



INTSO EDUCATION

SCIENCE TALENT SEARCH OLYMPIAD (STSO) 2015-16

STAGE - 1

TIME : 60 min.

CLASS : VI

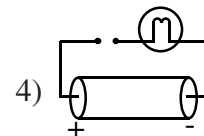
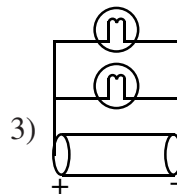
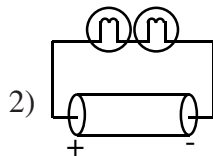
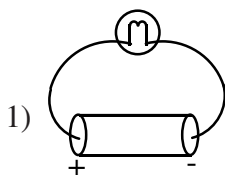
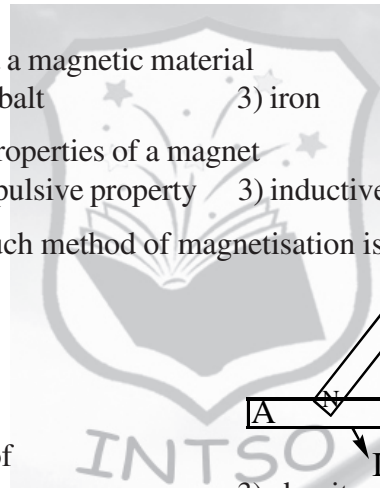
Max. Marks : 50

Instructions:

- ⇒ Fill the OMR sheet completely and carefully.
- ⇒ Each question carries one mark and has only one correct answer. No negative marks
- ⇒ The question paper contains 50 questions to be answered in 60 minutes.

PHYSICS

- The earth's magnetic field is caused by the []
 - circulation of liquid parts of the earth's core which results in electrical current
 - circulation of water within the earth's crust
 - presence of a huge bar magnet embedded inside the earth
 - earth's orbital motion
- Which of the following is not a magnetic material []
 - steel
 - cobalt
 - iron
 - manganese
- Which of the following are properties of a magnet []
 - attractive property
 - repulsive property
 - inductive property
 - all the above
- In the given figure, single touch method of magnetisation is shown. The end A acquires
 - north pole
 - south pole
 - may be north pole
 - none
- Lighting conductor is made of []
 - copper
 - glass
 - ebonite
 - plastic
- In a filament type light bulb, the filament is made of []
 - bronze
 - nichrome
 - iron
 - tungsten
- Which circuit gives out the maximum light, if bulbs and cells are identical []

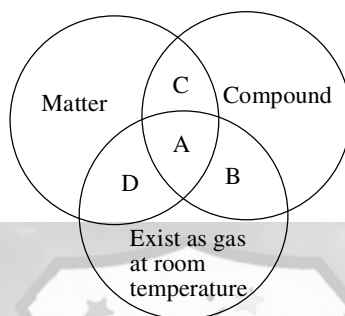


- Statement (A)** : Substances which allow the flow of electricity are known as conductors of electricity

Statement (B) : Substances which do not allow the flow of electricity are known as insulators of electricity []

 - Both A and B are false
 - Both A and B are true
 - A is true, B is false
 - A is false, B is true
- The substances which pass most of the incident light through them are called []
 - translucent
 - transparent
 - opaque
 - luminous

20. Formation of a compound from its constituent elements is a []
 1) Physical change
 2) Chemical Change
 3) Neither Physical change nor chemical change
 4) Can not be predicted
21. Hydrogen and oxygen can combine in different ratios to form two compounds A and B. The ratio of number of hydrogen atoms to numbers of oxygen atoms in one molecule of A and one molecule of B respectively are 2 : 1 and 1 : 1.
 Now the ratio of number of hydrogen atoms in one molecule of A to number of hydrogen atoms in one molecule of B is []
 1) 1 : 1 2) 2 : 1 3) 1 : 2 4) can not be predicted
22. Observe the venn diagram carefully



Correct match among the following which are suitable to A, B, C, D respectively are []

- | A | B | C | D | A | B | C | D |
|---------------------|------------------|----------------|-----------------|--------------------|-----------------|------------------|----------------|
| 1) SO ₂ | O ₂ | Fe | Ne | 2) NaCl | SO ₂ | HCl | O ₂ |
| 3) H ₂ O | N ₂ O | N ₂ | Br ₂ | 4) CO ₂ | NH ₃ | H ₂ O | He |

23. Which of the following is a diatomic molecule of compound []
 1) O₂ 2) CO 3) Ne 4) H₂SO₄
24. $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
 According to the above equation, number of oxygen molecules required for the formation of 6 molecules of MgO is []
 1) 6 2) 2 3) 3 4) 1
25. What happens when excess common salt is added to a glass of water at room temperature []
 1) water can dissolve any amount of salt
 2) common salt crystals remain as sediment after forming a saturated solution
 3) common salt is not soluble in water 4) It forms an unsaturated salt solution.
26. Pick up the odd one from the following based on the chemical composition []
 1) pure water 2) the gas which we exhale
 3) milk 4) sugar

27. **Column - I** **Column - II**
- | | |
|---|---|
| i) Na | p) Chemical equation |
| ii) CaCO ₃ | q) Physical change |
| iii) $2\text{H}_2\text{O} + \text{O}_2 \rightarrow 2\text{H}_2\text{O}_2$ | r) Symbol |
| iv) $\text{NaCl} + \text{H}_2\text{O} \rightarrow \text{Aq NaCl}$ | s) Chemical formula |
| i ii iii iv | i ii iii iv |
| 1) r s q p | 2) r s p q |
| 3) s r q p | 4) q r p s |

BIOLOGY

35. Read the following Food components []
I. Carbohydrates II. Proteins III. Fats
Arrange them in an order based on their energy requirement to the body.
1) III - II - I 2) I - II - III 3) I - III - II 4) II - I - III
36. Identify the mismatch []
1) Beet root : Carbohydrates 2) Tomatoes : Vitamin - D
3) Peanut : Protein 4) Onion : Antioxidant
37. I am the Vitamin present in milk []
I will keep the bones and teeth strong
I am available in Fish meat
Who am I
1) Vitamin - C 2) Vitamin - D 3) Vitamin - E 4) Vitamin - K
38. Which of the following is incorrect []
1) The food with all essential nutrients is called balanced diet
2) Eating food with carotenoids can lower the risk of cancer
3) Fruits are the good source of roughages.
4) Spoiled food cannot show any effect on our health
39. Which of the following organisms use the sense of hearing to identify the prey . []
1) Chamaeleon 2) Vulture 3) Bat 4) Snake
40. Which of the following is correct representation of Food chain []
1) Plant → Grasshopper → Snake → Frog → Peacock
2) Worm → Hen → Fox → Deer → Lion
3) Seeds → Rat → Snake → Eagle
4) Plant → Deer → Rabbit → Fox
41. **Assertion (A)** : Desert animals are Diurnal animals []
Reason (R) : They move actively during night, time and during day time they hide in dark places.
1) Both A and R are true and R is the correct explanation of A
2) Both A and R are true and R is not correct explanation of A
3) A is correct and R is incorrect
4) A is incorrect and R is correct.
42. Which of the following teeth are well developed in carnivore animals to tear the flesh. []
1) Incisor 2) Premolar 3) Canine 4) Molar
43. Identify the similar organisms based on their feeding habit []
1) Cow, Goat, Tiger, Lion 2) Frog, Snake, Rabbit, Lizard
3) Fox, Wolf, Tiger, Lion 4) Grasshopper, Frog, Snake, Bird
44. Which of the following is the correct method of Fish preservation []
1) Drying, Pickling, adding Sugar - syrup 2) Drying, Salting, Smoking
3) Pickling, Honey syrup 4) All the above
45. Which of the following are the world's most diverse habitats. []
1) Trees 2) Grass lands 3) Desert 4) Coral reefs
46. Farmers grow single variety of fruit yielding trees in a []
1) Grassland 2) Orchard 3) Forest 4) Agricultural land

