

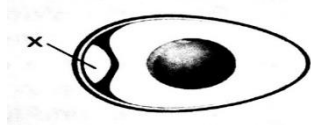
## Bhavan's Science Olympiad (BSO) – 2023

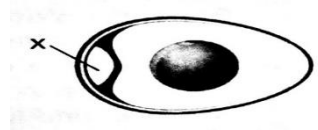
**Class:- 5**  
**Time:- 1 Hr.**

**Subject:- Science**  
**Total :- 50 Marks**

### **INSTRUCTIONS :-**

- Question no. 1 to 40 carries 1 mark each
- Question no. 41 to 45 carries 2 marks each

1. Kavya is going to a hilly area for her summer vacation. Which of the following will she most probably find there?  
a) Spruce  
b) Coconut  
c) Venus flytrap  
d) None of these
  2. I have a tail and gills like a fish, I swim in water but I can jump on land when I'll grow up. Who am I?  
a) Maggot  
b) Nymph  
c) Caterpillar  
d) Tadpole
  3. On which day every year "World Environment Day" is celebrated?  
a) 24 April  
b) 22 March  
c) 5 June  
d) 5 July
  4. Identify the part labeled as X in the given figure.  
a) Yolk  
b) Air Space  
c) Albumen  
d) Embryo
- 
5. In which of the following parts of digestive system does complete digestion of food occurs?  
a) Large Intestine  
b) Small Intestine  
c) Stomach  
d) Mouth
  6. Which of the following plant does not grow in coastal areas?  
a) Teak  
b) Mangrove  
c) Coconut  
d) Rubber
  7. Which of the following is not a marsupial?  
a) Wallabies  
b) Kangaroo  
c) Wombats  
d) Duck billed Platypus
  8. Which natural fibre is made from the fibres of the flax plant?  
a) Cotton  
b) Jute  
c) Linen  
d) Silk
  9. Which of the following process causes presence of humidity in air?  
a) Blowing wind  
b) Evaporation  
c) Condensation  
d) Rotation
  10. Which among the following is not a type of soil?  
a) Sandy  
b) Clayey  
c) Gravel  
d) Loamy
  11. Select the INCORRECT match from the following.  
a) Incisor- Cutting  
b) Canine- Tearing  
c) Molar- Biting  
d) Premolar- Crushing



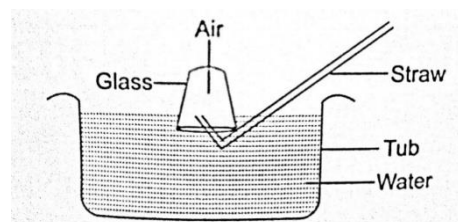
12. Why do we prefer to wear white or light coloured clothes in summer?
  - a) These clothes reflect the heat and keep the body cool.
  - b) These clothes absorb the heat and keep the body cool.
  - c) These clothes absorb the heat and keep the body warm.
  - d) These clothes reflect the heat and keep the body warm.
13. Rita needs an object that does not melt easily and we can see through it clearly. She should use \_\_\_\_\_.
  - a) Wood
  - b) Metal
  - c) Crayon
  - d) Glass
14. Whenever we use the air conditioner, refrigerator, etc., we send P gases into the air. Which of these is P gas?
  - a) CNG
  - b) CFCs
  - c) Oxygen
  - d) Nitrogen
15. Pluto was demoted to be a \_\_\_\_\_ planet on \_\_\_\_\_.
  - a) Dwarf, 24<sup>th</sup> August 2006
  - b) Giant, 24<sup>th</sup> August 2006
  - c) Dwarf, 15<sup>th</sup> August 2005
  - d) Giant, 15<sup>th</sup> August 2005
16. The given table shows the time taken by a ball to roll over the same distance over four different surfaces P, Q, R and S.

Surface	Time Taken by ball
P	6 seconds
Q	15 seconds
R	10 seconds
S	18 seconds

If the ball is pushed with the same force in each case, then which surface P, Q, R or S is the smoothest?

- |   |            |      |      |
|---|------------|------|------|
| Q | 15 seconds | a) P | b) R |
| R | 10 seconds | c) S | d) Q |
| S | 18 seconds |      |      |
17. A sea breeze blows when the air above land is \_\_\_\_\_ and the air above sea is \_\_\_\_\_.
- Colder, Warmer
  - Warmer, Lighter
  - Heavier, Colder
  - Warmer, Colder
18. A compass works with the help of
- Solar Energy
  - Moon's gravity
  - Earth's Magnetic field
  - Earth's gravity
19. Select the animal pair who has similar breathing mechanisms.
- Bat : Fish
  - Turtle : Lizard
  - Butterfly: Mouse
  - Earthworm : Cockroach
20. Select the correct match from the following.
- Venus – It has 2 moons
  - Saturn – Its rings are made of ice, rocks and dust
  - Jupiter – Largest and farthest planet from the Sun
  - Mercury – Hottest planet

21. Study the given figure carefully. What will happen to the water level in the tub, when some air is sucked out of the glass?



- a) Water level in the tub will go down
- b) Water level in the tub will rise.
- c) Bubbles will appear in the tub.
- d) Water level in the tub will remain the same.

22. When oxides of nitrogen and sulphur react with water vapour in the air they cause\_\_\_\_\_.

- a) Ozone depletion
- b) Global warming
- c) Acid rain
- d) Oil spill

23. X majorly helps in the formation of teeth and bones.

Select the option that gives name of X on unscrambling.

- a) ONRI
- b) IALCCUM
- c) ULUSPHR
- d) PPECOR

24. \_\_\_\_\_ is the organic component of the soil formed by action of soil microorganism.

- a) Gravel
- b) Humus
- c) Sand
- d) Clay

25. During which of the following stages, the butterfly forms a cocoon?

- a) Embryo
- b) Nymph
- c) Pupa
- d) Caterpillar

26. Which of the following nutrients is required in small amount in our body?

- a) Fats
- b) Carbohydrates
- c) Proteins
- d) Vitamins and minerals

27. Which is the hardest substance in our body?

- a) Bone
- b) Enamel
- c) Dentine
- d) Cartilage

28. Which of the following forces causes wear and tear of machine parts?

- a) Frictional Force
- b) Gravitational Force
- c) Muscular Force
- d) Magnetic Force

29. Which of the following is the most fertile layer of the soil?

- a) Bedrock
- b) Subsoil
- c) Top soil
- d) Partially weathered rocks

30. Which of the following statement about work is correct?

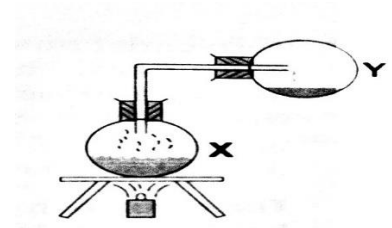
- a) Work is done when force is applied.
- b) Work is done only when an object is displaced
- c) Work is not related to the amount of force applied.
- d) Work is not related to energy.

31. Select the correct option regarding solution.

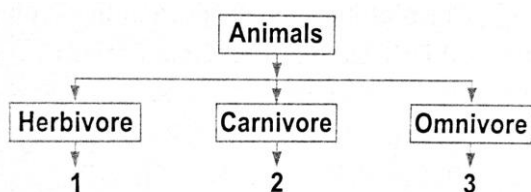
- a) Solute + Solution = Solvent
- b) Solvent – Solute = Solution
- c) Solvent + Solution = Solute
- d) Solute + Solvent = Solution

32. \_\_\_\_\_ leads to pollution of water.
- Reducing the use of fossil fuels
  - Carbon dioxide released in respiration by animals
  - Avoiding washing and cleaning of animals in water bodies
  - Throwing untreated industrial waste in water bodies

33. Examine the experiment as shown in the given figure. 500 ml of water in flask X is heated until it is completely evaporated. The amount of water collected in flask Y will be about \_\_\_\_\_.



- 300 ml
  - 450 ml
  - 400 ml
  - 500 ml
34. Which deficiency disease is caused due to the lack of vitamin C?
- Night blindness
  - Scurvy
  - Rickets
  - Beri – Beri
35. Which of the following is a kharif crop?
- Rice
  - wheat
  - Pulses
  - Mustard
36. Which of the following aquatic plant do not have stomata?
- Floating plant
  - Fixed plant
  - Underwater plant
  - None of these
37. Choose the correct statement.
- Birds are cold blooded animals.
  - Kiwi can fly.
  - Polar bears hibernate.
  - Amphibians lay their eggs in water.
38. Select the option that arranges the major gases in air in decreasing order of their percentage.
- Oxygen < Nitrogen < Carbon dioxide
  - Nitrogen < Oxygen < Carbon dioxide
  - Nitrogen > Oxygen > Carbon dioxide
  - Carbon dioxide > Nitrogen > Oxygen
39. Refer to the given flow chart and select the correct option regarding it.



- 1 - Cow, 3 - Bear
- 2 - Crow, 3 - Squirrel
- 1 - Fox, 3 - Lion
- 1 - Eagle, 2 - Sparrow

40. What do we call the pores on the underside of the leaves?
- Stomata
  - Petiole
  - Stalk
  - Lamina

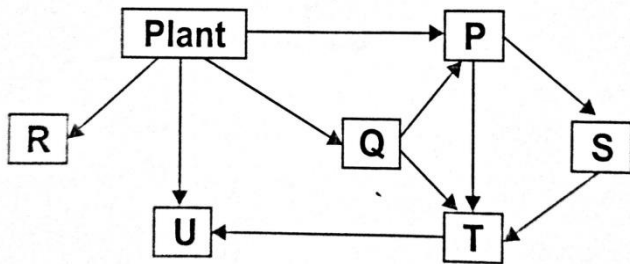
### ACHIEVER SECTION

41. Unscramble the given options and select the one that is not a cause for soil erosion.

- a) GIULOPGHN
- c) FORTDESTAIONE

- b) AFRSAOFETITON
- d) AVERONGRZIG

42. In the given food web, P, Q, R, S, T and U are consumers. Which of these consumers are both plant and animal- eaters?



- a) P and S
- c) R and T

- b) Q and U
- d) P and U

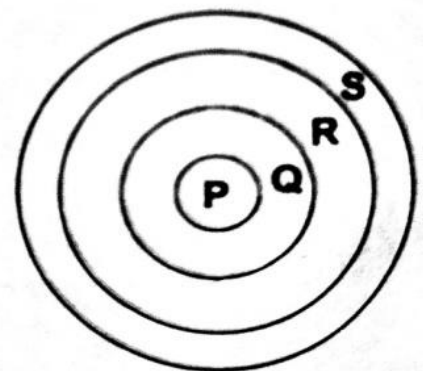
43. When a mixer grinder is switched on, \_\_\_\_\_ energy changes to \_\_\_\_\_ and kinetic energy.

- a) Mechanical, Sound
- c) Electrical, Sound

- b) Electrical, Heat
- d) Potential, Mechanical

44. The given figure shows three layers of Earth. Select the correct statement regarding it.

- a) P and Q are liquid layers.
- b) Layer S makes up most of the total Earth's volume.
- c) Layer above R is called crust.
- d) All of these



45. Planet X is closer to Sun than planet Y. It can be inferred that \_\_\_\_\_

- a) Planet Y has longer revolution period than planet X.
- b) Planet X has longer revolution period than planet Y.
- c) Planet X has longer rotation period than planet Y
- d) Planet Y has longer rotation period than planet X