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OLYMPIAD EXPLORER



Workbook for
**Nationwide Interactive SCIENCE Olympiad & Other
National/International Olympiads/Talent Search Exams.**

Also useful for Nationwide Biotechnology Olympiad (NBTO)

Based on CBSE, ICSE, GCSE, State Board Syllabus & NCF (NCERT)

100's of Q's with answers

- Chapterwise Practice Q's
- Revision Q's
- Sample Paper



Class

5

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EduHeal Foundation conducts 5 Olympiads annually reaching out to 3,500 + Schools
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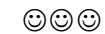
PRIZES



WORKSHOP • TEACHER TRAINING PROG. • MAGAZINE/LAB GRANT • PRINCIPAL LEADERSHIP AWARD.

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SYLLABUS GUIDELINES*

Based on CBSE, ICSE & GCSE Syllabus & NCF guidelines devised by NCERT

1. Family and Friends

1.1 RELATIONSHIPS

Family tree

Can you make a family tree with as many of your relatives you can get information about?

Who are the relatives whom you have never seen? Where do they live?

Shifting from place to place

Have you always lived at the place that you now live in? If not, where does your family come from?

Who laughs the loudest?

Who is the tallest/shortest in the family? Who has the longest hair? How long? Who has the loudest voice/laugh in the house? From how far away can you hear it? Who speaks the softest? When does a child cry the loudest? When she is hungry-or angry? Who is the best cook in the family?

Our likes and dislikes

Which is your favourite colour? Which is your friend's favourite colour? Which is your favourite food? What about your friends favourite food? Do you know your friends' likes and dislikes? Are there any smells you don't like (fish, mustard oils, garlic, eggs etc) ? Do you eat fish?

Feeling to read

Do you know how people read with their hands? Do you know someone who finds it difficult to walk/ speak/see etc.? How do you think they learn to overcome the problem?

1.2 WORK AND PLAY

Team games – your heroes

Do you play any games in teams? Have you ever been captain of the team? Do boys and girls play together? Have you heard of any Indian team playing in another country? Which is your favourite team sport? Do you know any National level player?

Local games/martial arts

What are the local games/ martial arts of your area? Do you know someone who is good at them? Have you seen a young acrobat or wrestler practicing? Who taught them? For how long have they learnt the art/game? What are the new games in your area that were not played earlier? What do you do in the evenings for leisure? What if there is no TV? Who decides what programmes to watch?

Blow hot blow cold

How many times do you breathe in a minute – on sitting still, just after a run? How much can you expand your chest by breathing deeply? Can you make a glass cloudy by blowing on it? How do you blow to make something cold? Do you also blow to keep a fire going?

Clean work – dirty work?

Can you list ten different types of work that people do for you. In this list what work is seen as dirty and what is seen as clean?

What would happen if there were no one to - clean our streets/our home/clear the garbage?

1.3 ANIMALS

How animals find their food?

If you leave some food outside your house do some animals take it away? How do they find it? Do these animals also hear/speak/ see/smell/ eat/ sleep?

What we take from animals?

What animal products do we use for clothing, shelter, etc.?

Why is the tiger in danger?

Why do people kill wild animals? Which are the animals that are poached?

People who depend on animals

Do you know people who catch/trap/hunt/ entertain using animals? Have you seen how snake charmers/gujjars depend on animals?

What do you understand by cruelty to animals? Do you think a snake charmer is cruel to the snake?

Have you seen scenes of hunting in rock paintings or on ancient seals?

1.4 PLANTS

Growing plants

How does a plant grow from a seed? Can you grow a plant without seeds? How do you grow mangoes/potatoes? Where does the seed come from? Have you seen seeds that fly/stick to your clothes/drift in the water?

Forests and forest people

Have you seen or heard about a forest? How do people live in forests? How is their life threatened by forests being cut? What kinds of foods do they collect from the plants there? What leaves are used for eating on?

Do your parents remember places with trees/forests where there are none today? Why were the trees cut and what is there today?

Protected trees

Have you heard of a park/sanctuary? Who looks after it? Does anybody own it? Have you seen a place where trees are worshiped or protected by the villagers?

Plants that have come from far

Does tea come from a plant? Where did people first grow tea and what does the plant look like? Does it grow only in some places/climates? What did people drink when there was no tea in India?

2. Food

When food gets spoilt

How does food spoil? How do we know that food is spoilt? Which food spoil sooner than others? What can we do to prevent food from getting spoilt?

What do we do to keep it fresh during travel? Why do we need to preserve food? Do you leave food in your plate?

Who produces the food we eat?

Do you know of different kinds of farmers? Do all farmers own their land? How do farmers get the seeds they plant every year? What else besides seeds is required for a crop to grow?

What did people grow earlier?

Did your grandparents or any elderly person eat the same food you eat today? Do all of us eat the same kind of food? Why do we eat different kinds of food?

When people do not get food

Do you know of times when many people do not get enough food to eat? Have you seen where extra grain is stored?

How do you know when you are hungry?

Do you know of people who get ill because they do not have enough to eat?

Our mouth – tastes and even digests food!

How do we taste food? What happens in the mouth to the food we eat? Why do we give glucose to patients? What is glucose?

Food for plants?

What do plants need for food? Do you know of any plants that eat insects? What do animals eat?

Do all animals eat the same

food? Do animals eat other animals?

3. Shelter

Why different houses

Why do you have different kind of houses in different places? Different houses in the same place?

A shelter for everyone?

Does everyone have a shelter to live in? Why do people live together in villages, hamlets, colonies, neighbourhoods?

Ants live in colonies?

Do you know how bees/ ants live together in colonies?

Times of emergency

Have you heard of houses being damaged by floods/earthquakes/ cyclones/fires/storms/ lightening? What would it have felt like? Who are the people who come to help? What can you do to help others before the doctor comes? Where can we look for help at such times? Who runs such institutions?

4. Water

Water from where in earlier times?

From where and how far did your grandparents get water? How far do you have to go for water?

What are underground

wells/'baolis'? Do you still see them being used? Have you seen a 'piaao'?

Water flow

From where do farmers get water to grow crops? Do all crops need the same amount of water?

Have you seen water flowing upwards? What are the different ways in which you have seen water being lifted? How is flowing water used to grind grain?

Plants and animals in water

What kinds of animals and plants live in water? Are there weeds that are covering your pond/ lake/ river? Can you classify all the animals you see around you to show which ones live in water and which live on land?

What floats, sinks or mixes?

Have you ever seen anything floating in water? Can you classify as many things around you to see which float, which sink and which mix with water? Does oil mix with water? What are the similarities and differences in water, oil, milk, cold drink, etc.? How do we measure these?

Is there any way to reduce the mosquitoes in water? Have you heard of malaria? In what season do you find more people getting ill with malaria?

5. Travel

Petrol or diesel

Do all vehicles need petrol to run on? What other fuels do you know that are used for vehicles? What do trains run on? In the past what did they run on? What do tractors use as fuel? For what other purposes are petrol and diesel used?

Find out the cost of a litre of petrol/diesel in your area? Do all vehicles run an equal distance on a litre of fuel?

Rough and tough

Have you seen or been to a mountain? How and why do you think people make such difficult trips? How do you think they train for it?

Ride on a spacecraft

What all do you see in the sky – at day time? And at night? How many of the things you see in the sky are man-made?

Have you heard of people traveling in a spacecraft?

Oldest buildings

Is there any well-known monument/historical place in your area that people come to visit? What are the oldest buildings around your area? Have you traveled far to see any historical monuments? Have you heard of those personalities who lived in these monuments or who built these?

6. Things we Make and Do

Growing Food

How do we grow food? What tools do we use for preparing the field? For cutting and harvesting? For cutting and cooking different vegetables/ dishes?

How do we water the crops? How do we lift water through a pump or a waterwheel? Can we make a water wheel, sprinkler, etc.?



- Q.1.** Which of the following plant grows without seed?
(a) Wheat plant (b) Rice plant
(c) Banana plant (d) None of these
- Q.2.** The development of seed into a seedling is called
(a) Conservation (b) Seed dispersal
(c) Germination (d) None of these
- Q.3.** Which of the following is false?
(a) The roots grow downwards
(b) Plants cannot move from one place to another
(c) Maize seed has two seed leaves (cotyledons)
(d) None of these
- Q.4.** A germinating seed needs
(a) Air (b) Water (c) Warmth (d) All of these
- Q.5.** Dispersal of seeds is carried out by
(a) Air (b) Water (c) Animals (d) All of these
- Q.6.** The plant shown in figure reproduces through leaves. This is



- (a) Spinach (b) Bryophyllum
(c) Sugarcane (d) None of these
- Q.7.** Food is stored in a seed in
(a) Tiny root (b) Tiny stem
(c) Seed leaves (d) None of these
- Q.8.** A soaked seed will be able to germinate in
(a) Oven (b) Refrigerator
(c) Moist cotton kept at window sill
(d) None of these
- Q.9.** Plants produce
(a) Single seed (b) Few seeds
(c) Many seeds (d) None of these

Q.10. The seeds of the given plant dispersed by



- (a) Air (b) Water (c) Animals (d) None of these

Q.11. "There are six classes of nutrients substance" the statement is

- (a) True (b) False (c) Can't say (d) None of these

Q.12. Which of the following group of plants grows from stem cutting

- (a) Potatoes, ginger, groundnut
(b) Rose, Sugarcane, hibiscus
(c) Potatoes, Rose, Wheat
(d) None of these

Q.13. This seed is adapted to be dispersed by



- (a) Air (b) Water (c) Animal (d) None of these

Q.14. Which of the following is a kharif crop ?

- (a) Wheat (b) Gram (c) Jowar (d) None of these

Q.15. Seed dispersal is

- (a) The process of fusion of male part and female part of plant
(b) The scattering of seeds to different places
(c) Development of seed into new plant
(d) None of these

Q.16. Seedling grows to become

- (a) Seed (b) Fruit (c) New plant (d) None of these

Q.17. Match the plants

- | | |
|----------|----------|
| 1. Wheat | A Rabi |
| 2. Maize | B Kharif |
| 3. Bajra | |
| 4. Gram | |

- (a) 1 – B 2 – B 3 – A 4 – A
(b) 1 – A 2 – B 3 – A 4 – B
(c) 1 – A 2 – B 3 – B 4 – A
(d) None of these

Q.18. The seeds dispersed by wind have.

- (a) Sticky hooks or spikes (b) Hair or wings
(c) Spongy part (d) None of these

Q.19. As the seedling leaves grow bigger, the seed leaves shrink because

- (a) They feel colder under the ground
(b) Food stored in them is used up
(c) Sunlight make them shrink
(d) None of these

Q.20. Which of the following gram will you be able to sprout ?

- (a) Split gram (b) Full gram
(c) Any of these (d) None of these

Q. 21. Which of the following plant trap and eat insects?

- (a) Cotton plant (b) Pitcher plant
(c) Bamboo (d) None of these

Q.22. Green Chillies came to India from

- (a) Australia (b) South America
(c) Europe (d) None of these

Q.23. Which of the following is grown in India since very long?

- (a) Cabbage (b) Mango (c) Coffee (d) None of these

Q.24. Match the following

- | | |
|----------------|----------------|
| 1. Jowar | A. Clayey soil |
| 2. Maize | B. Moist soil |
| 3. Tea | C. Black soil |
| 4. Rice & Jute | D. Sandy soil |
| 5. Cotton | E. Dry soil |

- (a) 1 – D, 2 – E, 3 – B, 4 – A, 5 – C
(b) 1 – D, 2 – B, 3 – A, 4 – E, 5 – C
(c) 1 – C, 2 – A, 3 – D, 4 – C, 5 – E
(d) None of these

Q.25. For a good and healthy crop we need

- (i) Healthy & ripe seeds (ii) Good manure & fertilizers
(iii) Proper irrigation (iv) Grazing animals
(a) ii, iii, iv only (b) i, ii, iii only
(c) All of these (d) None of these

Q.26. Mark the odd one on the basis of part used for reproduction.

- (a) Potatoes (b) Sweet potatoes
(c) Ginger (d) Pea

- Q.27.** Which is a winter vegetable?
(a) Radish (b) Pumpkin
(c) Brinjal (d) None of these
- Q.28.** Which of the following is harmful for crops?
(a) Rain (b) Hails (c) Breeze (d) None of these
- Q.29.** Which of the following is a plant able to grow in dry desert regions?
(a) Carrot (b) Cactus (c) Radish (d) None of these
- Q.30.** Rabi crops are also called as
(a) Kharif crop (b) Winter crop
(c) Summer crop (d) None of these



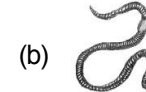
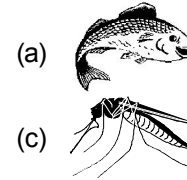
ANSWERS

1. (c) 2. (c) 3. (c) 4. (d) 5. (d) 6. (b) 7. (c) 8. (c)
9. (c) 10. (b) 11. (c) 12. (b) 13. (c) 14. (c) 15. (b) 16. (c)
17. (c) 18. (b) 19. (b) 20. (b) 21. (b) 22. (b) 23. (b) 24. (a)
25. (b) 26. (d) 27. (a) 28. (b) 29. (b) 30. (b)



- Q.1.** The surroundings in which an animal lives and grows is called its.
(a) Climate (b) Environment
(c) Behaviour (d) None of these

- Q.2.** Which of the following uses its body surface to breathe?



(d) None of these

- Q.3.** Oxygen carrier pigment in our blood is called
(a) Chlorophyll (b) Haemoglobin
(c) Both of these (d) None of these

- Q.4.** Mark the odd one
(a) Tiger (b) Leopard (c) Fox (d) Giraffe

- Q.5.** Animals which feed on plant products only is
(a) Carnivores (b) Herbivores
(c) Omnivores (d) None of these

- Q.6.** The wings of the birds are their
(a) Hind limbs (b) Fore limbs
(c) Separate structure (d) None of these

- Q.7.** Mark the odd one.



- Q.8.** Birds have
(a) Spongy bones (b) Hard bones
(c) Hollow bones (d) None of these

- Q.9.** The animals living in cold regions have _____ on their bodies.
(a) Fur (b) Scales (c) Spines (d) None of these

- Q.10.** The long winter sleep is called.

- (a) Hibernation (b) Nap
(c) Nocturnal (d) None of these
- Q.11.** Snakes are
(a) Wild animals (b) Pet animals
(c) Domestic animals (d) None of these
- Q.12.** Which of the following animals is not used by people to earn their livelihood?
(a) Monkey (b) Snakes (c) Donkey (d) Giraffe
- Q.13.** Which of the following snake is poisonous?
(a) Krait (b) Cobra
(c) Both of these (d) None of these
- Q.14.** Which of the following is true?
(a) Animals hunting should be allowed
(b) Animals enjoy more in zoo than in jungles
(c) Animals are used for entertainment in circus
(d) None of these
- Q.15.** Poisonous teeth of snakes are called
(a) Feets (b) Fangs (c) Fins (d) None of these
- Q.16.** How do snakes hear the sound of beans?
(a) Through external ears
(b) Through inner ears
(c) Snakes are deaf, they cannot hear
(d) None of these
- Q.17.** Earthworm, Grasshoppers and cockroaches all are
(a) Vertebrates (b) Invertebrates
(c) Chordates (d) None of these
- Q.18.** Fishes use _____ types of fins while swimming.
(a) Four (b) Six (c) Three (d) Two
- Q.19.** Snakes are reptiles. They
(a) Walk (b) Jump (c) Crawl (d) None of these
- Q.20.** Lungs, gills and spiracles etc. are organs for
(a) Excretion (b) Respiration
(c) Digestion (d) None of these
- Q. 21.** Elephants are mainly killed for
(a) Skin (b) Tusks (c) Eyes (d) None of these
- Q.22.** Which of the following animal gives us wool?
(a) Tiger (b) Rabbit (c) Sheep (d) None of these
- Q.23.** Which of the following is not made up of use animal products?
(a) Tabla (b) Fur coat (c) Cotton shirt (d) None of these
- Q.24.** Which of the following are animal product?

- (a) Leather (b) Silk
(c) Both of these (d) None of these
- Q.25.** Animal poaching is
(a) Keeping animals in zoo (b) Illegal killing of animals
(c) Stealing of animals (d) None of these
- Q.26.** Which of the following animals use echolocation?
(a) Bats (b) Dolphin
(c) Both of these (d) None of these
- Q.27.** Who have strongest sight of vision?
(a) Rat (b) Eagle (c) Sparrow (d) None of these
- Q.28.** A silk moth can find its female partner from many kilometer by its
(a) Sound (b) Smell (c) Walk (d) None of these
- Q.29.** How do a grasshopper detect the movement of air?
(a) Through eyes
(b) Through the hair present on his body
(c) Through its skin (d) None of these
- Q.30.** Which of the following animal have the strongest sense of smell?
(a) Bat (b) Cats (c) Dogs (d) Monkey
- Q.31.** Which of following smell foul?
(a) Perfume (b) Garbage (c) Tasty food (d) None of these
- Q.32.** Who can hear ultrasonic sounds?
(a) Elephants (b) Bats (c) Dogs (d) None of these
- Q.33.** How ants come to know the place of food?
(a) They see the food (b) They feel the food
(c) They smell the food (d) None of these
- Q.34.** Animals use their sense of smell to
(a) Find food (b) Find their male/ female partner
(c) Detect the presence of their enemies
(d) All of these
- Q.35.** What do the birds do when they see some enemy.
(a) Keep silence (b) Start chirping all together
(c) Attack on enemies (d) None of these



ANSWERS

1. (b) 2. (b) 3. (b) 4. (d) 5. (b) 6. (b) 7. (d) 8. (c)
9. (a) 10. (a) 11. (a) 12. (d) 13. (c) 14. (c) 15. (b) 16. (b)
17. (b) 18. (a) 19. (c) 20. (b) 21. (b) 22. (c) 23. (c) 24. (c)
25. (b) 26. (c) 27. (b) 28. (b) 29. (b) 30. (c) 31. (b) 32. (b)
33. (c) 34. (d) 35. (b)



- Q.1.** What are the component of balance diet?
 (a) Proteins (b) Carbohydrates
 (c) Vitamins (d) All of these
- Q.2.** Ram is a labour. Which type of food he should eat?
 (a) Rich in Proteins (b) Rich in vitamins
 (c) Rich in carbohydrates (d) None of these
- Q.3.** Match the following
 A. Fats (i) Milk, meat, pulses
 B. Vitamins (ii) Potatoes, sweet potatoes
 C. Proteins (iii) Vegetable oil, ghee, butter
 D. Carbohydrates (iv) Fruits and vegetables
 (a) A - (ii), B-(i), C-(iii), D-(iv)
 (b) A-(iii), B-(iv), C-(i), D-(ii)
 (c) A-(iv), B-(ii), C-(iii), D-(i)
 (d) None of these
- Q.4.** Which of the following is good for your health?
 (a) Exercises (b) Rest
 (c) Balanced Diet (d) All of these
- Q.5.** Anaemia is caused by deficiency of
 (a) Vitamin (b) Iron
 (c) Carbohydrates (d) None of these
- Q.6.** Which is important for our bones?
 (a) Calcium (b) Phosphorous
 (c) Vitamin B (d) All of these
- Q.7.** Nishtha gave a drink to Juhi. Juhi tasted the juice it was sour. What it could be
 (a) Sugar cane juice (b) Lemon juice
 (c) Milk (d) Either (a) or (b)
- Q.8.** Which of the following things you can't recognise by its smell?
 (a) Mango (b) Apple (c) Water (d) None of these
- Q.9.** Which sense organ is responsible for recognising taste?
 (a) Nose (b) Skin (c) Tongue (d) None of these
- Q.10.** Parul ate something and start saying "sssee, ssee.....". What do you think she might have tasted?

- (a) Lemon (b) Chillies (c) Apple (d) None of these
- Q.11.** Which of the following food item needs more chewing?
 (a) Rice (b) Ice cream
 (c) Chapatti (d) None of these
- Q.12.** Which of the following gives energy instantly?
 (a) Apple (b) Glucose (c) Milk (d) None of these
- Q.13.** Which of the following activity makes you tired mentally?
 (a) Boxing (b) Running (c) Studying (d) None of these
- Q.14.** Food passes from mouth to stomach through
 (a) Trachea (b) Oesophagus
 (c) Lungs (d) None of these
- Q.15.** The process of mixing of saliva while chewing is called
 (a) Pasteurization (b) Mastication
 (c) Peristalsis (d) None of these
- Q.16.** Why glucose drip is given to a patient who is not able to eat or drink anything?
 (a) It is clear solution (b) It tastes sweet
 (c) It provides instant energy
 (d) None of these
- Q.17.** If you do not eat anything for two days you may
 (a) Die of hunger (b) Become weaker day by day
 (c) Stay healthy (d) None of these
- Q.18.** Digestive system is
 (a) Body's defence system
 (b) Body's breathing system
 (c) Body's food processing system
 (d) None of these
- Q.19.** What happens to the food when it reaches the stomach?
 (a) Nothing, the food stays here for sometime and then leaves the body
 (b) Stomach juices mix with food and stomach muscles squeeze the food.
 (c) The food get stored in stomach walls.
 (d) None of these
- Q.20.** The job of our digestive system is to break down food particles so that our body can use it as energy. The statement is
 (a) True (b) False

- (c) Partially true (d) None of these

Q. 21. Which of the following is wrong statement?

- (a) Oesophagus is also called wind pipe
 (b) Liver is the largest gland of our body
 (c) Food passed out from our body from
 (d) None of these

Q.22. After food leaves our stomach it heads into which part of our body?

- (a) Large intestine (b) Small intestine
 (c) Oesophagus (d) None of these

Q.23. A person is suffering from vomiting and loose motion. What you will give to the person as first aid?

- (a) A solution of salt and sugar
 (b) A soft drink
 (c) Milk and biscuit (d) None of these

Q.24. "Small intestine is the longest organ of your body.

- (a) True (b) False
 (c) Can't say (d) None of these

Q.25. The path of food is

- (a) Mouth → Stomach → Large intestine → Small intestine
 (b) Mouth → Oesophagus → Stomach → Small intestine → large intestine
 (c) Mouth → Oesophagus → Stomach → Large intestine → small intestine
 (d) None of these



ANSWERS

1. (d) 2. (c) 3. (b) 4. (d) 5. (b) 6. (d) 7. (b) 8. (c)
 9. (c) 10. (b) 11. (c) 12. (b) 13. (c) 14. (b) 15. (b) 16. (c)
 17. (b) 18. (c) 19. (b) 20. (a) 21. (a) 22. (b) 23. (a) 24. (a)
 25. (b)



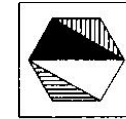
**NATIONWIDE INTERACTIVE
SCIENCE OLYMPIAD (NISO) SAMPLE PAPER**

Total duration : 40 Minutes

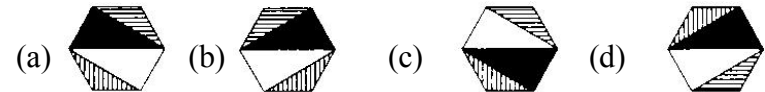
Total Marks : 25

GENERAL I.Q.

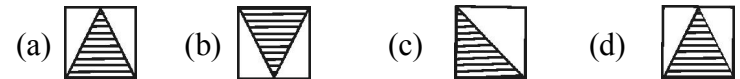
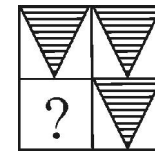
1. Choose the correct mirror-image of the figure (X) from amongst the four alternatives (a), (b), (c) and (d) given below.



(x)



2. Complete the missing portion of the given pattern by selecting from the given alternative (a), (b), (c) and (d).



3. In the following question, a related pair of figures is followed by four pairs of figures. Select the pair that has a relationship similar to that in the original pair.



(d) None of the above

4. Foot is related to Hand in the same way as knee is related to.....

(a) Elbow (b) Ankle (c) Leg (d) Foot

5. In the following question, four words have been given out of which three are alike in some manner and the fourth one is different. Choose the odd one.




(a) Shoulder (b) Foot (c) Elbow (d) Arm

SCIENCE

6. The mouth part of a mosquito works as

- (a)  (b)  (c)  (d) None of these

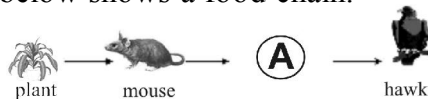
7. Which animal looks most different from its parent as a baby?

- (a)  (b)  (c)  (d) None of these

8. Which of the following disease is caused by protein deficiency in diet?





- (a) Typhoid (b) Marasmus
(c) Cholera (d) None of these

9. The picture below shows a food chain.

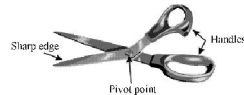


- (a) A cow (b) A monkey (c) A snake (d) A Rabbit

10. Mark the odd one with reference to the mode of reproduction?

- (a)  (b)  (c)  (d) 

11. The picture below shows a pair of scissors.



Scissors are an example of a complex machine. Which of the following simple machines are combined to make scissors?

- (a) Lever and gear (b) Gear and pulley
(c) Lever and wedge (d) None of these

12.



The figure given above is a representation of

- (a) Hinge Joint (b) Ball and socket joint
(c) Pivot Joint (d) None of these

13. Which of the following shows how a frozen water changes when the temperature is increased?

- (a) Solid → gas → liquid (b) Gas → solid → liquid
(c) Liquid → solid → gas (d) Solid → liquid → gas

14. The leaves of which plant below show the best structural adaptation for protecting the plant from predators?




- (a)  (b)  (c)  (d) 

15. Which group of materials below will burn in a candle flame?

1. cardboard 2. cotton wool 3. stone
4. kitchen foil 5. newspaper 6. steel wool

- (a) 1, 2, 3, 4, 5 (b) 2, 5
(c) 1, 3, 4, 5 (d) None of these

16. Which of the following is the BEST representation of molecules of water vapour?

- (a)  (b)  (c)  (d) None of these

17. Study the table below.

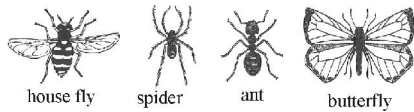
Student's Observations of Characteristics

Organism	Characteristic 1	Characteristic 2
W	teeth	scales
X	reproduces	grows
Y	hair	moves
Z	feathers	eats

A student records observed characteristics for four organisms. Based on this student's observations, which organism has two characteristics of all living things?

- (a) Organism W (b) Organism X
(c) Organism Y (d) Organism Z

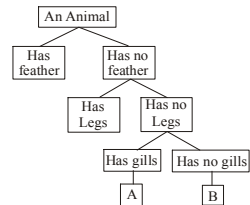
18. Kiran had a question on insects. She was to complete a table by observing the features of following insects



She made the following table. But she placed only one insect correctly. Can you find which is that

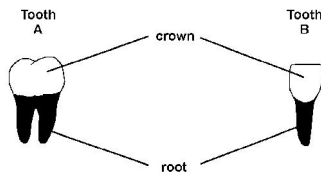
	Name	Legs	Wings	Antennae
(a)	Butterfly	6	4	2
(b)	Ant	6	2	2
(c)	Spider	6	0	2
(d)	Housefly	8	0	0

19. Look at the following chart to identify the animal B in it?

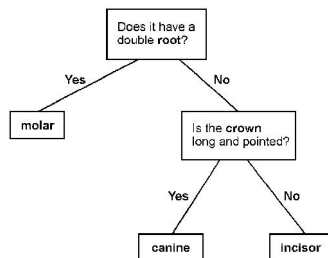


- (a) Frog (b) Snake (c) Fish (d) None of these

20. Mohit looks at these pictures of teeth.



He uses this key to identify tooth A and tooth B.



Based upon the chart given above he concluded that

- (a) Tooth A is canine and tooth B is incisor
 (b) Tooth A is incisor and tooth B is molar

- (c) Tooth A is molar and tooth B is incisor
 (d) None of these

EduSys Interactive Learning Section

These questions are designed that they can be performed in the class / lab and can be used by the Coordinator Teacher to enhance understanding of basic science concepts.

21. The picture below shows the Sun shining on an open jar with some water in it.

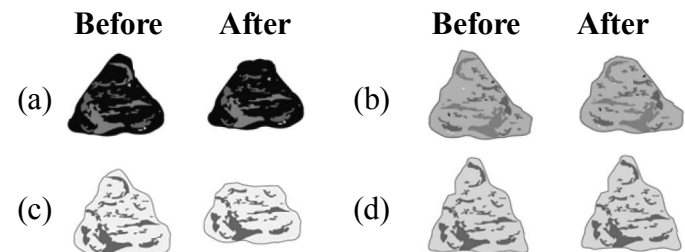


Akhil puts the jar of water on a table outside in the sunlight. Which of the following pictures shows what Akhil would observe after all of the water had turned into a gas?



22. Tarun tested four rocks to see how hard they are. He rubbed each of them against some hard steel for one minute. He drew pictures of what they looked like before he rubbed them and after he rubbed them.

Circle which of Tarun's rocks is the softest.



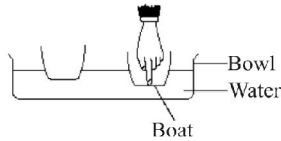
23.



Which of the following process you observe in this figure?

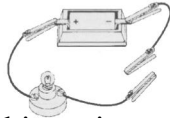
- (a) Sedimentation and decantation
 (b) Evaporation and condensation
 (c) Seiving and filtration
 (d) Sedimentation and evaporation

24. Mihir puts two boats in a bowl of water. They float on the water. Mihir pushes down on one of the boats with his finger as shown in the figure.



Tick the correct option to show what Mihir can feel as he pushes down.

- (a) The force from the water pushing the boat up.
 (b) The force from the water pushing the boat down.
 (c) The force from the air pushing the boat up.
 (d) The force from the air pushing the boat down.
25. Sonali has a cell (battery), some wire and a bulb. She makes a simple circuit.



Sonali joins these objects into the circuit, to see if the bulb lights :



Cork Iron nail Copper rod Plastic ruler Steel spoon
 She records her result in this table. Which is the correct result?

Object	A	B	C	D	E
	Cork	Steel Spoon	Iron Nail	Plastic Ruler	Copper Rod
(a) Bulb Lights	No	Yes	Yes	No	Yes
(b) Bulb Lights	Yes	Yes	No	Yes	Yes
(c) Bulb Lights	No	Yes	Yes	Yes	No
(d) Bulb Lights	Yes	No	Yes	Yes	No

☺ **END OF THE EXAM** ☺

ANSWERS

1. (d) 2. (b) 3. (c) 4. (a) 5. (b) 6. (a)
 7. (c) 8. (b) 9. (c) 10. (d) 11. (c) 12. (b)
 13. (d) 14. (a) 15. (b) 16. (c) 17. (b) 18. (a)
 19. (b) 20. (c) 21. (b) 22. (c) 23. (b) 24. (a)
 25. (a)

