



Young Scholars Foundation

Prizes

SCIENCE

**GRADE
6**

<p>1st Rank Trip to Dubai</p>  <p>+</p> <p>Gold Medal + Certificate of Excellence</p>	<p>2nd Rank ₹ 25000</p> <p>+</p> <p>Silver Medal + Certificate of Excellence</p>	<p>3rd Rank ₹ 10000</p> <p>+</p> <p>Bronze Medal + Certificate of Excellence</p>
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**4th TO 10th
Rank
Rs 1100**

+ Certificate of Excellence

**11th TO 50th
Rank
Wrist Watch**



+ Certificate of Excellence

Instructions

Time : 1 hour

Maximum Marks : 100

- Maximum Time is 1 hour & You will get additional ten minutes to fill up information about yourself on the OMR Sheet, before the start of the exam.
- Write your **Name, School Code, Class, Roll No.** and **Mobile Number** clearly on the **OMR Sheet** and do not forget to sign it.
- The Question Paper comprises four sections:
Scientific Reasoning (25 Questions), **General Science** (15 Questions), **Logical Reasoning** (5 Questions) and **Wise Wizard** (5 Questions). Each question carries two marks.
- All questions are compulsory. There is no negative marking. Use of calculator is not permitted.
- To mark your choice of answers by darkening the circles on the OMR Sheet, use **HB Pencil** or **Blue / Black ball point pen** only.

Roll No

Student Name

Father's Name

SECTION - A (SCIENTIFIC REASONING)

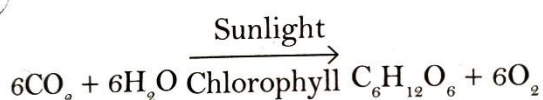
- Q1. Below two statements are given. Choose the correct option for the given statements.
- Statement 1: Plants are producers.
- Statement 2: Honey is a plant product.
- Statement 2 is correct and statement 1 is incorrect.
 - Statement 1 is correct and statement 2 is incorrect.
 - Both statements 1 and 2 are correct.
 - Both statements 1 and 2 are incorrect.
- Q2. Which of the following is included in our diet but it is neither a plant nor an animal product?
- Oil
 - Milk
 - Salt
 - Rice
- Q3. Herbivores, Carnivores, Omnivores are the categories of animals divided on the basis of their:
- Habitats
 - Food habits
 - Types of animals around them
 - All of these
- Q4. Few steps are given below to separate salt from sand. Arrange the given steps in a correct sequence.
- Decantation is done.
 - Water is added to the mixture of sand and salt.
 - Stir the mixture of salt, sand and water.
 - Evaporation is done.
- i, ii, iii, iv
 - iii, iv, i, ii
 - ii, iii, i, iv
 - ii, i, iv, iii
- Q5. Rahul in his craft class is making beads by using POP (plaster of Paris). The setting of beads by using water is a/an:
- Physical change
 - Reversible change
 - Irreversible change
 - No change
- Q6. Match Column –I with Column –II and select the correct answer using the codes given below the columns.
- | Column I | Column II |
|----------------------|-------------------------|
| A. Silk industry | (p) Muga |
| B. Silk worm | (q) Silk |
| C Queen of textiles | (r) Bombyx mori |
| D. Non-mulberry silk | (s) Respiratory disease |

- a. A → (p), B → (s), C → (r), D → (q)
- b. A → (r), B → (p), C → (s), D → (q)
- c. A → (s), B → (r), C → (q), D → (p)
- d. A → (q), B → (r), C → (p), D → (s)

Q7. While making chapati, Radhika observed the following changes, which among the following is a reversible change?

- a. Changing of flour into dough.
- b. Rolling of chapatti.
- c. Baking of chapatti.
- d. Eating a chapatti.

Q8. Match the following on the basis of given chemical reaction:



Column A

- i. CO₂
- ii. Chlorophyll
- iii. O₂
- iv. Process

Column B

- a. Product
- b. Photosynthesis
- c. Reactant
- d. Catalyst

- a. (i-d), (ii-c), (iii-a), (iv-b)
- b. (i-b), (ii-d), (iii-c), (iv-a)
- c. (i-c), (ii-d), (iii-a), (iv-b)
- d. (i-c), (ii-b), (iii-d), (iv-a)

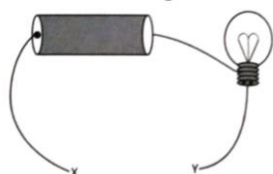
Q9. Which combination of statements is correct?

- i. When magnesium oxide reacts with water, magnesium hydroxide is produced.
- ii. When magnesium reacts with oxygen, magnesium oxide is produced.
- iii. When baking soda reacts with vinegar, sodium carbonate is produced.
- iv. When an iron object is placed in the copper sulphate solution, iron sulphate and copper are produced.
- v. Calcium hydroxide does not react with carbon dioxide.

- a. i, ii and iii
- b. ii, iii and iv
- c. i, ii and v
- d. i, ii and iv

- Q10. In between xylem and phloem there is a layer called
 a. Meristem b. Medulla c. Cambium d. Midrib
- Q11. Hydrilla is an example of :
 a. Floating plant b. Fixed plant c. Submerged plant d. Mountain plant
- Q12. Materials that can be recycled are collected in
 a. Red bins b. Blue bins c. Yellow bins d. White bins
- Q13. Which type of joint is there between upper arm bone and lower arm bone?
 a. Hinge joint b. Fixed joint c. Pivot joint d. Ball and socket joint
- Q14. The joint used in nodding of the head.
 a. Ball and socket joint b. Hinge joint
 c. Pivot joint d. Gliding joint
- Q15. Which of the following is not a necessary condition for the formation of a shadow?
 a. An opaque object
 b. A screen
 c. A transparent object
 d. A source of light
- Q16. In which of the following medium speed of light is maximum?
 a. In air b. In vacuum c. In glass d. In water
- Q17. A burning candle is placed on a table. We can see the light of candle flame when we see it from:
 a. Bent tube → by keeping only one eye open.
 b. Straight tube → by keeping only one eye open.
 c. Spiral tube → by keeping only one eye open.
 d. U –shape tube.
- Q18. Which of the following is not a correct match?
 a. Ferns – non –flowering plant
 b. Wheat plant – herb
 c. Lemon plant – shrub
 d. Pine tree- flowering plant
- Q19. Which of the following tissues carry water from root to leaves?
 a. Xylem b. Phloem c. Chloroplast d. Chlorophyll
- Q20. Electric bell is an example of _____ magnet.
 a. Bar magnet b. Cylindrical magnet c. Electromagnet d. Horseshoe magnet
- Q21. A child suffering from _____ becomes so thin that loose folds of skin can be seen all over the body?
 a. Goitre b. Rickets c. Anaemia d. Marasmus

- Q22. Which one of the following statements is not true?
- Materials are grouped for convenience.
 - Materials are grouped to study their properties.
 - Materials are grouped for fun.
 - Materials are grouped according to their uses.
- Q23. Rain water harvesting is a method employed to
- stop soil erosion in a place.
 - raise the water table of a place.
 - decrease drought at a place.
 - decrease floods at a place.
- Q24. In the given circuit which material should be placed between point X and Y to make the bulb glow?

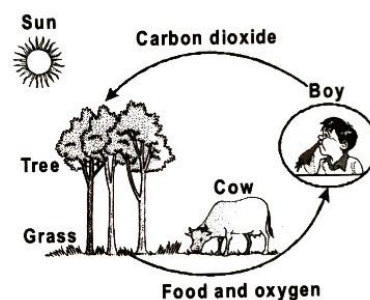


- A rubber band
 - A plastic ruler
 - A silver coin
 - A wooden paper weight
- Q25. Rita fixed a candle at the bottom of a trough containing water. After lighting the candle, she inverted a gas jar over it. What did she observe?
- The flame continued to burn and water rose in the jar.
 - The flame was put off and water rose in the jar.
 - The flame continued to burn and water became milky.
 - The flame was put off and black smoke was deposited on the sides of the jar.

SECTION - B (GENERAL SCIENCE)

- Q26. We are able to see the objects around us because
- the objects absorb all the light.
 - the light reflected from the eyes reaches the object.
 - the light reflected from the objects enters our eyes.
 - light can be refracted.
- Q27. Which of the following statements is NOT true regarding shadows?
- A shadow gives only the outline of that object.
 - Shadows are formed due to the blocking of light by an opaque object.
 - Images are similar to shadows.
 - A shadow formed is always on the opposite side of the light source.

- Q28. What does the figure given below represent?
- Interdependence between plants.
 - Interdependence between plants and animals.
 - Interdependence between animals.
 - Interdependence between abiotic factors.

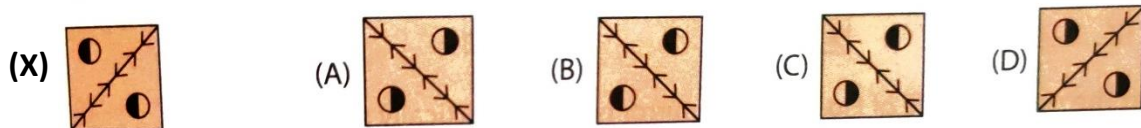


- Q29. Which terms means 'Adjustment to environment'?
- Adaptation
 - Mimicry
 - Hibernation
 - Aestivation
- Q30. Which of these is a multicellular organisms?
- Amoeba
 - Paramecium
 - Human beings
 - None of these
- Q31. Environment consists of which of the following things?
- Only biotic environment
 - Only abiotic environment.
 - Both biotic and abiotic environment.
 - Only plants and animals.
- Q32. The alternate form of a gene is
- Alternate type
 - Recessive character
 - Dominant character
 - Allele
- Q33. Which one will show a metallic lustre?
- Any surface of a metal
 - Freshly cut surface of a metal
 - Freshly cut surface of non-metal
 - Surfaces of all materials
- Q34. Which one of the following is not soluble in water?
- Turmeric powder
 - Common salt
 - Alum
 - All are soluble
- Q35. Who are autotrophs?
- Those animals who prepare, their food themselves.
 - Those organisms who make their food themselves using simple substances.
 - Those organisms who depends on others for their food.
 - None of these
- Q36. Which combination of statements is correct?
- A simple electric circuit can be prepared by using an electric cell, a bulb, a switch and connecting wires.
 - In the symbol of the electric cell, the longer line represents the positive terminal and the thicker, shorter line represents the negative terminal.
 - When electric current passes through a wire, it behaves like a magnet.
 - Electric current can be used to make magnets.
 - When filament of an electric current is broken, the bulb is said to be fused.
- i and iii only
 - i, ii and iv only
 - i, iv and v only
 - all i, ii, iii, iv and v

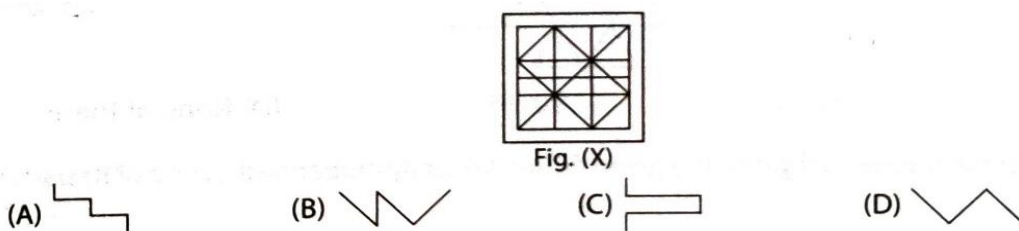
- Q37. Which of the following statements is true about woollen fibre?
- a. Wool is a poor insulator of heat. b. Wool is a good insulator of heat.
 c. Wool does not absorb water. d. Wool is cheaper than cotton.
- Q38. Shreya touched a hot kettle and quickly pulled her hand away. Which characteristic is proved by the given statement?
- a. Reproduction b. Response to stimuli
 c. Growth d. Respiration
- Q39. What is the function of the tendrils of the cucumber plant?
- a. It holds the plant firmly to the ground.
 b. It helps the plant to climb up a support.
 c. It stores nutrients for the plant.
 d. It helps the plant to carry out photosynthesis.
- Q40. Identify the plants that shows the given characteristics.
- Have fibrous roots
 - Have petals in multiples of three
 - Bears leaves with parallel veins
- a. Maize and balsam. b. Balsam and hibiscus.
 c. Paddy and maize. d. Sugarcane and hibiscus.

SECTION - C (LOGICAL REASONING)

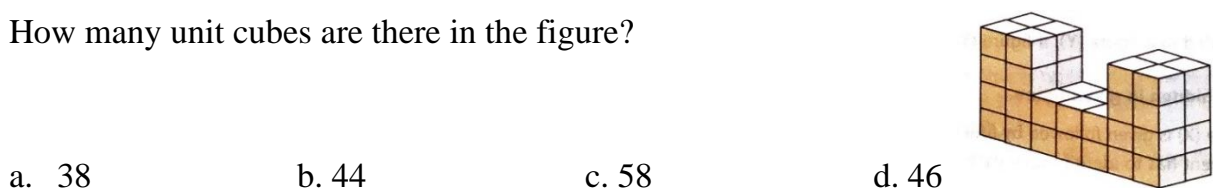
Q41. Find the mirror image of the given figure (X).



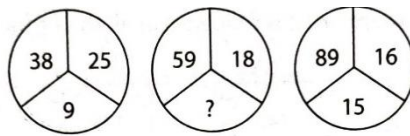
Q42. Which of the following figures is NOT exactly embedded in Fig. (X) as one of its parts?



Q43. How many unit cubes are there in the figure?



Q44. Find the missing number, if same rule is followed in all the three figures.



- a. 11 b. 14 c. 10 d. 7

Q45. Garima ranked 7th in a class of 49 students from the top. What is her rank from the bottom in the class?

- a. 49th b. 43rd c. 50th d. 48th

SECTION - D (WISE WIZARD)

Q46. Match the following.

- | | |
|-----------------|---------------------------------------|
| i. Marasmus | a. Lack of iron |
| ii. Kwashiorkor | b. Lack of iodine |
| iii. Anaemia | c. Lack of proteins and carbohydrates |
| iv. Cretinism | d. Lack of proteins |

- a. i→c, ii→d, iii→b, iv →a
 b. i→b, ii→ a, iii→c, iv →d
 c. i→c, ii→d, iii→a, iv →b
 d. i→d, ii→a, iii→c, iv →b

Q47. The exposed garbage bin encourages the spread of

- a. non-infectious diseases b. deficiency diseases
 c. congenital diseases d. infectious diseases

Q48. Speed of light in vacuum is:

- a. 3×10^8 km/h b. 3×10^8 m/s c. 3×10^8 m/h d. 3×10^2 m/s

Q49. In a mixture, constituents exhibit

- a. similar properties. b. Only those properties which are characteristic to the mixture.
 c. their own properties. d. no properties.

Q50. The length of the shadow will be longest when the:

- a. angle between the source of light and the object is 45°
 b. source of light and the object are parallel to each other
 c. source of light and the object are perpendicular to each other
 d. angle between the source of light and the object is 60° .