Etg-OLYMPIAD EXPLORER



Workbook for

2

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)



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. Food

Sources of food What are the various sources of our food? What do other animals eat?

Components of food What is our food made up of? Why do we eat a variety of food?

Cleaning food How do we separate the grains after harvesting the wheat / rice crop?

2. Materials

Materials of daily use

What are our clothes made of ? How did people manage when there were no clothes?

Are some of our clothes made of materials obtained from plants? In what kinds of places do these plants grow? Which parts of the plants are used for making clothes?

Different kinds of materials What kinds of things do we see around us?

How things change/react with one another

In what ways do things change on being heated? Do they change back on being cooled? Why does a burning candle get shorter?

How much salt can be dissolved in a cup of water?

3. The World of the Living

Things around us

Are all things around us living? What is the difference between living and nonliving? Are all living things similar? Do all living things move? Where do plants and animals live? Can we grow plants in the dark?

The habitat of the living

How does habitat affect plants and animals? How do fish live in water?

Plants - form and function

What is the structure and function of various parts of the plants - stem, leaf and roots? How do different flowers differ from one another? How does one study flowers?

Animals - form and function

What is inside jour bodies? How do animals move? Do all animals have bones in

Class - 6

their bodies? How do fishes move? And birds fly? What about snakes, snails, earthworms?

4. Moving Things, People and Ideas *Moving*

How did people travel from one place to another in earlier times? How did they know how far they had travelled? How do we know that something is moving? How do we know how far it has moved?

5. How things work *Electric current and circuits* How does a torch work?

Do all materials allow current to flow through them?

Magnets

What is a magnet?

Where on a magnet do things stick?

How is a magnet used to find direction?

How do two magnets behave when brought close to each other?

6. Natural Phenomena

Rain, thunder and lightning Where does rain come from? How do clouds form?

Light

Which are the things we can see through?

When are shadows formed? Do you get a shadow at night - when there is no light in the room, moonlight or other source of light? What colour is a shadow?

On what kinds of surfaces can we see images?

7. Natural Resources

Importance of water

What will happen to soil, people, domestic animals, rivers, ponds and plants and animals if it does not rain this year?

What ; will happen to soil, people, domestic animals, plants and animals living in rivers and points, if it rains heavily?

Importance of air

Why do earthworms come out of the soil when it rains?

Waste

Do you throw away fruit and vegetable peels and cuttings? Can these be reused? If we dump them anywhere, will it harm the surroundings? What if we throw them in plastic bags?



- Q.1. The animal which eats only plant products is-
 - (a) vulture. (b) lion.
 - (c) parrot. (d) hawk.
- **Q.2.** Which of the following is not the best way to test unknown plants?
 - (a) by tasting its leaves.
 - (b) by testing its leaves.
 - (c) by testing its any part in a lab.
 - (d) by testing it physically.
- **Q.3.** A coconut tree is used to:
 - (a) Provide oil. (b) Give us food.
 - (c) Make boats. (d) All of these.
- **Q.4.** Which of the following does not belong to the group formed by the others?
 - (a) cow (b) horse
 - (c) monkey (d) jackal
- Q.5. Which of these plant is used as spices in the food?
 - (a) Brinjal (b) Chilly
 - (c) Onion (d) Tomato
- **Q.6.** Human beings are:
 - (a) Carnivorous (b) Herbivorous
 - (c) Omnivorous (d) None of these
- Q.7. Which of the following eats the fruits of trees?
 - (a) Cat (b) Monkey
 - (c) Eagle (d) Snake
- Q.8. Which of the following food items is not a milk product?
 - (a) Cream (b) Cheese
 - (c) Chappatti (d) Butter
- Q.9. Which of the following is not an insectivorous?
 - (a) Crocodile (b) Frog
 - (c) Lizard (d) Snake
- **Q.10.** Which of the following is an edible shoot?
 - (a) Potato (b) Radish
 - (c) Carrot (d) Apple

Q.11. A house lizard eats

- (a) Oil cakes (c) Small insects
- (b) Hay (d) Grains
- Q.12. Find the odd one out?
 - (a) Milk (c) Carrot
- (b) Apple (d) Sugar
- Q.13. A carnivore eats :
 - (a) Sprouted seeds (b) Milk
 - (c) Green leaves (d) Flesh of other animals
- Q.14. The food of the butterfly is :
 - (b) Nectar (a) Small insects
 - (c) Sprouted seeds (d) Unsprouted seeds
- **Q.15.** Deer eats only plant products and thus it is called:
 - (a) Herbivores (b) Carnivores
 - (c) Omnivores (d) None of these.
- Q.16. Nectar is :
 - (a) A place where bees live (b) Honey
 - (c) Sweet juice of flowers (d) None of these
- Q.17. Which of the following statement is false?
 - (a) We get sugar from plants
 - (b) Ghee obtained from milk comes from animals
 - (c) Cow eats only animal products
 - (d) Tiger is a carnivore
- Q.18. Sources of food are:
 - (a) Animals (b) Plants
 - (c) Both (a) and (b). (d) Milk
- **Q.19.** Match the items given in column A with those in column B. COLUMN (A) COLUMN (B)
 - I. Radish and carrot a. Omnivores
 - II. Man and dog b. Autotrophs
 - c. Vegetables. III. Chillies and cloves
 - d. Spices
 - (b) I-d, II-a, III-bC, IV-c (a) I-c, II-a, III-d, IV-b
 - (c) I-a, II-c, III-b, IV-d (d) I-b, II-a, III-d, IV-c
- Q.20. Tomato is a-

IV. Plants

- (a) Stem. (b) Root. (c) Fruit.
 - (d) Leaf.
- Q.21. Which animal product is used in Ayurvedic medicines? (a) Egg. (b) Butter.

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- (d) Meat.
- Q.22. Spinach is a-

(c) Honey.

- (a) Complete diet. (b) Plant product.
- (d) None of these. (c) Animal product.
- Q.23. The energy which we get from food is-
 - (a) Electrical energy. (b) Physical energy.
 - (d) None of these (c) Chemical energy.
- Q.24. Which one of the following statement is not true? (a) Food helps us in replacing the damaged cells.
 - (b) Hygenic food causes food poisoning
 - (c) Food makes new materials needed for growth.
 - (d) Food provides us energy.
- Q.25. The part from which mustard oil is obtained is-
 - (b) Flowers (a) Leaves
 - (c) Stems (d) Seeds
- Q.26. Following list illustrates some food items?
 - (i) Honev (ii) Sugar
 - (iii) Wheat (iv) Cheese
 - (vi) Milk
 - (v) Egg (vii) Apple

Which of the following group of food items is obtained by animals?

- (b) (i), (iv), (v), (vi) (a) (i), (ii), (iii), (vii)
- (C) (ii), (iv), (v), (vi), (vii) (d) none of these
- Q.27. Which of the following statement is false?
 - (a) Raw vegetables are rich in roughage
 - (b) Idli is made from wheat and pulses
 - (c) Overeating is not good for health
 - (d) None of these
- **Q.28.** Which of the following is not a plant product?
 - (b) Pulses (a) Cotton
 - (c) Wood (d) None of these
- **Q.29.** Which of the following is a group of dairy animals?
 - (b) Cow, Buffalo, Goat (a) Hen, Fish, Cow
 - (c) Hen, Goat, Donkey (d) None of these
- **Q.30.** Honey is a product derived from <u>i</u> . <u>ii</u> are a source for obtaining spices
 - The information in which option completes the given statement?

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Row	i	ii
(a)	Animals	Animals
(b)	Plants	Plants
(C)	Animals	Plants
(d)	Plants	Animals

Q.31. Use the following information to answer the next question. The given diagram illustrates various kinds of animals.



Carnivorous animals present in the given diagram are labelled

(b) IV. V and VI

(d) II, IV and V

as

(a)	١,	ll and Ill	
(a)		N/ and V/	

(c) I, IV and VI

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ANSWERS							
9. (a) 17. (c)	10. (a) 18. (c)	3. (d) 11. (c) 19. (a) 27. (b)	12. (a) 20. (c)	13. (d)	14. (b) 22. (b)	7. (b) 15. (a) 23. (c) 31. (d)	16. (c)

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- **Q.1.** Which of the following are called protective foods? (i) Vitamins. (ii) Minerals.
 - (iii) Carbohydrates
 - (iv) Water (b) (i) and (ii)
 - (a) (i) and iii(b) (i) and (ii)(c) All four(d) None of these
- **Q.2.** The component of food supplies energy is (a) Protein. (b) Vitamin.
 - (c) Cellulose. (d) Carbohydrate.
- Q.3. Oxygen in the body is transported to the tissue by-(a) Haemoglobin. (b) Plasma.
 (c) Diffusion. (d) All of these.
- Q.4. The disease which bring too much fat to a person is (a) Kwashiorkor (b) Obesity (c) Anaemia (d) Scurvy
- Q.5. Hair, nails, skin and muscles are mostly made up of (a) Fat (b) Carbohydrate (c) Protein (d) Calcium
- (c) Protein (d) Calciu Q.6. Starch and sugar are a kind of
 - (a) Carbohydrate (b) Fat
 - (c) Protein (d) Vitamin
- **Q.7.** Which part of the plant is pea?
 - (a) Root (b) Fruit
 - (c) Leaves (d) Flower
- **Q.8.** Glucose and fructose are:
 - (a) Starches (b) Fats
 - (c) Sugars (d) None of these.
- **Q.9.** Which food is obtained from animals?
 - (a) Sugar (b) Honey
 - (c) Jaggery (d) Jam
- Q.10. Malnutrition of food is caused due to
 - (a) Intake of balanced diet
 - (b) Intake of insufficient nutrients
 - (c) Intake of lot of roughage
 - (d) None of these

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Q.11.	is a water soluble vitamin where asis fat
	soluble. (a) vitamin B, vitamin C (b) vitamin B, vitamin A (c) vitamin D, vitamin E (d) None of these
Q.12.	Which of the following are good sources of carbohydrates?(a) Milk, egg, meat(b) Green leafy vegetables(c) Cereals, sugar(d) None of these
Q.13.	Translucent paper test in done to show the presence of(a) Proteins(b) Carbohydrates(c) Vitamins(d) None of these
Q.14.	 Which of the following is true? (a) During malnutrition ORS solution should be given (b) Proteins are good source of energy (c) Scurvy is caused due to deficiency of vitamin C (d) None of these
Q.15.	For strong bones and teeth we need(a) Vitamin A(b) Vitamin D(c) Vitamin E(d) Vitamin K
Q.16.	Cereals are — (a) Grains mostly obtained from grasses. (b) Vegetables (c) Animal products (d) None of these
Q.17.	Protein is called (a) Energy giving food. (b) Body building food. (c) Protective food. (d) Roughage
	 Radha was testing a food item. She took the sample in a test tube and added iodine to it. On seeing the colour she inferred that the food item contains carbohydrate. What happened in the test tube (a) The test tube became very hot to touch (b) The colour of solution in test tube changed to blue black (c) A foul smelling gas is released (d) None of these
Q.19.	Which is a protein deficiency disease?

- Q.19. Which is a protein deficiency disease? (a) Osteomalacia (b) Kwashior
 - (a) Osteomalacia(b) Kwashiorkar(c) Night Blindness(d) None of these
- **Q.20.** Following a list of food items
 - A. Ground nut
 - B. Wheat

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 - C. Potato
 - D. Soya bean

Which of the following would give violet colour on adding copper sulphate and caustic soda solution.

- (a) A and C (b) A and D
- (c) B and C (d) None of these
- Q.21. The vitamin lost by heating is
 - (a) A (b) C
 - (c) D (d) B
- Q.22. Soya beans are the richest source of
 - (a) Carbohydrates (b) Proteins
 - (c) Vitamins (d) Roughage
- **Q.23.** White portion of an egg turns violet when two drops of copper sulphate and ten drops of caustic soda are added to it. This indicates the presence of
 - (a) Starch (b) Proteins
 - (c) Fats (d) Vitamins
- Q.24. PEM is caused by the deficiency of
 - (a) Protein and fat. (b) Fat and carbohydrate.
 - (c) Protein and carbohydrate.
 - (d) None of these.
- Q.25. Anaemia is caused due to deficiency of
 - (a) Fe (b) Mn
 - (c) Ca (d) Na
- Q.26. Vitamin K is needed for-
 - (a) Normal night vision. (b) Normal growth of bones.
 - (c) Healthy teeth and gums. (d) Clotting of blood
- Q.27. Rich sources of roughage are-
 - (a) Salad, corn and porridge (dalia).
 - (b) Milk. (c) Oil & Cheese
 - (d) Both (a) and (c).
- Q.28. Formation of blood requires-
 - (a) lodine. (b) Calcium.
 - (c) Iron. (d) Phosphorus.
- Q.29. A balanced diet contains-
 - (a) Proteins, carbohydrates and fats.
 - (b) Minerals and vitamins.
 - (c) Roughage and water.
 - (d) All of the above

- Q.30. A malnourished child needs -
 - (a) Costly medicine. (b) Vitamins.
 - (c) The required amount of balanced diet.
 - (d) Tonics.

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- Q.31. Which of the following statements is false?
 - (a) Water maintains the body temperature.
 - (b) Water helps in transportation of nutrients to and from the cells.
 - (c) Water is essential for the existence of life.
 - (d) About one fourth of our body weight is water.
- Q.32. Find the one that needs a diet rich in carbohydrates and fats-
 - (a) A doctor (b) An office clerk
 - (d) A labour (c) An advocate
- Q.33. Which food component prevents constipation?
 - (b) Vitamins.
 - (c) Carbohydrates. (d) Roughage.
- Q.34. Which of the following statement is true?
 - (a) Vitamin A keeps skin and eyes healthy
 - (b) Vitamin B deficiency causes rickets
 - (c) Magnesium is the element present in haemoglobin
 - (d) None of these

Q.35. Match the column

B. Vitamin B

C. Vitamin C

D. Vitamin D

(a) Fats.

- (i) Rickets A. Vitamin A
 - (ii) Scurvy
 - (iii) Night Blindness

(ii) Fats

(iii) Vitamins

(i) Carbohydrates

- (iv) Beri-Beri
- А В С D
- (iii) (iv) (i) (ii) (a)
- (b) (iii) (i) (iv) (ii) (i)
- (iv) (ii) (iii) (C)
- (d) None of these

Q.36. Match the following

- A. Milk
- B. Green Vegetables

В

C. Oil

(a)

D. Cereals

А

- (iv) Proteins С D
- (iii) (i) (ii) (iv)
- (b) (iv) (iii) (ii) (iii) (iii) (C)
 - (iii) (i) (iv)
- (d) None of these
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ANSWERS

	. ,	3. (a) 11. (b)	4. (b) 12.(c)		6. (a) 14.(c)		
17. (b)	. ,	19. (b)	20. (b) 28. (c)	21. (b)	()	23. (b)	24.(c)
. ,	• • •	35. (b)	()	20. (u)	00. (C)	01. (u)	02. (u)

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- Q.1. Wool and silk are
 - (a) Plants fibres
 - (b) Animals fibres
 - (c) Both plant and animal fibres
 - (d) Synthetic fibres
- Q.2. Jute fibres are obtained from which part?
 - (a) Flower (b) Stem
 - (c) Root (d) Leaves
- Q.3. A good yield of cotton needs
 - (a) Long summer season and black soil with ample water
 - (b) Warm humid climate and alluvial soil
 - (c) Rainy season with loamy soil
 - (d) None of these
- Q.4. Shearing is connected with
 - (a) Taking out silk from cocoon
 - (b) Removing wool from sheep
 - (c) Removing cotton seed from cotton balls
 - (d) None of these
- Q.5. Wool is warm because
 - (a) It is crinkled and retains air.
 - (b) Its fibres are made up of protein.
 - (c) Both options (a) and (b) are correct.
 - (d) None of these.
- Q.6. Which one of the following statements is correct?
 (a) Jute fibres are obtained from the stems of the plants.
 (b) Cotton is obtained from the balls of the flowers.
 (c) Both (a) and (b) options are correct.
 (d) Both are wrong.
- Q.7. Which statement is true for cotton clothes?
 - (a) It absorbs water efficiently and burns at a moderate speed.
 - (b) It does not absorb water efficiently but burns at a moderate speed.
 - (c) It does not absorb water efficiently and does not burn at a moderate speed.
 - (d) It absorbs water efficiently but does not burn at a moderate speed.

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- Q.8. Jute is obtained from which part of the jute plant?
 - (a) Leaves (b) Root
 - (d) Both leaves and stem.
- Q.9. Synthetic fibres are

(c) Stem

- (a) Rayon only
- (b) Nylon and Polyster only
- (c) Rayon, Nylon, and Polyester.
- (d) None of these
- Q.10. Silk is obtained from-----
 - (a) Larva of silkworm.
 - (b) Sheep
 - (c) Cotton plants of good quality.
 - (d) All of these.
- **Q.11.** Ginning is the process of removing cotton seeds from cotton bolls, here cotton bolls are
 - (a) Flowers (b) Seeds
 - (c) Leaves (d) None of these.
- Q.12. Which of the following is made from coconut fibres?
 - (a) Sweaters (b) Shoes
 - (c) Mattresses (d) Saris
- **Q.13.** The two main processes of making fabrics are:
 - (a) Ginning and weaving. (b) Weaving and knitting.
 - (c) Weaving and spinning. (d) None of these.
- Q.14. Which of the following statements is not true?
 - (a) Fabric is made of yarn.
 - (b) Jute is the outer covering of coconut.
 - (c) Polyester is a synthetic fiber.
 - (d) Silk fiber is obtained from silk worms.
- Q.15. Which of these is not a fiber?

(a) Leather	(b) Cotton
(c) Nylon	(d) None of these

- Q.16. Which of these fabrics will you prefer on a hot sunny day?(a) Nylon(b) Silk
 - (c) Cotton (d) Wool
- Q.17. Synthetic fibers are obtained from
 - (a) Plants (b) Animals
 - (c) Petroleum (d) All of these
- Q.18. Silk is a-
 - (a) Cellulose fibre (b) Protein fibre

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Q.19.	 (c) Fat fibre Which is the false statem (a) Jute crops are cultivation (b) Jute fibres are obtained (c) Twisting makes the yation (d) Polyesters are not matical 	ted in the rainy season. ed from the stem of the jute plant. Irn stronger.	Q.27. Match A. S B. La C. S D. O A
Q.20.	Silk fibre is obtained from (a) Egg of silk moth. (c) Adult of silk moth.	- (b) Cocoon of silk moth. (d) None of these.	(a) (i) (b) (ii (c) (ii (d) N
Q.21.	Which of the following clo Diwali Diyas? (a) Cotton. (c) Polyester.	oth is suitable to wear while lighting (b) Nylon. (d) Rayon.	(0) 1
Q.22.	Rearing of silk worm is ca (a) Weaving. (c) Ginning.	alled- (b) Spinning. (d) Sericulture.	1. (b) 2. (l 9. (c) 10.(a
Q.23.	The process of obtaining (a) Ginning. (c) Bobbin.	jute fibres from stem is called (b) Retting. (d) Weft.	17. (c) 18. (l 25. (c) 26. (c
Q.24.	Which is the correct state (a) All synthetic fibres are (b) Cotton is grown in allu (c) Polyester absorbs mo (d) Silk and wool both are	e rough to touch. vial soil. re water than cotton.	
Q.25.	Match the following A. Retting B. Shearing C. Ginning D. Sericulture A B C D (a) (ii) (i) (iv) (iii) (b) (ii) (iii) (iv) (i) (c) (iii) (i) (iv) (ii) (d) None of these	 (i) Wool (ii) Silk (iii) Jute (iv) Cotton 	
Q.26.	Which of the following is t (a) India cultivated the co		

- (a) India cultivated the cotton first
- (b) Jute is obtained from stem
- (c) Rayon and Nylon are plant fibres
- (d) None of these

ch the following

Α.	See	d		(i)	Silk	
В.	Larva	а			(ii)	Wool
C.	Sten	n			(iii)	Cotton
D.	Oute	er ski	n		(iv)	Jute
	А	В	С	D		
(a)	(iv)	(ii)	(i)	(iii)		
(b)	(iii)	(i)	(iv)	(ii)		
(C)	(ii)	(iv)	(iii)	(iv)		

None of these

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ANSWERS (b) 3. (b) 4. (b) 5. (a) 6. (c) 7. (a) 8. (c) 13. (c) 14. (b) 15. (a) 16. (c) (a) 11. (a) 12. (c) (b) 19. (d) 20. (b) 21. (a) 22. (d) 23. (b) 24. (d) (c) 27. (b)

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2ND NATIONWIDE INTERACTIVE SCIENCE OLYMPIAD (NISO)

Total duration : 30 Minutes

Total Marks: 25

1. Some structures in the human arm are shown in the diagram below.



A ligament is represented by the structure labelled



2. Structure A given in the diagram developed from which flower part?



(a) Stamen (b) Anther (c) Petal (d) Ovary

3. A fungus is an example of

- (a) A herbivore (b) An autotroph
- (c) A saprophyte (d) An omnivore
- 4. Which diagram best represents an ecosystem ?



- 5. Which of the following is true ?
 - (a) Deficiency of vitamin B causes scurvy
 - (b) Over eating causes problems for the body
 - (c) Vegetables are chief source of proteins
 - (d) None of these.
- 6. Which of the following biological functions help in keeping body cool ?

(a) Peristalsis (b) Perspiration

- (c) Micturation (d) None of these
- 7. When you are getting-up to go to school in India, a student on the other side of Earth is getting ready for bed. What is the reason for this ?
 - (a) Earth revolves around the Sun.
 - (b) Earth rotates on its axis. (c) The Sun rotates on its axis.
 - (d) The Moon revolves around Earth.

- 8. Which of the following keeps the planets in our solar system in orbit around the Sun?
 - (a) Atmospheric pressure (b) Gravitational force
 - (c) Electromagnetic energy (d) Thermal energy
- 9. Which of the following groups of organisms uses sunlight to convert carbon dioxide and water into sugar and oxygen?
 - (b) Decomposers (a) Carnivores
 - (d) Producers
- 10. Which of the following is an example of a physical change but not a chemical change?
 - (a) A log gives off heat and light as it burns.
 - (b) A tree stores energy from the Sun in its fruit.
 - (c) A coin lost in the grass slowly changes colour.
 - (d) A water pipe freezes and cracks on a cold night.
- 11. Which of the following is an example of the formation of a mixture?
 - (a) Rust forming on an iron nail

(c) Herbivores

- (b) Sugar crystals dissolving in water
- (c) Sodium and chlorine forming table salt
- (d) Hydrogen and oxygen reacting to produce water
- 12. Which of the following substances can be separated into several elements?
 - (a) Nitrogen (b) Zinc (c) Air (d) Aluminum
- 13. Which of the following best describes a role of mushrooms in ecosystems?
 - (a) Capturing energy from sunlight
 - (b) Consuming living plant material
 - (c) Taking energy from animal hosts
 - (d) Breaking down dead plant material
- 14. The picture below shows four parts of a wooden pencil.



- Which part of the pencil is best conductor of electricity?
- (a) Metal band (b) Plastic grip
- (c) Rubber eraser (d) Wooden body
- 15. The terms gas exchange, diaphragm, and inhale are most closely associated with which system in the human body?
 - (a) Circulatory (c) Digestive
 - (c) Excretory (d) Respiratory

- 16. What are the basic structural units of living organisms?
 - (b) Nucleus (c) Organs (a) Cells (d) Tissues
- 17. Which of the following has the greatest effect on the ability of soil to hold water?
 - (a) The age of the soil particles
 - (b) The size of the soil particles
 - (c) The colour of the soil particles
 - (d) The lustre of the soil particles
- 18. A solar panel is used to collect energy from the Sun and change it into other forms of energy. The picture below shows some solar panels on the roof of a building.



Which form of energy is collected by the solar panels?

- (b) Sound (c) Magnetic (d) Light (a) Wind
- **19.** The picture below shows tongs.



The tongs work as which of the following simple machines?

- (a) Inclined plane
- (c) Pulley
- (b) Lever (d) Wedge



If each horse is pulling with the same force, in which direction will the rock move?

- (a) North (b) East (c) South (d) West
- 21. The cartoon below shows a humorous view of a scientific phenomenon.



What process is occurring that makes the childs' breath become visible?

- (a) Boiling (c) Condensation
- (b) Melting
 - (d) Evaporation

EduSys Interactive Learning

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.

- 22. Which diagram best shows the property of refraction and condensations respectively?

 - (c) (i) and (iv) (d) None of these
- **23.** The table shows the weather and when students saw earthworm and snails in the school playground during one week.

	Weather				Earthworm	
Day	Hot	Cold	Windy	Rainy	Visit	Visit
Monday	✓			~	~	
Tuesday	~		✓			✓
Wednesday	✓		✓			✓
Thursday		✓		✓	✓	
Friday		✓	✓			✓

Earthworms are most likely to visit the school playground on a day that is

(a) Hot (b) Cold (c) Windy (d) Rainy

- **24.** Mrs. Gupta's class has five small, covered boxes. One contains perfume; another contains dried onions. There is also a box of pine needles, a box of lemon pieces, and a box with a paper towel wet with vanilla flavoring. What should they do to get the best information about what is in each box ?
 - (a) Shake the boxes (b) Smell the boxes
 - (c) Listen to the boxes (d) Weigh the boxes
- 25. Which diagram below shows a circuit that will cause the bulb to light?



I. (a)	2. (u)	э.	(0)	4. (u)	3. (0)				
6. (b)	7. (b)	8.	(b)	9. (d)	10. (d)				
11. (b)	12. (c)	13.	(d)	14. (a)	15. (d)				
16. (a)	17. (b)	18.	(d)	19. (b)	20. (c)				
21. (c)	22. (c)	23.	(d)	24. (b)	25. (b)				
000									