



EHF
LEARNING FOR LIFE

**EDUHEAL
FOUNDATION**

**CLASS
9**

LEVEL - 1

Set A1

EHF OLYMPIADS

- 4000 schools • 6 lakh students
- 10 olympiads • Global outreach



EHF

**NATIONAL INTERACTIVE
SCIENCE OLYMPIAD**

Name :

Roll No :

Class :

School :



**NATIONAL
BIOTECHNOLOGY
OLYMPIAD**



**NATIONAL
MATHS
OLYMPIAD**



**NATIONAL
SCIENCE
OLYMPIAD**



**INTERNATIONAL
CYBER
OLYMPIAD**



**INTERNATIONAL
ENGLISH
OLYMPIAD**



**INTERNATIONAL
GENERAL KNOWLEDGE
OLYMPIAD**



BSE international finance olympiad (BIFO)



NATIONAL IIT-PMT OLYMPIAD (NIPO)

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 Art and Cricket.

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.

* # See prospectus website for details

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 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.
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
E-MAIL : INFO@EDUHEALFOUNDATION.ORG

ROUGH WORK

GENERAL IQ

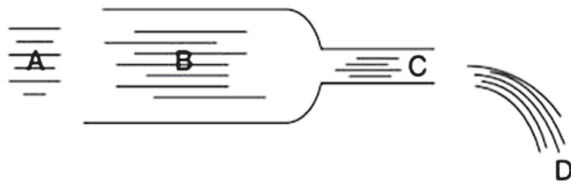
1. Two people were walking in opposite directions. Both of them walked 6 miles forward then took right and walked 8 miles. How far is each from starting positions?

- (1) 14 miles and 14 miles
- (2) 10 miles and 10 miles
- (3) 6 miles 6 miles
- (4) None of these

2. My successor's father is my father's son and I don't have any brothers or sons. Who is my successor?

- (1) Nephew
- (2) Niece
- (3) Daughter
- (4) None of these

3. A large volume of water is gushing through a pipe which narrows at the outlet. At which point, A, B, C or D will the water flow fastest?

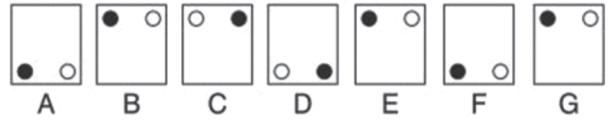


- (1) A
- (2) B
- (3) C
- (4) None of these

4. How many cases do you need if you have to pack 112 pairs of shoes into cases that each hold 28 shoes?

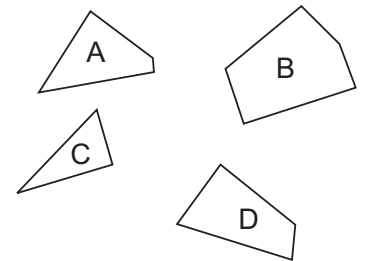
- (1) 12
- (2) 8
- (3) 15
- (4) None of these

5. Which does not belong in this sequence?



- (1) C
- (2) E
- (3) F
- (4) None of these

6. Which three of the four pieces below can be fitted together to form a perfect square?



- (1) C, B and D
- (2) A, B, and C
- (3) A, C and D
- (4) None of these

7. The day after the day after tomorrow is four days before Monday. What day is it today?

- (1) Monday
- (2) Tuesday
- (3) Wednesday
- (4) None of these

8. Forest is to tree as tree is to?

- (1) Plant
- (2) Leaf
- (3) Branch
- (4) None of these

9. Which of the following can be arranged into a 5-letter English word?

- (1) H R G S T
- (2) R I L S A
- (3) W Q R G S
- (4) None of these

10. If you rearrange the letters "LNGEDNA" you have the name of a(n):

- (1) Animal
- (2) Country
- (3) State
- (4) None of these

GENERAL SCIENCE

11. Which leaves are used by farmers to protect their crops from weeds and insects?

- (1) Peepal leaves
- (2) Neem leaves
- (3) Basil Leaves
- (4) None of these

12. A rabi crop that is also one of the pulses.

- (1) Wheat
- (2) Gram
- (3) Maize
- (4) None of these

13. Rhizobium : Nitrogen fixation : : _____ :
Fermentation

- (1) Algae (2) Protozoa
(3) Lactobacillus (4) None of these

14. What are Blue-Green bacteria called?

- (1) Acquaobacteria (2) Cyanobacteria
(3) Protozoa (4) None of these

15. What type of synthetic fibre is used to make the given things?



- (1) Nylon (2) Rayon
(3) Both (1) and (2) (4) None of these

16. Polythene and PVC are some of the examples of

- (1) Thermoplastics
(2) Thermosetting plastics
(3) Both (1) and (2)
(4) None of these

17. _____ is a non-metal which catches fire on being exposed to air.

- (1) Mercury (2) Phosphorous
(3) Magnesium (4) None of these

18. Name a metal which is not attacked by cold water, boiling water and steam.

- (1) Copper (2) Iron
(3) Sulphur (4) None of these

19. The buried dead plants get converted to _____ due to high temperature and pressure underneath the Earth.

- (1) Rocks (2) Metal
(3) Coal (4) None of these

20. Which is the constituent of a foam type fire extinguisher?

- (1) Dilute sulphuric acid
(2) Dilute nitric acid

(3) Both (1) and (2)

(4) None of these

21. _____ is the first Reserve Forest of India where the finest Indian teak is found.

- (1) Jim Corbett National Park
(2) Satpura National Park
(3) Sundarbans National Park
(4) None of these

22. Which of the following cells can change its shape?

- (1) White blood cell (2) Egg cell
(3) Red blood cell (4) None of these

23. Internal fertilization does not occur in



(4) None of these

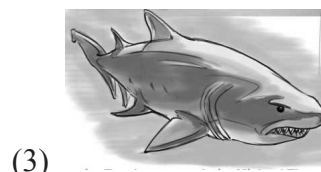
24. What is the range of adolescence?

- (1) 31-39 (2) 51-59
(3) 11-19 (4) None of these

25. The frictional force exerted by fluids is

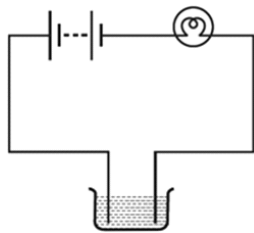
- (1) drag (2) thrust
(3) dynamic friction (4) none of these

26. Some animals bounce sound waves off an object to detect their location, this is known as echolocation. Which of the following animals does not use echolocation?



(4) All of these

27. The bulb glow in the setup shown in the figure.
What is the possible reason?

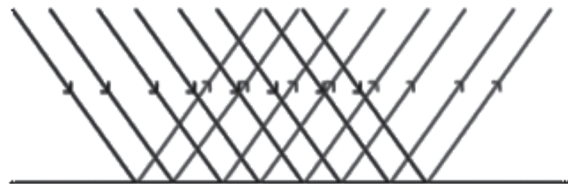


- (1) Solution is poor conductor of electricity
(2) Solution is a good conductor of electricity
(3) Bulb always glow
(4) None of these
28. Which of the following cannot be charged easily by friction?
- (1) A plastic scale (2) A copper rod
(3) An inflated balloon (4) None of these
29. What is the range of wavelength of visible light in Å units?
- (1) 4000 to 7000 Å (2) 5000 to 10000 Å
(3) 11000 to 20000 Å (4) None of these
30. The closest star to the sun is:
- (1) Proxima Centauri
(2) Alpha Centauri A
(3) Star Light, Star Bright
(4) None of these
31. _____ is produced by combustion of fuels like coal in power plants.
- (1) Sulphur dioxide
(2) Magnesium oxide
(3) Carbon dioxide
(4) None of these
32. Acid rain is formed by the oxidation followed by dissolution of _____ and gases in rain water.
- (1) Smoke (2) Water vapour
(3) Ultraviolet (4) None of these
33. The majority of asteroids are found between the orbits of
- (1) Mars and Jupiter

- (2) Earth and Mars
(3) Jupiter and Saturn
(4) None of these

34. Name the scale on which the destructive energy of an earthquake is measured.
- (1) Newton Scale (2) Richter scale
(3) Kelvin Scale (4) None of these
35. Force of friction is more in
- (1) marble tiles (2) wooden floor
(3) playground (4) none of these
36. Which of the following will remain unchanged when a sound wave travels in air or in water?
- (1) Amplitude (2) Wavelength
(3) Frequency (4) None of these

37. What type of reflection is shown in the given figure?



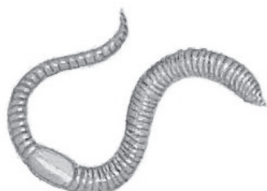
- (1) Regular (2) Irregular
(3) Diffused (4) None of these
38. The earth and the moon are attracted to each other by gravitational force. Does the earth attract the moon with a force that is greater or smaller or the same as the force with which the moon attracts the earth?
- (1) Same force (2) Greater force
(3) Smaller force (4) None of these
39. What is the shape and size of cells related to?
- (1) Size of the organism
(2) Weight of the organism
(3) Function of the cell
(4) None of these
40. Energy of an electron in orbit is proportional to
- (1) distance between shells
(2) distance from nucleus
(3) distance between two nuclei
(4) none of these

INTERACTIVE SECTION

41. A projectile moves in a gravitational field. Which one of the following is a correct statement for the gravitational force acting on the projectile?

- (1) The force is in the direction of the field.
- (2) The force is in the opposite direction to that of the field.
- (3) The force is at right angles to the field.
- (4) None of these

42. Chewing mouth parts found in



(1)



(2)



(3)

(4) none of these

43. Flies and dust carry hundreds of

- (1) viruses
- (2) germs
- (3) diseases
- (4) none of these

44. The Earth's shape most closely resembles which of the following object

- (1) a basketball
- (2) a pear
- (3) a ping-pong ball
- (4) none of these

45. What is the dewpoint when the dry-bulb temperature is 24°C and the wet-bulb temperature is 15°C ?

- (1) 8°C
- (2) -18°C
- (3) 36°C
- (4) None of these

46. In general, the probability of flooding decreases when there is an increase in the amount of

- (1) precipitation
- (2) infiltration
- (3) runoff
- (4) none of these

47. A man travels a distance of 20 km from his home to office, and 10 km towards his house back. Then the displacement covered by the man in the whole trip is

- (1) 30 km
- (2) 10 km
- (3) zero km
- (4) none of these

48. In the following example, try to identify the number of times the velocity of ball changes: "A football player kicks a football to another player of his team who kicks the football towards the goal. The goalkeeper of the opposite team collects the football and kicks it towards a player of his own team."

- (1) Five times
- (2) Four times
- (3) Three times
- (4) None of these

49. Ram applied 10 N of force over 3 m in 10 seconds. Shyam applied the same force over the same distance in 1 minute. Who did more work?

- (1) Ram
- (2) Both did the same work
- (3) Shyam
- (4) None of these

50. Which of the following was NOT a contribution of Newton's to science?

- (1) The law of universal gravitation
- (2) $F = ma$
- (3) Laws of electrolysis
- (4) None of these



END OF THE EXAM