

6th Std. — ENGLISH

QUESTION BOOKLET



GREATER BOMBAY SCIENCE TEACHERS' ASSOCIATION
DR. HOMI BHABHA BALVAIDNYANIK COMPETITION

2023–24

DATE OF EXAMINATION : 21st OCTOBER 2023

TIME : ONE HOUR THIRTY MINUTES

MARKS : 100

EXAM SEAT NO. :

1	2	1	4	3	2	1	8	2	0	5
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EXAMPLE

परीक्षार्थी बैठक क्रमांक
EXAM SEAT NO.

9	2	7	0	1	8	3	5	4	9	5
①	①	①	①	●	①	①	①	①	①	①
②	●	②	②	②	②	②	②	②	②	②
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④	④	④	④	④	④	④	④	●	④	④
⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	●	⑤	●
⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥	⑥
⑦	⑦	●	⑦	⑦	⑦	⑦	⑦	⑦	⑦	⑦
⑧	⑧	⑧	⑧	⑧	●	⑧	⑧	⑧	⑧	⑧
●	⑨	⑨	⑨	⑨	⑨	⑨	⑨	⑨	●	⑨
⑩	⑩	⑩	●	⑩	⑩	⑩	⑩	⑩	⑩	⑩

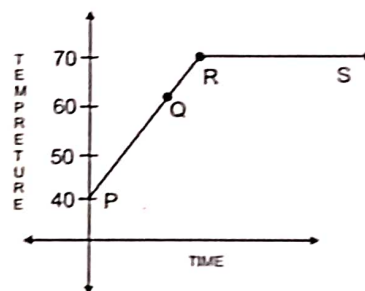
IMPORTANT

Please write your **Exam Seat No.** in the row of boxes in column No. of your **ANSWERSHEET** and darken the oval that corresponds to each of the numerals as shown in the example, using **ONLY BLACK BALL POINT PEN.**

INSTRUCTIONS :

1. Write your Exam Seat No. on this test booklet in the space provided above.
2. This test booklet contains 100 Questions.
3. Each question carries 1 mark.
4. Check to make sure that you have received the appropriate test booklet for your standard and medium.

- unicellular organism can be seen by the naked eyes.
 (A) All (B) Some
 (C) None of the (D) Aquatic
- Identify anomalous source of energy.
 (A) Sun (B) Coal (C) Wind (D) Tidal waves
- An iron nail kept in which of the following liquids will lose its shine?
 (A) Kerosene (B) Coconut oil (C) Lime sharbat (D) Petrol
- Identify the following correlation and select the correct option.
 Fingers : Nails :: Skin : -----
 (A) Hair (B) Sweat gland (C) Melanin (D) Oil Gland
- Who am I?
 I can change the shape of a body.
 I can change direction of a moving body.
 I can move a body which is at rest.
 (A) Power (B) Energy (C) Force (D) Work
- Suhas visited different villages during vacation. The colour of the soil in each village, he found, was different. When school started, what answer would he have received from his teacher when he asked about it. The texture and colour of the soil depends upon-
 (A) the temperature variations (B) water availability
 (C) amount of humus in the soil (D) the bedrock of the soil
- Given graph shows temperature of a liquid noted at every minute while it is being heated. At what point has the transition of state started?



- (A) P (B) Q (C) R (D) S
- The part of the alimentary canal that comes after the Oesophagus and before the small intestine is -----
 (A) Liver (B) Stomach (C) Pancreas (D) Large intestine
 - Balloons P, Q, R, S are filled with water, air, sand and hydrogen gas respectively. If each of these balloons is held close to the ear and rubbed with the finger, which balloon will transmit the sound more clearly?
 (A) P (B) Q (C) R (D) S

10. Which of the following objects placed in front of light sources will have the same shadow at all positions of the object?

P - Cuboid, Q - Cylinder, R - Prism, S - sphere
(A) P (B) Q (C) R (D) S

11. Wrinkles appear on the skin of elderly people because-----

P) Decrease in subcutaneous fat.
Q) The stretched skin returns to its original position
R) The amount of fat under the skin increases
S) Stretched skin does not return to its original position.
(A) P, Q (B) Q, R (C) R, S (D) P, S

12. Identify the group of planets that do not have rings.

(A) Venus, Mars (B) Venus, Uranus
(C) Uranus, Mars (D) Mars, Saturn

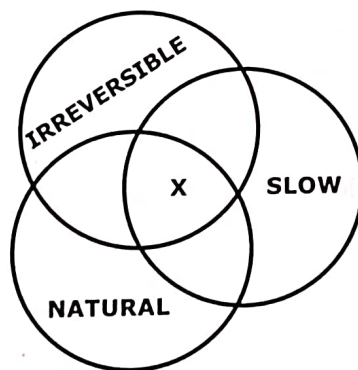
13. Which of the following plants have reticulate venation in their leaves?

(A) Wheat (B) Banana (C) Colocasia (D) Betel nut

14. Following devices convert various energies into electrical energy. Match the correct pair of devices and form of energy from which electricity is generated.

Instruments - 1) Microphone, 2) Generator
Energy - P) Light Q) Sound R) Mechanical S) Heat.
(A) 1-Q; 2-R (B) 1-Q; 2-P (C) 1-R; 2-P (D) 1-S; 2-R

15. Study the Venn diagram given below and select the correct option for 'x' phenomenon.

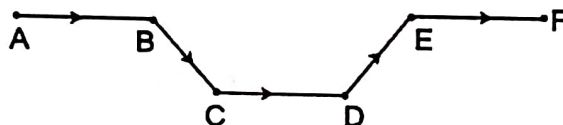


(A) a meteorite fall (B) cloud formation (C) photosynthesis (D) bomb explosion

16. Identify incorrect pair.

(A) Fibrous substances - normalize bowel movement
(B) Vitamins - improves immunity
(C) Salts - bone strength
(D) Protein - energy production

17. Dyanada buries a jute bag, a vegetable stalk and a plastic bottle in the ground. After a few days how will the rate of decomposition of these three substances be found?
 (A) Jute bag > Vegetable stalk > Plastic bottle
 (B) Vegetable stalk > Plastic bottle > Jute bag
 (C) Vegetable stalk > Jute bag > Plastic bottle
 (D) Plastic bottle > Vegetable stalk > Jute bag
18. ----- in the air destroys the ozone layer of the atmosphere.
 (A) Carbon dioxide (B) Chlorofluorocarbon (C) Carbon monoxide (D) Nitrogen dioxide
19. Using the correlation fill in the blank
 Cobalt : Magnetic :: Navsagar (Ammonium chloride) : -----
 (A) Insoluble. (B) Non-decomposable (C) Sublimative (D) Volatile
20. Which force acts on a ball thrown upwards?
 (A) magnetic force (B) muscular force
 (C) gravitational force (D) Both (B) and (C)
21. Which of the following factors is most responsible for loss of biodiversity?
 (A) Urbanization (B) Earthquake (C) Flood (D) Drought
22. A ball is moving from A to F as shown in the figure. In which phase will the speed of the ball increase?



- (A) AB (B) BC (C) CD (D) DE
23. A butterfly caterpillar sheds its skin ---
 (A) because it wants to build a cocoon (B) to adjust to the habitat
 (C) to protect from enemies (D) because its size is increasing rapidly
24. A substance is dissolved in a liquid. Which method should be used if it is to obtain both substance and liquid?
 (A) Evaporation (B) Boiling (C) Distillation (D) Centrifugal method
25. Select the correct option that tells the difference between plastic cloth and cotton cloth.

Option	Plastic Cloth	Cotton cloth
(A)	Perforated and woven	With holes and rolled like chapati
(B)	Woven with no holes	Without holes and rolled like chapati
(C)	Without holes and rolled like chapati	Woven with holes
(D)	With holes and rolled like chapati	Woven with no holes

26. Which planet must be visited to see the sunrise in the west?

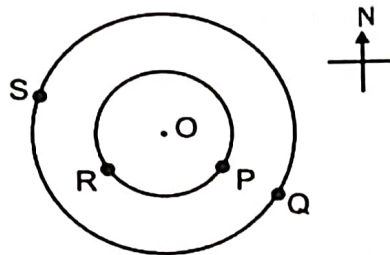
- (A) Venus (B) Mercury (C) Mars (D) Jupiter

27. In the accompanying diagram the cities P, Q, R, S are shown with respect to origin 'O'.

(Scale of figure- 1 cm= 50 km)

The inner circle is 3 cm in diameter and the outer circle has twice the diameter of inner circle.

Which city in the figure is 150 km south-east of 'O'?



- (A) P (B) Q (C) R (D) S

28. Who am I?

I make short distance travel joyful.

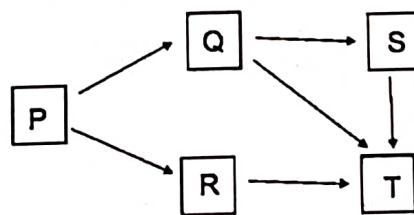
By my higher usage muscles become stronger and lung efficiency is improved.

- (A) Hand carriage. (B) Horse carriage (C) Bullock cart. (D) Bicycle

29. When a piece of metal is heated, the space between its adjacent molecules----- and hence the piece -----

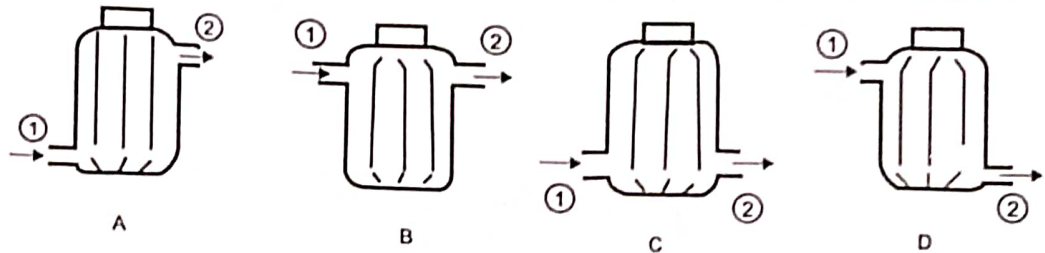
- (A) increases, contracts (B) decreases, contracts
(C) increases, expands (D) decreases, expands

30. With reference to the accompanying food web, select the appropriate option for "P" and "T".

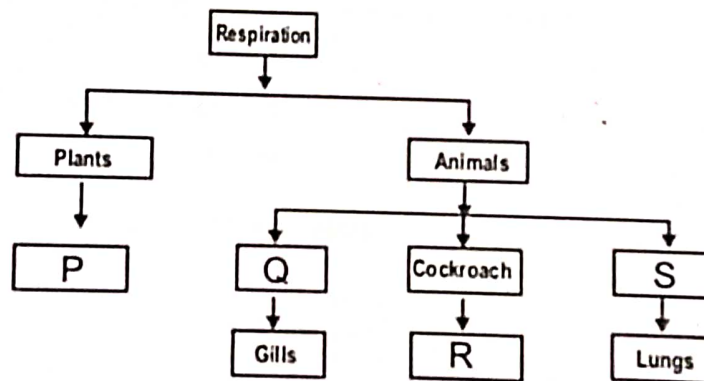


Option	P	T
(A)	Producers	Carnivores
(B)	Herbivores	Carnivores
(C)	Producers	Herbivores
(D)	Herbivores	Omnivores

31. The process of converting milk into curd is due to
- (A) acid in buttermilk (B) water in buttermilk
(C) microorganisms in buttermilk (D) salts in buttermilk
32. Two taps are connected to an elevated water storage tank as shown in the figure. (1) To fill a tank with water; (2) To distribute tank water. Which of the following connections of Tap-1 and Tap-2 depict the most appropriate set of connections?

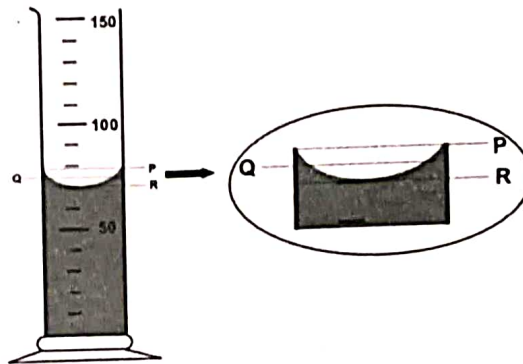


- (A) A (B) B (C) C (D) D
33. Popcorn ball undergo ----- motion in popcorn making machine while being prepared.
(A) Linear motion (B) Circular motion (C) Random Motion (D) Periodic motion
34. Which adaptation do animals have in regions with temperatures below zero degree celsius?
(A) More number of sweat glands (B) Having a thick layer of hairs on the body
(C) Longer legs (D) Having gills for respiration
35. Choose the correct option for P, Q, R, S in the following flowchart about respiration in plants and animals.



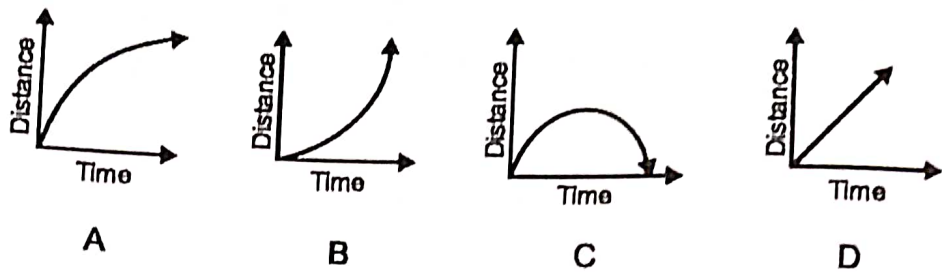
- (A) P-Leaf base, Q- Fish, R- Lung, S- Worm
(B) P-Stomata, Q- Fish, R-Trachea, S-Snake
(C) P- Stalk, Q- Worm, R- Skin, S- Mouse
(D) P- Stomata, Q- Frog, R- Lung, S- Worm
36. Who am I ?
My fibers are shiny, strong and flexible. My touch is soft and warm and I am called queen of textile fibers.
(A) Silk (B) Wool (C) Jute (D) Cotton

37. The machine is called as a force multiplier if mechanical advantage is....
 (A) < 1 (B) $= 1$ (C) > 1 (D) $= 0$
38. Which materials were used for construction (P), writing(Q) and clothing(R) in earlier times?
 (A) P- Cement sheets, Q-Boru (wooden pen), R-Rayon
 (B) P-cement, Q-Bhurjapatre, R-cotton
 (C) P-coconut leaves, Q-paper, R-wool
 (D) P-bamboo, Q-boru (wooden pen), R-cotton
39. Bones in the human skull do not move except
 (A) eye cavity (B) upper jaw (C) teeth (D) lower jaw
40. While measuring the level of water in a measuring cylinder, from which point would it be accurate to look at the level?



- (A) P (B) Q (C) R (D) P and R
41. The water chestnut (Shingada) grows in the
 (A) river (B) forest (C) lake (D) sea
42. Densities of some of the substances have been provided in the table given below. Which of these substances will sink in mercury and which one will float in alcohol respectively?
- | Substances | Density (gm/cm ³) |
|------------|-------------------------------|
| Gold | 19.3 |
| Iron | 7.9 |
| Alcohol | 0.79 |
| Mercury | 13.6 |
| Wood | 0.5 |
- (A) Iron, Wood (B) Gold, Wood (C) Gold, Iron (D) Wood, Gold
43. Identify odd one out according to type of nutrition?
 (A) Fungi (B) Bandagul (C) Amarvel (D) Sadafully (Vinca Rosa)
44. Freezing point and boiling point of water are..... and..... respectively.
 (A) 0 K; 100 K (B) 32 K; 212 K (C) 273 K; 373 K (D) None of these
45. Deforestation can cause which of the following disasters?
 (A) Flood (B) Wildfire (C) Landslide (D) Earthquake

46. Which of the following graph represents uniform linear motion of an object?



- (A) A (B) B (C) C (D) D

47. The Sun rises in City 'X' before Mumbai and the Sun rises in City 'Y' after Mumbai. In which direction are City 'X' and City 'Y' situated with respect to Mumbai?
 (A) West and East (B) East and West (C) North and South (D) South and North

48. Herons sit on the buffalo's back because -----
 (A) it's skin is thick, it doesn't know that the herons are on its back
 (B) heron has long legs.
 (C) the heron is light in weight.
 (D) the movement of the buffalo facilitates the feeding of the heron.

49. How sweating regulates body temperature?
 (A) Heat in the body is given out with sweat.
 (B) Heat from the body is used to evaporate sweat.
 (C) Excretory substances are given out with sweat.
 (D) Nitrogenous substances are given out with sweat.

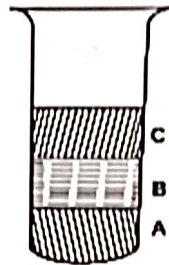
50. If the earth's axis was at right angle to the plane of the earth's orbit, then -----
 (A) day and night would not have happened
 (B) earth would not have seasons
 (C) earth would not have magnetic properties
 (D) earth would not have atmosphere

51. Select the correct statements that show the effect of winter on living organism.
 1) Trees grow new leaves
 2) The leaves of the trees fall
 3) The frog croaks.
 4) Frog lives deep underground.

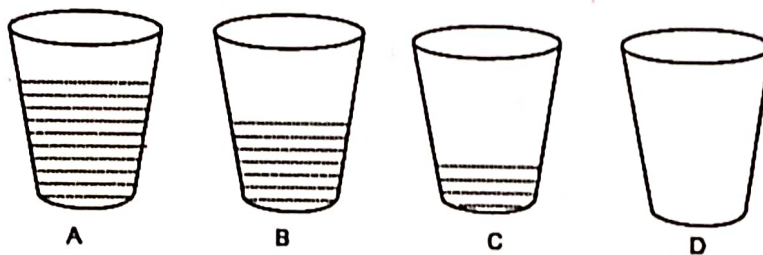
- (A) 1 (B) 3 (C) 2, 4 (D) 1, 3

52. Identify inconsistent (odd) action with respect to metals from following set of actions.
 (A) Wire drawing (B) Making sheets
 (C) Making a container (D) Forming metal alloys
53. Which of the following plant leaves do not have petiole?
 (A) Ashoka tree (B) Wheat (C) Pea (D) Fenugreek
54. What is the effect on a spring when an object is hung to a spring balance?
 (A) Potential energy increases (B) Potential energy remains the same
 (C) Potential energy decreases (D) Potential energy becomes zero
55. Which of the following fuel can produce more energy using less mass?
 (A) Uranium (B) Coal (C) Methane gas (D) CNG
56. Soil where insectivorous plants grow are deficient in -----
 (A) carbohydrates (B) proteins (C) lipids (D) vitamins
57. The planet Uranus appears to be spinning or rolling in its orbit because its axis is nearly ----- to the orbit.
 (A) perpendicular (B) inclined at 23°
 (C) inclined at 0° (D) inclined at 180°
58. Camphor shrinks in size when it is left in air. In this process -----
 (A) heat is absorbed (B) heat is released
 (C) heat is first absorbed then released (D) heat is neither absorbed nor released
59. Who is taking the most appropriate breakfast?
 (A) Sikha eats a bowlful of fruits
 (B) Madhura drinks a glass of milk and eats a sandwich of sprouted pulses
 (C) Tina eats sandwiches and potato wafers
 (D) Apoorva eats Burger
60. A force does not change object's ----
 (A) mass (B) length (C) shape (D) state of motion
61. Wheel with axle is used because -----
 (A) sliding friction is less than the rolling friction
 (B) they work as the inclined plane
 (C) rolling friction is less than the sliding friction
 (D) they help us to change the direction of force

62. Anil starts walking from point A on the circumference of a circle of radius (r) 7 cm and comes back to the same point. Identify the difference between distance traveled and displacement of Anil. (Perimeter = $44/7 \times r$)
 (A) 0 cm (B) 44 cm (C) 88 cm (D) 22 cm.
63. 'P' is part of nervous system and 'Q' is part of excretory system. Select the option that indicates the correct body part for 'P' and 'Q' respectively.
 (A) Brain, heart (B) Nerves, large intestine
 (C) Skin, Lungs (D) Spinal Cord, Kidneys
64. Following figure shows layers of liquids A, B, C taken in a test tube. If 50 grams of each liquid is taken, then which of the option given below, shows correct relation between their volumes.

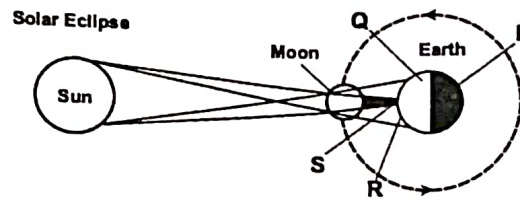


- (A) $V_A > V_B > V_C$ (B) $V_C > V_B > V_A$ (C) $V_B > V_C > V_A$ (D) $V_A = V_B = V_C$
65. Each of the four glasses below contain different quantities of water. If they are struck with same force, which glass would have the lowest pitch?



- (A) A (B) B (C) C (D) D
66. Which of the following causes turbidity of river water during monsoon?
 (A) Fungi (B) Soluble substances
 (C) Fine particulate matter (D) light and insoluble matter
67. In a cricket stadium, when the floodlights were switched on at 7:00 p.m., multiple shadows of the stumps appeared. As match progresses, the length of these shadows will ----
 (A) increase (B) decrease
 (C) first increase and then decrease (D) remain the same

68. Solar eclipse has been shown in the following figure. In which region partial solar eclipse would be visible?



- (A) P, S (B) Q, R (C) R, S (D) S, Q
69. Which type of joint in the body has a structure similar to that of a ragada used to grind the dough of idli?
 (A) Hinge joint (B) Ball and socket joint (C) Sliding joint (D) Immovable joint
70. Which of the following factors generate day and night on Earth?
 1) Earth's rotation 2) Earth's revolution 3) Earth's tilted axis
 4) Light travels in a straight line.
 (A) 1, 3 (B) 2, 3 (C) 2, 4 (D) 1, 4
71. ____ have ability to hear ultrasonic sound.
 (A) Dog (B) Bat (C) Rhinoceros (D) Human
72. Which of the following devices use a magnet?
 P- Mobile phone, Q- Binocular, R- Television set, S- Speaker set
 (A) P, Q, R (B) Q, R, S (C) P, R, S (D) P, Q, S
73. Identify the odd element with respect to nuclear energy source.
 Aluminum, Sodium, Thorium, Radium.
 (A) Aluminum (B) Sodium (C) Thorium (D) Radium
74. Evolution in living organism means -----
 (A) slow change (B) gradual change
 (C) gradual and continuous change (D) sudden change
75. Name the simple machine which is used to lift a load with the help of a rod that rests on a support.
 (A) Pully (B) Lever (C) Inclined plane (D) Wedge
76. Which properties of light causes shadows of planets ?
 P) Light contains a lot of energy Q) Light can travel in a vacuum
 R) Light travels in a straight line S) Light is reflected.
 (A) P, Q (B) Q, R (C) R, S (D) S, P

77. Which planets in the solar system can be observed transiting the Sun from the Earth?
 (A) Mars, Jupiter (B) Jupiter, Venus
 (C) Venus, Mercury (D) Mars, Mercury
78. Which of the following is natural source of light?
 P) Sun Q) Stars of the sky R) Honey Mushroom S) Angler fish
 (A) P (B) P, Q (C) P, Q, S (D) P, Q, R, S
79. Some statements about cricketers are given. Identify the false statement.
 (A) Batsman always applies force opposite to the motion of the ball.
 (B) Boller always applies force in the direction of motion of the ball.
 (C) While catching a ball, fielder applies force opposite to direction of ball.
 (D) Batsman apples force on the ball in various directions.
80. Which of the following metal is suitable for conversion of electrical energy into heat energy?
 (A) Copper (B) Silver (C) Tungsten (D) Aluminum
81. Due to the invention of the wheel.....
 (A) there was a difference in means of transport
 (B) there was a difference in the way food was eaten
 (C) man settled in one place
 (D) the arts developed
82. Find the option which has all edible stems.
 (A) potato, ginger, beet (B) onion, radish, potato
 (C) carrot, sweet potato, ginger (D) bamboo shoot, sugarcane, ginger
83. Which would be the most suitable tool to tighten this bolt?



P



Q



R



S

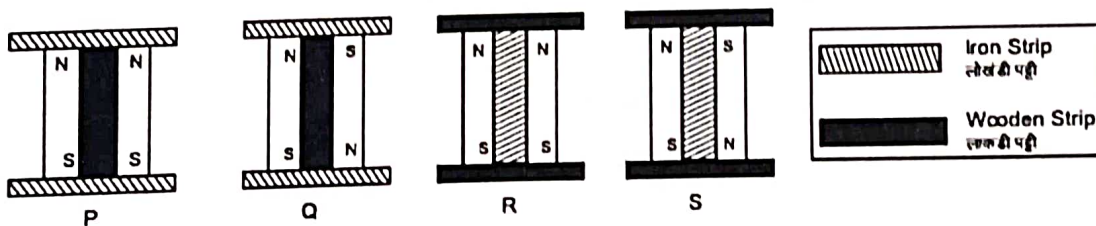
(A) P

(B) Q

(C) R

(D) S

84. What does tabla player need to do to increase the pitch of his instrument?
- (A) He tighten the skin across the tabla
 (B) He strikes the tabla harder
 (C) He changes the skin of the tabla
 (D) He sprinkles powder on skin of the tabla
85. Inverted Image formation is a characteristic of-----.
- (A) Periscope (B) kaleidoscope (C) Pin hole camera (D) Simple microscope
86. If a magnet falls from a height, its energy changes from-----
- (A) kinetic energy to potential energy (B) potential energy to kinetic energy
 (C) chemical energy to heat energy (D) solar energy to electrical energy
87. Like pole of two bar magnets placed on a table repelled from each other. Which of the following forces were **not** active in this event?
- (A) Magnetic force (B) Frictional force
 (C) Muscular force (D) Gravitational force
88. A force which requires friction to produce it, but which once produced affects other objects at a distance is called -----
- (A) muscular force (B) mechanical force
 (C) electromagnetic force (D) static electric force
89. Which of the following options correctly represents the storage of bar magnets?



- (A) P (B) Q (C) R (D) S
90. When a ray of light is incident perpendicularly on a plane mirror the angle of incidence will be -----
- (A) 180° (B) 90° (C) 100° (D) 0°

91. Who was the founder of Indian Space Research Organization (ISRO)?

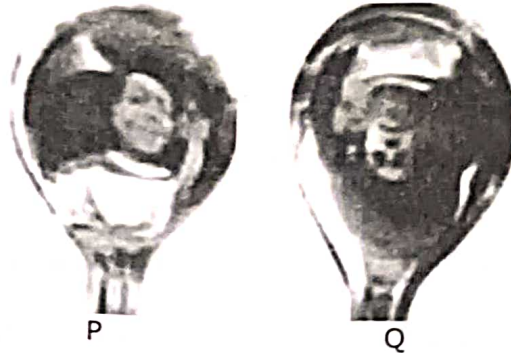
(A) Dr. Abdul Kalam

(B) Dr. Anil Kakodkar

(C) Vikram Sarabhai

(D) Rakesh Sharma

92. A new and round steel spoon is taken. The images of face are shown when viewed from both sides of spoon. Select the appropriate option regarding the surface of the spoon.



(A) P-Convex, Q-Concave

(B) P-Concave, Q-Convex

(C) P-Convex, Q-Convex

(D) P-Concave, Q-Concave

93. Identify the correct statement among the given statements regarding Lonar lake.

(A) Lonar lake is formed by volcano eruption.

(B) Lonar lake has a lot of biodiversity

(C) Naturally magnetic stones are found near Lonar lake

(D) Lonar lake is a fresh water lake.

94. Tamarind is used while preparing vegetable of Colocasia (Alu) because-----

(A) vegetable tastes better

(B) vegetable gets cooked quickly

(C) eating vegetable does not cause itching

(D) the fibrous part of the vegetable dissolves

95. What will happen if alum is swirled in salt water?

(A) Salt will settle to the bottom

(B) Salt will float in water

(C) No change will occur

(D) A salt precipitate will form

96. Given below is the top view of mosquito coil. If it is lit at both ends simultaneously, at which point will the two lighted ends meet?



- (A) P (B) Q (C) R (D) S
97. Successful Indian mission to discover existence of water on moon for the first time is ----
- (A) Chandrayaan-1
(B) Chandrayaan-2
(C) Chandrayaan-3
(D) Apollo Mission
98. Which tree bark is used as spice?
- (A) Cloves
(B) Fenugreek
(C) Cardamom
(D) Cinnamon
99. Why do the roots of mangrove plants come up from the soil?
- (A) To absorb sun light.
(B) To take oxygen.
(C) To plant the plants firmly in the soil.
(D) To search food particle.
100. An astronaut is moving in space when a big explosion occurs about 50 meter in front of him. How will the astronaut come to know about the explosion?
- (A) from the sound of explosion.
(B) from the light due to the explosion.
(C) from light and sound due to the explosion.
(D) from the vibration due to the explosion.

Space for Rough Work

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