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(SCHOLARS INTEGRAL MATHS & SCIENCE OLYMPIADS)



BIGGEST NATIONAL LEVEL OLYMPIADS (STAGE - II) : 2025-26

MAX. MARKS : 90

SISO QUESTION PAPER

TIME: 60 MIN.

NAME OF THE STUDENT :

HALL TICKET NUMBER :

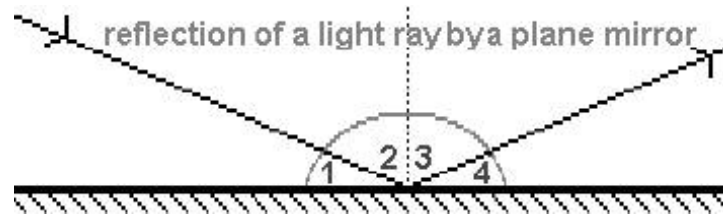
NAME OF THE SCHOOL :

INSTRUCTIONS TO THE STUDENTS :

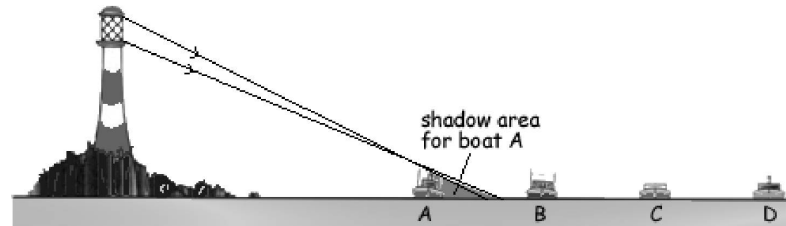
- ☞ Write your Hall ticket number immediately after receiving the question paper booklet.
- ☞ Darken the answers only on the OMR Sheet.
- ☞ Read the instructions given on the OMR sheet and follow them accordingly.
- ☞ Don't write any thing on the question paper booklet.
- ☞ To do rough work, use only the white paper provided in the examination hall.
- ☞ **No negative marks.**
- ☞ This question paper booklet consists of 30 questions.
- ☞ **PHYSICS (Q.No-1 to 10) :**
First 7 questions (1 to 7) are single correct answer type.
Each question carries THREE marks.
Next 3 questions (8 to 10) are one or more than one correct answer type. Each question carries THREE marks.
- ☞ **CHEMISTRY (Q.No-11 to 20) :**
First 7 questions (11 to 17) are single correct answer type.
Each question carries THREE marks.
Next 3 questions (18 to 20) are one or more than one correct answer type. Each question carries THREE marks.
- ☞ **BIOLOGY (Q.No-21 to 30) :**
All questions (21 to 30) are single correct answer type.
Each question carries THREE marks.
- ☞ Students are not allowed to use any Mathematical and Physical tables (OR) any other electronic devices.
- ☞ After completion of the examination hand over the OMR answer sheet to the invigilator without fail. You can retain the question paper with you.
- ☞ Students should not leave the examination hall before the last bell rings.
- ☞ To know your results log in to our website www.simsolympiads.com.
- ☞ Stage-I branch result copy will be sent to the school mail id. Please contact your principal to know your result.

Single Correct Answer Type :**7 × 3 = 21M**

1. The diagram shows what happens to a ray of light when it strikes the surface of a plane mirror. The vertical dotted line is at 90° to the surface of the mirror. Which statement is NOT true?



- 1) Angle 1 = angle of incidence
2) Angle 1 always equals angle 4
3) Angle 3 = angle of reflection
4) Angle 2 always equals angle 3
2. A car traveled at a speed of 50 km/h for 30 minutes and then at a speed of 80 km/h for 45 minutes. The total distance covered by car is equal to
- 1) 85 km 2) 130 km 3) 90 km 4) 77 km
3. The diagram shows a lighthouse on a rock. It is night-time and there are boats at A, B, C, and D moored in the water. On which boat, (A, B, C or D) would the light from the lighthouse be brightest?

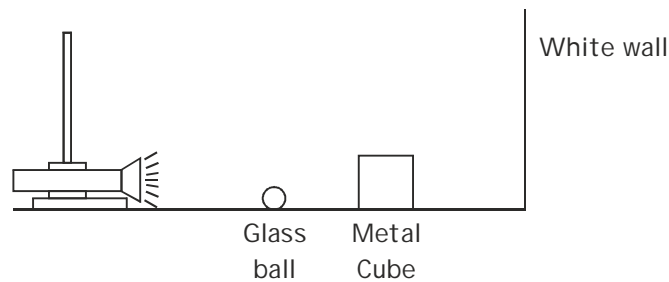


- 1) Boat A 2) Boat B 3) Boat C 4) Boat D
4. On holding a stainless steel spoon near our face, we see
- 1) Our inverted image on outer side of the spoon
2) Our erect image on inner side of the spoon
3) Our vertically inverted image on inner side of the spoon
4) Our laterally inverted image on inner side of the spoon
5. Marking on a bulb is 60 W, 220 V. What does it signify?
- 1) The bulb is connected across the 220 volts, 60 joules of energy is consumed for every second
2) The bulb is connected across 60 joules, 220 volts of energy is consumed
3) 60 unit of current will flow in the bulb
4) 220 unit of current will flow in the bulb

6. Which of the following is in uniform motion ?

- 1) A car travelling with constant speed in a straight line
- 2) A stone is being whirled in a circle with constant speed
- 3) Rotation of the earth
- 4) A bike on a busy road

7. A screen, a glass ball, a metal cube and a torch are placed in a straight line as shown in the set-up below. When the torch is switched on, a dark shadow is formed on the white wall. Which one of the following shows correctly what is seen on the white wall?



- 1)
- 2)
- 3)
- 4)

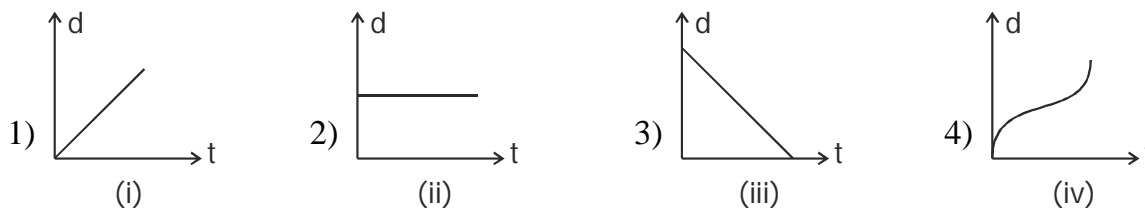
Multi Correct Answer Type :

3 × 3 = 9M

8. Which of the following are the properties of image formed by a plane mirror?

- 1) The image is at the same distance as the object
- 2) The image is upright
- 3) The image is vertically inverted
- 4) The image is laterally inverted

9. Which of the following graphs do not represent variable acceleration ?



10. Identify the true statements

- 1) To make a battery of two cells, the negative terminal of one cell is connected to the negative terminal of the other cell.
- 2) When the electric current through the fuse exceeds a certain limit, the fuse wire melts and breaks.
- 3) An electromagnet does not attract a piece of iron.
- 4) An electric bell has an electromagnet.

Single Correct Answer Type :**7 × 3 = 21M**

11. The list given below contain different natural calamities and their properties match them:

Column -I

- 1) Monsoon
- 2) Tornado
- 3) Thunderstorms

Column -II

- p) Gusty winds and heavy rain
- q) Dark funnel shaped cloud
- r) Wind carrying water

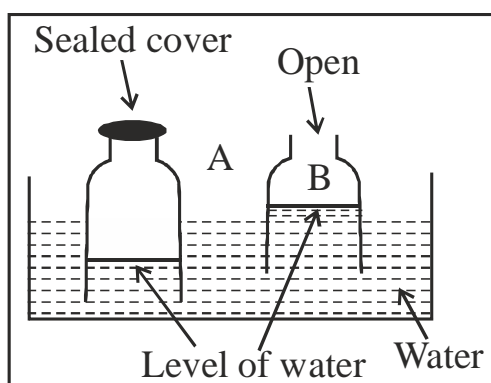
1) 1-r, 2-p, 3-q

2) 1-q, 2-r, 3-p

3) 1-p, 2-q, 3-r

4) 1-r, 2-q, 3-p

12. Two plastic bottles with their bottoms cut are pushed into a trough of water as shown in the figure. Why is the level of water in bottle 'A' less than the level of water in bottle 'B'?



- 1) Water occupies space in bottle
- 2) Atmospheric pressure in bottle 'A' is more than that of bottle 'B'
- 3) Water takes the shape of the container
- 4) Air occupies space

13. Match the following column - I with column - II and choose the correct option .

Column A

- a) Freezing of water
- b) Rusting of iron
- c) Changes of season
- d) Growing of baby into adult

Column B

- i) Periodic change
- ii) Chemical change
- iii) Slow change
- iv) Physical change

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

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

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

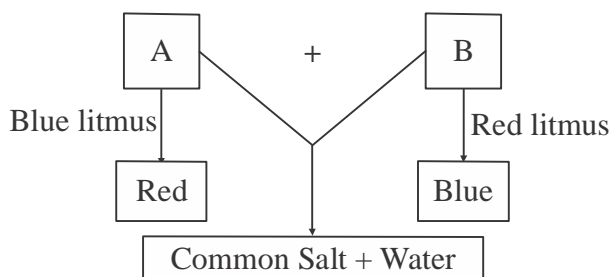
4) a-(iv), b-(ii), c-(i), d-(iii)

14. Which of the following match is incorrect?

| S.No. | Indicator | Acid | Base |
|-------|-----------------|-------|------------|
| i | Methyl orange | Red | Yellow |
| ii | Phenolphthalein | Pink | Colourless |
| iii | Litmus | Blue | Red |
| iv | China rose | Green | White |

- 1) (i) and (ii) 2) (ii) and (iii) 3) (ii) and (iv) 4) (iii) and (iv)

15. Consider the following flow chart. Identify A and B.



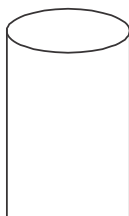
- 1) A = H_2SO_4 , B = NaOH 2) A = $Ca(OH)_2$, B = NaCl
 3) A = HCl, B = Na_2SO_4 4) A = NaOH, B = HCl

16. Nidhi placed some iron nails into the solution of blue vitriol and observed that the colour of solution turns green. What Nidhi observed? The conclusions made by them from the above experiments are:

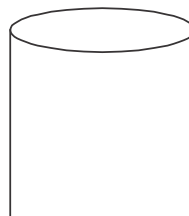
- A. Physical change B. Temporary change
 C. Irreversible change D. Permanent change

- 1) B and C 2) A and D 3) A and B 4) C and D

17. Consider the following two types of containers.



Glass container - A



Metallic container - B

Rama preferred 'A' for storing cut pieces of lemon. This is because

- I. A is transparent II. A is cheaper
 III. B is not easily available IV. B reacts with the acid present in lemon

The correct reason(s) is / are

- 1) I and II 2) II and IV 3) I and III 4) Only IV

Multi Correct Answer Type :**3 × 3 = 9M****18. Which of the following statements is correct ?**

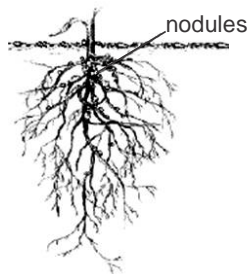
- 1) Air has weight and exerts pressure in one direction
- 2) Acid rain which can cause damage to buildings and statues
- 3) Air contains water vapour, dust particles and smoke particles
- 4) Ozone layer prevents harmful uv radiations

19. Adding salt to water makes it salty .Which of the following is true regarding this change ?

- 1) It is a physical change because there is a change in colour
- 2) It is a chemical change because of exchange of heat
- 3) It is a physical change because no new substance is formed
- 4) It is a physical change because of the original substances can be recovered

20. Which of the following methods control the water pollution ?

- 1) Educating society about the water pollution
- 2) Avoiding the use of chemical substances freely
- 3) Using biological control in agricultural areas instead of using pesticides
- 4) By adding chemicals to the river water

Single Correct Answer Type :**10 × 3 = 30M****21. The diagram given below shows nodules on roots of leguminous plants which contain symbiotic bacteria. What is the role of the bacteria?**

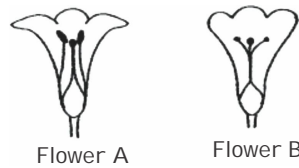
- 1) Convert oxides of nitrogen into soil nitrates
- 2) Convert atmospheric nitrogen gas into soil nitrates
- 3) Convert soil nitrates into gaseous nitrogen
- 4) Convert plant proteins into Ammonia

22. Why 'defecation' is NOT considered as 'Excretion'?

- 1) The waste material is a product of chemical reactions in the cell.
- 2) The waste material havenot undergone any chemical reaction.
- 3) The waste material does not have a specific excretory organ.
- 4) The waste material have not entered the cells of the body.

23. The diagrams below shows the cross-section of 2 different types of flowers.

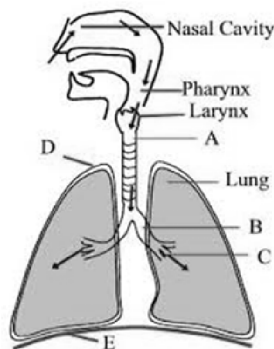
Which statements? about the flowers is/are TRUE?



- (i) Both flowers can grow into fruits
- (ii) Pollination takes place in both flowers.
- (iii) Both Flowers have male and female parts.

- 1) (ii) only
- 2) (i) & (iii)
- 3) (i) & (ii)
- 4) (i), (ii) & (iii)

24. Choose the correct option which matches the labelled parts A, B, C, D & E



- 1) A - Trachea; B - Bronchiole; C - Bronchi; D - Pericardium; E - Sternum
- 2) A - Trachea; B - Bronchi; C - Bronchiole; D - Pleura; E - Diaphragm
- 3) A - Trachea; B - Bronchiole; C - Bronchi; D - Peritonium; E - Diaphragm
- 4) A - Trachea; B - Bronchiole; C - Bronchi; D - Pleura; E - Rib cage

25. Match the items of Column - I with that of Column - II

Column - I

- a) Yeast
- b) Skin
- c) Fish
- d) Frog
- e) Cockroach

Column - II

- p) Gills
- q) Lungs
- r) Alcohol
- s) Trachae
- t) Earthworm

- 1) a-q, b-s, c-p, d-t, e-r
- 2) a-s, b-p, c-t, d-r, e-q
- 3) a-r, b-t, c-p, d-q, e-s
- 4) a-t, b-r, c-q, d-s, e-p

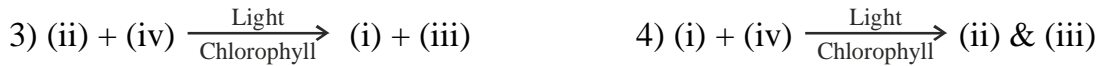
26. In a typical complete, Bisexual and Hypogynous flower the arrangement of floral whorls on the thalamus from the outermost to the innermost is :

- 1) Calyx, Corolla, Androecium and Gynoecium
- 2) Calyx, Corolla, Gynoecium and Androecium
- 3) Gynoecium, Androecium, Corolla and Calyx
- 4) Androecium, Gynoecium, Corolla and Calyx

27. Photosynthesis involves the substances

(i) Oxygen (ii) Carbondioxide (iii) Water (iv) Sugar

Which is the correct equation of photosynthesis?

**28. Rearrange according to the steps involved in making yarn is**

(i) Scouring (ii) Rearing (iii) Shearing (iv) Sorting

1) (i), (ii), (iii) & (iv) 2) (ii), (iv), (iii) & (i)

3) (ii), (iii), (i) & (iv) 4) (iv), (iii), (ii) & (i)

29. Assertion (A) :The seeds dispersed by animals have

Hooks or Thorns on them.

Reason (R) : The seeds get adapted in such a way that they get carried away easily by wind.

1) Both (A) and (R) are true, and (R) is the correct explanation of (A).

2) Both (A) and (R) are true, and (R) is not correct explanation of (A).

3) (A) is true and (R) is false.

4) Both (A) and (R) are false.

30. What are the end products of aerobic and anerobic respiration respectively?

1) Nitrogen, H₂O and CO₂, H₂O

2) CO₂, H₂O and Ethyl alcohol, CO₂

3) O₂, H₂O and O₂, Alcohol

4) Glucose, CO₂ and O₂, Water

❖❖❖ ALL THE BEST ❖❖❖