of all plant nutrients.
- (3) It provides humus to soil.
- (4) It improves texture of soil.

12. Organism responsible for amoebic dysentery is:

- (1) Entamoeba gingivalis
- (2) Amoeba proteus
- (3) Entamoeba histolytica
- (4) Plasmodium vivax

13. The toy shown in the image is made up of a

- (1) thermosetting plastic
- (2) plastic coir
- (3) thermoplastic
- (4) natural rubber



14. Non metals are used in

- | | |
|-------------------|----------------------|
| (1) aeroplanes | (2) making machinery |
| (3) water boilers | (4) fertilisers |

15. Which one of the following are very reactive non metals?

- | | |
|------------|-----------------|
| (1) Sodium | (2) Potassium |
| (3) Carbon | (4) Phosphorous |

16. Read the following statements:

- (i) Natural gas can be used for manufacturing carbon black.
 - (ii) Carbon black is used in rubber industry as strengthening agent.
- (1) Statement (i) is correct but (ii) is wrong
 - (2) Both are wrong
 - (3) Statement (ii) is correct but (i) is wrong
 - (4) Both are correct

17. LPG finds its use as a

- (1) rocket fuel
- (2) biogas manufacturer
- (3) refrigerant
- (4) both (1) and (2)

18. During incomplete combustion, fuel gives out

- | | |
|------------------|----------------------|
| (1) yellow flame | (2) oxygenated flame |
| (3) black flame | (4) blue flame |

19. Read the following statements:

- (i) White phosphorus ignites spontaneously at about 35°C.
 - (ii) White phosphorus is never stored under water.
- (1) Statement (ii) is correct but (i) is wrong
 - (2) Both are wrong
 - (3) Statement (i) is correct but (ii) is wrong
 - (4) Both are correct

20. The Indian Government has established how many biosphere reserves in India?

- | | |
|--------|--------|
| (1) 10 | (2) 12 |
| (3) 18 | (4) 20 |

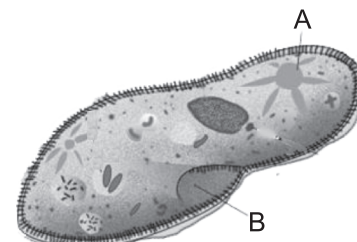
21. The smallest possible cell is

- | | |
|---------|----------|
| (1) RBC | (2) TMV |
| (3) HIV | (4) PPLO |

22. Read the following statements:

- (i) Cytoplasm is involved in synthesis of useful materials.
 - (ii) Cytoplasm recycles unwanted materials for the cell.
- (1) Statement (ii) is correct but (i) is wrong
 - (2) Both are correct
 - (3) Statement (i) is correct but (ii) is wrong
 - (4) Both are wrong

23. Which one of the following technique is used in test-tube baby programme?
 (1) Intra-Uterine Insemination
 (2) Zygote Intra Fallopian Transfer
 (3) Intra-Cytoplasmic Sperm Injection
 (4) Both (2) and (3)
24. The right meal for adolescents consists of
 (1) chips, noodles, coke
 (2) chapatti, dal, vegetables
 (3) rice, noodles, burger and chapatti
 (4) vegetable cutlets, chips and lemon drink
25. When two forces applied on an object are equal and opposite, then these forces
 (1) may move the object.
 (2) may stop a moving object.
 (3) may move the object and also cause a change in its shape.
 (4) do not move the object but may cause a change in its shape.
26. Which of the following device works on principle of multiple reflection of sound?
 (1) Radar
 (2) Bulb horn
 (3) Guitar
 (4) Sonar
27. Which of the following is used for electroplating?
 (1) Iron metal
 (2) Aluminium metal
 (3) Silver metal
 (4) Chromium metal
28. Which of the following is not caused by an earthquake?
 (1) Landslide (2) Flood
 (3) Tsunami (4) Thunder
29. When light is passed through two consecutive mirrors resultant will be
 (1) rainbow colours
 (2) white beam
 (3) no light
 (4) dispersed light
30. The major event that occurs during the anaphase of mitosis, which brings about the equal distribution of chromosomes, is
 (1) splitting of the centromeres
 (2) splitting of the chromatids
 (3) replication of the genetic material
 (4) condensation of the chromatin
31. Which of the following is unique to mitosis and not a part of meiosis?
 (1) Homologous chromosomes pair and form bivalents
 (2) Chromatids are separated during anaphase
 (3) Homologous chromosomes behave independently
 (4) Both (1) and (2)
32. The following planets have natural satellites except
 (1) Jupiter (2) Venus
 (3) Uranus (4) Neptune
33. Identify the parts in the given picture.



- (1) A = Pellicle, B = Small nucleus
 (2) A = Contractile vacuole, B = Oral groove
 (3) A = Large nucleus, B = Pellicle
 (4) A = Cilia, B = Anal pore

34. Plant disease citrus canker is caused by

- (1) Virus
- (2) Fungi
- (3) Bacteria
- (4) Both (1) and (2)

35. Which of the following is not a fungi?

- (1) Paramecium
- (2) Bread mould
- (3) Penicillium
- (4) Aspergillus

36. The fruit shown in the image is a rich source of

- (1) Manganese
- (2) Potassium
- (3) Calcium
- (4) Magnesium



37. _____ is produced by combustion of fuels like coal in power plants.

- (1) Nitrogen dioxide
- (2) Carbon dioxide

(3) Sulphur dioxide

(4) Both (2) and (3)

38. A motorcycle with worn out threads on tyres is more likely to skid due to

- (1) Smaller size of tyres
- (2) More friction
- (3) Less weight of tyres
- (4) Less friction

39. Two or more waves combine to make one wave with more height. What kind of interference has happened?

- (1) Destructive interference
- (2) Constructive interference
- (3) Translucent interference
- (4) None of these

40. Which of the following sets contains only objects that shine as a result of reflected light?

- (1) Moons, Planets, and Comets
- (2) Moons, Comets, and Stars
- (3) Planets, Stars, and Comets
- (4) Planets, Stars, and Moons

INTERACTIVE SECTION

41. An object composed mainly of ice is orbiting the Sun in an elliptical path. This object is most likely

- (1) a planet
- (2) an asteroid
- (3) a meteor
- (4) a comet

42. Copper (Cu) reacts with oxygen (O) to form copper oxide (CuO). The properties of CuO are most likely

- (1) different from copper or oxygen.
- (2) similar to both copper and oxygen.
- (3) similar only to copper.
- (4) similar only to oxygen.

43. The following equations represent chemical reactions.

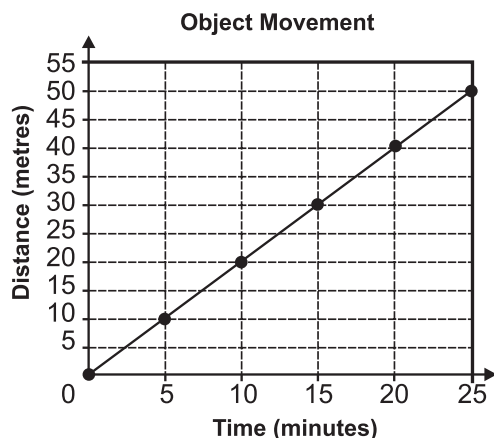
Chemical Reactions

1	$2\text{Na} + 2\text{H}_2\text{O} \rightarrow \text{NaOH} + \text{H}_2$
2	$\text{H}_2 + \text{O}_2 \rightarrow \text{H}_2\text{O}$
3	$\text{Mg} + \text{Cl}_2 \rightarrow \text{MgCl}_2$
4	$\text{NaOH} + \text{MgCl}_2 \rightarrow \text{NaCl} + \text{MgOH}$

Which equation shows that the total mass during a chemical reaction stays the same?

- (1) 1
- (2) 2
- (3) 3
- (4) 4

44. The graph below shows the movement of an object at several points in time.



What is the average speed of the object?

- (1) $\frac{0.5 \text{ metres}}{\text{minute}}$ (2) $\frac{2 \text{ metres}}{\text{minute}}$
 (3) $\frac{25 \text{ metres}}{\text{minute}}$ (4) $\frac{50 \text{ metres}}{\text{minute}}$
45. A spring scale is pulled downward and readings are recorded.

Data Table

Distance Pulled	Spring Scale Reading
1.0 cm	4 N
1.5 cm	6 N
2.0 cm	8 N
2.5 cm	10 N

If the spring is pulled 3.5 cm, the spring scale should read

- (1) 12 N (2) 13 N
 (3) 14 N (4) 15 N
46. A student divides several cubes into two groups, based on whether or not each cube can float in water. What property is the student using to classify the cubes?
- (1) Weight (2) Density
 (3) Conductivity (4) Mass
47. A galaxy is *best* described as a cluster of
- (1) hundreds of stars. (2) thousands of stars.
 (3) millions of stars. (4) billions of stars.

48. To express the distance between the Milky Way galaxy and other galaxies, the *most* appropriate unit of measurement is the

- (1) metre (2) kilometre
 (3) light-year (4) astronomical unit

49. Which of the following *best* describes an atom?

- (1) Protons and electrons grouped together in a random pattern.
 (2) Protons and electrons grouped together in an alternating pattern.
 (3) A core of protons and neutrons surrounded by electrons.
 (4) A core of electrons and neutrons surrounded by protons.

50. When magnesium (Mg) metal is burned in the presence of oxygen (O₂), magnesium oxide (MgO) is produced. The properties of magnesium oxide are different than the individual properties of magnesium and oxygen because magnesium oxide is

- (1) a solution (2) a mixture
 (3) a compound (4) an element

51. Match the following:

Column - I		Column - II	
(i)	Selection tool	(a)	Used to change the shape of the object.
(ii)	Sub selection tool	(b)	User to rotate, move, skew and distort the object.
(iii)	Free transform tool	(c)	Used to scale, rotate and change the direction of the gradient fill in the object.
(iv)	Gradient transform tool	(d)	It consists of animate objects.

- (1) (i-d) (ii-a) (iii-c) (iv-b)
 (2) (i-d) (ii-a) (iii-b) (iv-c)
 (3) (i-b) (ii-a) (iii-d) (iv-c)
 (4) (i-d) (ii-b) (iii-a) (iv-c)

52. Malaria is a mosquito borne disease that is caused by parasitic protozoan belonging to _____ type.

- (1) Plasmodium
- (2) Entamoeba
- (3) Trypanosoma
- (4) None of these




53. Who invented World Wide Web?

- (1) William Crookes
- (2) Robert Hooke
- (3) Wilhelm Rontgen
- (4) Tim Berners Le

54. The process of fermentation can be applicable to

- (1) Dairy products
- (2) Beverage products
- (3) Both (1) & (2)
- (4) None of these

55. Which of the following is a fermented produced?

- (1) 
- (2) 
- (3) 
- (4) None of these

56. Select the incorrect statement from the following.

- (1) Beer is fermented beverage.
- (2) Buns are fermented cereal.
- (3) Cheese is fermented diary product.
- (4) None of these

57. Identify in the following which is used for connect computer with networking.



58. The milk is pasteurized and do not contain harmful microbes. This milk is prepared by:

- (1) Heating milk at 70°C for 5 mins.
- (2) Heating milk at 70°C for 15 to 30 secs.
- (3) Heating milk at about 150°C for 60 secs.
- (4) None of these

59. When someone attack or try to hack your computer which security layer will block him first to enter into your system?

- (1) Physical layer
- (2) Network layer
- (3) Session layer
- (4) Data link layer

60. Preservatives are added to certain food to prevent the growth of microbes. Select the incorrect pair of food & its preservatives from the following.

- (1) Common salt – meat & fish
- (2) Sugar – jellies
- (3) Vinegar – vegetables
- (4) None of these



END OF THE EXAM