



Instruction to the Students

- Write only question numbers clearly outside the margin (1, 2, 3.i, 5.b, 4.c.ii, etc.).
 - Do not write questions or any titles. (For example - Do not write any II. Answer the following).
 - After every answer, give a one-line space.
 - For Multiple choice Questions - writing the option is compulsory. (Example: a, b, c, d)
 - Bullet points & Sub-points should be written inside the margin.
 - Do not fold / staple the paper.
-

Section

Choose the appropriate answer:

(25 x 1 = 25)

1. A cow moving around a pole is undergoing _____ motion
a) linear b) circular c) translatory d) oscillatory
2. Which of the following measurements do not change from person to person
a) Foot b) handspan c) Metre d) Yard
3. 16. Identify the odd one out in each case and then choose the correct option.
I. Second, kilogram, kelvin, pound
II. Blades of a moving fan, swinging pendulum, spinning (top, motion of giant wheel
III. Length, area, volume, speed
IV. Motion of Earth about its axis, motion of spinning top, motion exhibited by the needle of a sewing machine, motion exhibited by our heart.
a) Kelvin – Swinging pendulum – Speed – Motion exhibited by our heartbeat
b) second - Giant wheel - Volume - Motion of Earth about its axis
c) pound - Swinging pendulum - Length - Motion of spinning top
d) kilogram - Spinning top – Speed - Motion exhibited by top the wheel of sewing machine

4. Which of the following is incorrect?
 - a) Change in position of the object with time - Motion
 - b) Unknown quantity with respect to which measurement is done-
 - c) Comparison of unknown quantity with the known quantity - Measurement
 - d) Largest unit of length - Yottametre
5. Which technology is different from the rest in terms of its primary function or use?
 - a) Electric trains
 - b) Supersonic aeroplanes
 - c) Spacecraft
 - d) Motorized boats
6. Which of the following does not fit with the others based on its role in transportation?
 - a) Steam engine
 - b) Aeroplane
 - c) Monorail
 - d) Motorized cart
7. If the distance between Radha's and Ria's houses is 4329 m, it can be rounded to _____ km
 - a) 43
 - b) 44
 - c) 4
 - d) 5
8. Which of the following situations is/are valid regarding estimation?
 - (i) For measuring width of the bedroom door to move a table into it.
 - (ii) For cutting pieces of glass to make windowpanes.
 - (iii) For stitching a shirt for your brother.
 - a) (i) Only
 - b) (i) and (ii) only
 - c) (ii) and (iii) Only
 - d) (i), (ii) and (iii) Only
9. Which scenario is least likely to benefit from using translucent materials?
 - a) Designing a privacy screen for an office
 - b) Creating a clear display case for products
 - c) Constructing a light-filtering window for a conference room
 - d) Making a windowless storage container
10. Which of the following is not an example of a translucent material?
 - a) Oily paper
 - b) Frosted glass
 - c) Transparent plastic
 - d) Wax paper
11. Which of the following materials is an example of a transparent material?
 - a) Wood
 - b) Cardboard
 - c) Glass
 - d) Metal
12. Which of the following types of mixtures can be separated by hand-picking?
 - I. Solid-solid mixture with different size and colour.
 - II. Solid-solid mixture with same size and colour
 - III. Solid-solid mixture, both solids being soluble in water
 - IV. Solid-liquid mixture, solid being heavier
 - a) I and IV only
 - b) II and III only
 - c) I only
 - d) III only

13. Match the columns and select the correct option from the given clues

Column I

Column II

P. Saw dust and chalk powder	(I) Float on water
Q. Wood and paper	(Ii) Miscible liquids
R. Vinegar and water	(Iii) Sink in water
S. Stone and all pin	(Iv) Insoluble in water

- a) P-(iv), Q-(i), R-(ii), S-(iii) b) P-(ii), Q-(iii), R-(iv), S-(i)
c) P-(ii), Q-(iv), R-(iii), S-(i) d) P-(i), Q-(ii), R-(iv), S-(iii)

14. A molecule of carbon dioxide contains _____ atom(s) of carbon and _____ atom(s) of oxygen.

- a) 2 and 1 b) 1 and 2 c) 1 and 3 d) 2 and 3

15. Choose the correct statement.

- a) We can see clearly through an oiled paper.
b) We can see partially through frosted glass.
c) We cannot see at all through a cellophane paper.
d) We can see partially through a metal foil.

16. Why is it important to be cautious when washing rice and pulses?

- a) Repeated washing can enhance their taste.
b) Repeated washing can remove some vitamins and minerals.
c) It improves their texture.
d) It makes them more colorful.

17. What could be the potential consequence of not considering the loss of nutrients during the preparation of rice and pulses?

- a) Improved cooking efficiency
b) Increased risk of nutrient deficiencies in the diet
c) Enhanced flavor and taste of the dishes
d) More attractive appearance of the food

18. **Assertion:** Water is considered a crucial component of a balanced diet.

Reason: Water aids in digestion and helps maintain hydration levels in the body.

- a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.
b) Both assertion and reason are true, but the reason is not the correct explanation of the assertion.
c) The assertion is false, but the reason is true.
d) The assertion is true, but the reason is false.

19. **Assertion:** Roughage in the diet is not essential for maintaining good health.
Reason: Roughage helps in the digestion process and prevents constipation.
- Both assertion and reason are true, and the reason is the correct explanation of the assertion.
 - Both assertion and reason are true, but the reason is not the correct explanation of the assertion.
 - The assertion is false, but the reason is true.
 - The assertion is true, but the reason is false.
20. How does the balance of protein sources in the diet affect muscle synthesis and repair?
- Solely consuming animal proteins enhances muscle repair more effectively than a mix of animal and plant proteins.
 - A varied protein intake from both animal and plant sources provides a complete amino acid profile, optimizing muscle synthesis and repair.
 - Only plant proteins are needed to maximize muscle repair and synthesis.
 - Consuming excess protein from any source does not significantly impact muscle repair or synthesis.
21. In what way does the presence of vitamins in a balanced diet influence the body's ability to manage oxidative stress and inflammation?
- Vitamins have no significant role in managing oxidative stress or inflammation.
 - Certain vitamins act as antioxidants, helping to neutralize free radicals and reduce inflammation, thus supporting overall health.
 - Vitamins exacerbate oxidative stress and inflammation when consumed in excess.
 - The presence of vitamins primarily affects metabolic rates but has minimal impact on oxidative stress.
22. How might a deficiency in fat-soluble vitamins (A, D, E, and K) impact the absorption of other nutrients in the body?
- It enhances the absorption of water-soluble vitamins by creating a more favorable environment.
 - It does not affect the absorption of other nutrients since fat-soluble vitamins are not critical for this process.
 - It impairs the absorption of fat-soluble vitamins and may also hinder the absorption of other essential nutrients like calcium and iron.
 - It improves the overall efficiency of nutrient absorption and utilization in the body.

23. If a food item is rich in vitamins and minerals but lacks adequate dietary fiber, what aspect of health might be most adversely affected?
- Bone strength and joint flexibility
 - Immune function and resistance to infections
 - Digestive health and regular bowel movements
 - Energy levels and muscle development
24. If an individual consumes a diet lacking in fats but includes sufficient carbohydrates, proteins, and vitamins, what potential health issues might arise?
- Improved digestion and enhanced immune function.
 - Potential deficiencies in essential fatty acids and impaired cell function.
 - Increased energy levels and better muscle growth.
 - No significant impact on health.
25. **Assertion:** Dietary fibers are essential for our body despite not being classified as major nutrients.
- Reason:** Dietary fibers help in maintaining a healthy digestive system and are included in the list of components necessary for our body
- Both assertion and reason are true, and the reason is the correct explanation of the assertion.
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QUESTION PAPER SUMMARY
Olympiad
G6_Science Olympiad_Model Paper I

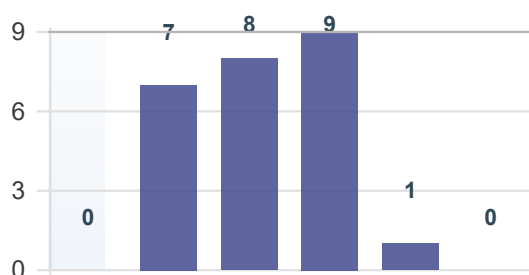
Class : VI
Total Marks : 25

Subject : Science Olympiad

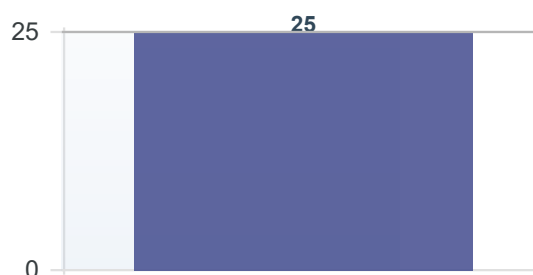
MARK DISTRIBUTION:

Type	No of Questions
Choose	25

BLOOMS DISTRIBUTION:



QUESTION DISTRIBUTION:



CHAPTERS - TOPIC COVERED:

Chapter	Topic	No of Questions
Motion And Measurement Of Distances	-	8
Sorting Materials Into Groups	-	7
Components Of Food	-	10



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(25 x 1 = 25)

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a) linear b) circular c) translatory d) oscillatory

Answer

b) circular (1)

2. Which of the following measurements do not change from person to person
a) Foot b) handspan c) Metre d) Yard

Answer

c) Metre (1)

3. 16. Identify the odd one out in each case and then choose the correct option.
- I. Second, kilogram, kelvin, pound
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 - c) pound - Swinging pendulum - Length - Motion of spinning top
 - d) kilogram - Spinning top – Speed - Motion exhibited by top the wheel of sewing machine

Answer 

c) pound - Swinging pendulum - Length - Motion of spinning top (1)

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 - b) Unknown quantity with respect to which measurement is done-
 - c) Comparison of unknown quantity with the known quantity - Measurement
 - d) Largest unit of length - Yottametre

Answer 

b) Unknown quantity with respect to which measurement is done- (1)

5. Which technology is different from the rest in terms of its primary function or use?
- a) Electric trains
 - b) Supersonic aeroplanes
 - c) Spacecraft
 - d) Motorized boats

Answer 

d) Motorized boats (1)

6. Which of the following does not fit with the others based on its role in transportation?
- a) Steam engine
 - b) Aeroplane
 - c) Monorail
 - d) Motorized cart

Answer 

a) Steam engine (1)

7. If the distance between Radha's and Ria's houses is 4329 m, it can be rounded to _____ km
- a) 43 b) 44 c) 4 d) 5

Answer 

c) 4 (1)

8. Which of the following situations is/are valid regarding estimation?
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- a) (i) Only b) (i) and (ii) only
c) (ii) and (iii) Only d) (i), (ii) and (iii) Only

Answer 

a) (i) Only (1)

9. Which scenario is least likely to benefit from using translucent materials?
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Answer 

d) Making a windowless storage container (1)

10. Which of the following is not an example of a translucent material?
- a) Oily paper b) Frosted glass
c) Transparent plastic d) Wax paper

Answer 

c) Transparent plastic (1)

11. Which of the following materials is an example of a transparent material?
- a) Wood b) Cardboard c) Glass d) Metal

Answer 

c) Glass (1)

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Answer 

c) I only (1)

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Answer 

a) P-(iv), Q-(i), R-(ii), S-(iii) (1)

14. A molecule of carbon dioxide contains _____ atom(s) of carbon and _____ atom(s) of oxygen.
- a) 2 and 1 b) 1 and 2 c) 1 and 3 d) 2 and 3

Answer 

b) 1 and 2 (1)

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Answer 

b) We can see partially through frosted glass. (1)

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Answer 

b) Increased risk of nutrient deficiencies in the diet (1)

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Answer ↪

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Answer ↪

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Answer ↪

- c) Digestive health and regular bowel movements (1)

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Answer ↪

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- c) The assertion is true, but the reason is false.
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Answer 

a) Both assertion and reason are true, and the reason is the correct explanation of the assertion.

(1)