



Primrose Schools

Affiliated to the CISCE Board for ICSE & ISC
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NATIONAL PRIMTALENT OLYMPIAD EXAMINATIONS SCIENCE

CLASS
4

Name :

Section :

Roll no :

Guidelines for the Candidates

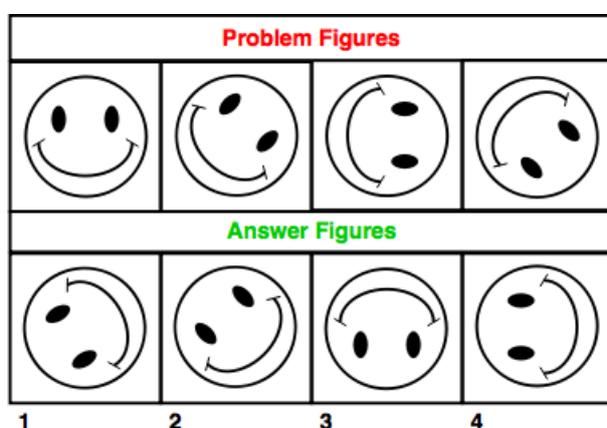
| | |
|---|---|
| 1 | Please check your Name, Class and Section on the OMR sheet provided to you. |
| 2 | In case, OMR sheet with your name is missing, please fill in information about yourself in the blank sheet provided before start of exam. |
| 3 | All questions are compulsory. There is no negative marking. Use of calculator is not permitted. |
| 4 | There is only ONE correct answer. Choose only ONE option for an answer. |
| 5 | To mark your choice of answers by darkening the circles in OMR sheet, use <u>HB Pencil or Blue/Black ball point pen</u> only. |
| 6 | Rough work should be done in the blank space provided in the booklet. |
| 7 | Return the OMR sheet to the invigilator at the end of the exam |
| 8 | Please fill in your personal details in space on the top of this page before attempting the paper |
| | |

SECTION A – LOGICAL REASONING

1. Choose the odd pair from the options given below.

- A. Aphid – Paper
- B. Termite – Wood
- C. Moth – Wool
- D. Locust – Plant

2. Find out the correct answer figure that should come next in the sequence of problem figures.



- A.1
- B.2
- C.3
- D.4

3. Complete the sequence, choosing the best option given below.
19, 25, 32, 40, ?, 59

- A. 46
- B. 49
- C. 55
- D. 51

4. Complete the sequence, choosing the best option given below.

BDA, FHE, ?, NPM

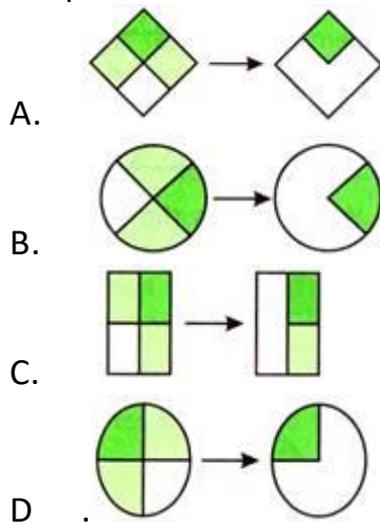
- A. JKI
- B. IMJ
- C. JLI
- D. INJ

5. Identify the figure that completes the pattern.



- A. 1
- B. 2
- C. 3
- D. 4

6. Which pair is the odd one out?



7. If the day before yesterday was Friday, what day will fall on the day after tomorrow?

- A. Friday
- B. Thursday
- C. Wednesday
- D. Tuesday

8. Look at this series:

20, 15, 20, 17, 20, ____ . What number should come next?

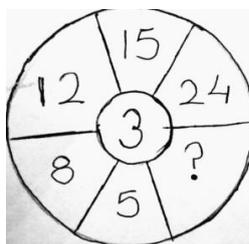
- A. 20
- B. 19
- C. 21
- D. 22

9. Find the letter which will end the first word and start the second word.

SHAR  RINT

- A. P
- B. K
- C. T
- D. Y

10. Find the number in the missing place.



- A. 11
- B. 4
- C. 13
- D. 34

SECTION B – EVERYDAY SCIENCE

11. What are the properties of matter?

- A. No mass but occupies space.
- B. Mass but occupies no space.
- C. Mass and occupies space.
- D. No mass and occupies no space.

12. Which of the following reaction is depicted in the following figure?



Water-----> Water vapour

- A. Evaporation
- B. Condensation
- C. Precipitation
- D. Freezing

13. Match the following types of teeth in Column-I with their uses in Column-II.

| Column - I | | Column - II | |
|------------|-----------|-------------|----------|
| p. | Incisors | i. | Grinding |
| q. | Canines | ii. | Cracking |
| r. | Premolars | iii. | Cutting |
| s. | Molars | iv. | Tearing |

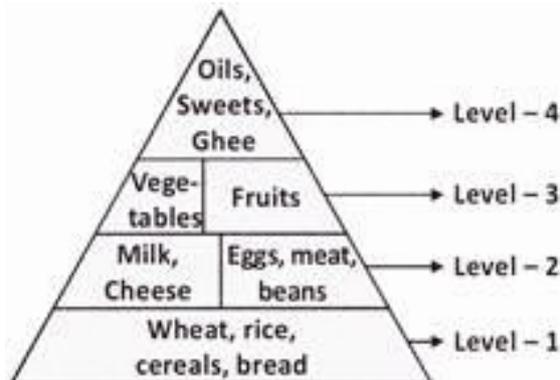
- A. p-ii, q-ii, r-i, s-iii
- B. p-ii, q-i, r-iv, s-iii
- C. p-iii, q-ii, r-iv, s-i
- D. p-iii, q-iv, r-ii, s-i

14. Which of the following food components are called protective foods?

- A. Carbohydrates
- B. Proteins
- C. Fats and carbohydrates
- D. Vitamins and minerals

15. Observe the food pyramid and answer the following question.

Food items of which level should be taken in the least quantity?



- A. Level 1
- B. Level 2
- C. Level 3
- D. Level 4

16. The man shown in the figure is obese because of the over intake of



- A. carbohydrates
- B. fats
- C. proteins
- D. vitamins

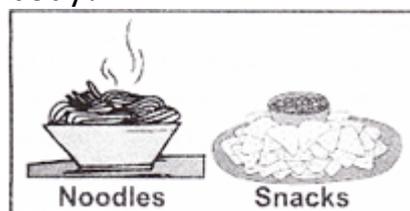
17. Growing children need more food containing _____.

- A. carbohydrate
- B. fat
- C. protein
- D. mineral

18. In a tooth, blood vessels and nerves are present in the -----.

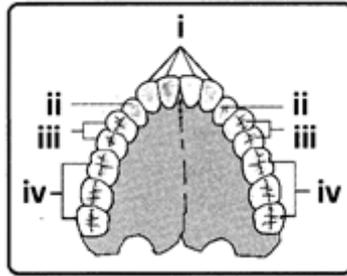
- A. crown.
- B. pulp.
- C. root.
- D. enamel

19. The figure below shows the daily diet of a primary school student. It is not a balanced diet for the child. Which of the following is needed for the child to build up his/her body?



- A. Proteins
- B. Carbohydrates
- C. Fats
- D. Fibre

20. Observe the diagrams given below and answer the question. Teeth marked i represent ___

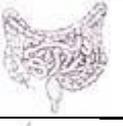


- A. incisors
- B. canines
- C. molars
- D. premolars

21. Which of the following food components are protective in function but are needed in small quantities?

- A. Proteins
- B. Vitamins
- C. Fats
- D. Carbohydrates

22. Match the following organs in Column-I with their functions in Column-II

| Column - I | | Column - II | |
|------------|---|-------------|---------------------------------|
| p. |  | i. | Saliva mixes with food. |
| q. |  | ii. | Absorption of food takes place. |
| r. |  | iii. | Secretes bile juice. |
| s. |  | iv. | Churning of food takes place. |

- A. p-iv, q-iii, r-ii, s-i
- B. p-iii, q-iv, r-ii, s-i
- C. p-ii, q-i, r-iii, s-iv
- D. p-i, q-iv, r-iii, s-ii

23. A runner participating in a race takes some glucose just before the race begins. This means that glucose _____.

- A. makes running easier.
- B. builds muscles instantly.
- C. gives energy instantly.
- D. stops sweating of the body.

24. _____ is absorbed in the large intestine.

- A. fats
- B. Water
- C. Blood
- D. Protein

25. Which of the following is the best method to kill the germs present in water?



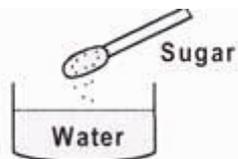
- A. Boiling the water



- B. Keeping the water in a container without lid



- C. Covering the vessel with a lid

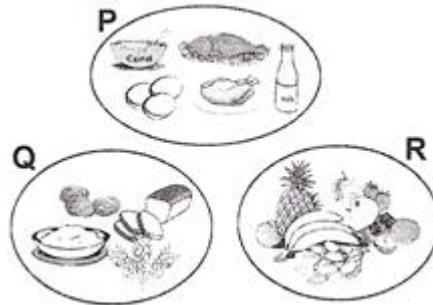


- D. Adding sugar to water

26. Which of the following is NOT true regarding the care of teeth?

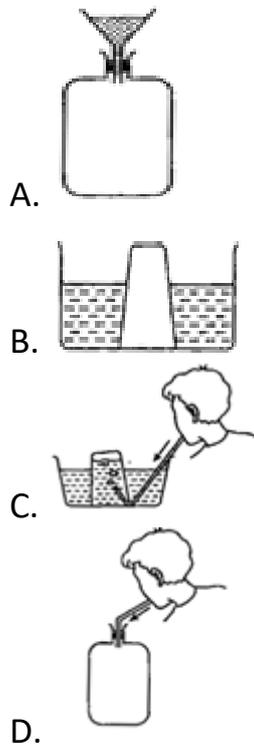
- A. Teeth get damaged by chewing food.
- B. We should not eat too many sweets.
- C. We should brush our teeth twice a day.
- D. We should eat raw fruits and vegetables.

27. Study the picture given below. Which of the following are energy giving foods?



- A. Only P
- B. Only Q
- C. Only R
- D. Both P and Q

28. Which one of the following set-ups does not show that air occupies space?

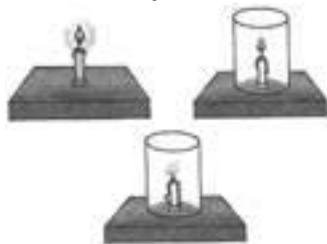


29. Arrange the following sentences in the correct order:

1. After this the food goes into large intestine, which absorbs the additional water.
2. The food goes into stomach through oesophagus.
3. The gastric juices that come from stomach walls, help the food get digested and kill the bacteria in the food if any.
4. After this food enters into small intestine so that body can absorb vitamin, minerals etc.

- A. 1,2,3,4
- B. 2,3,4,1
- C. 4,3,2,1
- D. 3,4,1,2

30. The given activity shows that _____.



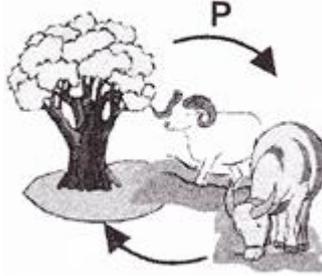
- A. Air consumes space
- B. Air rises up on getting warm
- C. Air is needed for burning
- D. Air has pressure

31. The diagram below shows the cross-section of a papaya fruit. Under suitable conditions, which part of the papaya (P, Q, R or S) will grow into a new plant?



- A. P
- B. Q
- C. R
- D. S

32. What could the arrow P possibly represent in the diagram given below?



- A. Carbon dioxide
- B. Oxygen
- C. Water
- D. Energy

33. Chlorophyll is a green pigment found in leaves. It is important to the green plants because it _____.

- A. helps the plant in reproduction.
- B. traps nitrogen in the air.
- C. traps light energy from the sun.
- D. absorbs water and mineral salts

34. Which of the following are produced by plants during the process of photosynthesis?

| |
|---------------------|
| (i) Oxygen |
| (ii) Carbon dioxide |
| (iii) Sugar |

- A. Only (i) and (ii)
- B. Only (i) and (iii)
- C. Only (ii) and (iii)
- D. (i), (ii) and (iii)

35. Where is the food stored in radish?

- A. leaves.
- B. stems.
- C. roots.
- D. flowers.

36. Which one of the following trees is called the Christmas tree?

- A. Mango tree
- B. Pine tree
- C. Fir Tree
- D. None of these

37. The spines of cacti are modified into _____



- A. Leaf
- B. Stem
- C. Root
- D. Fruit

38. Contamination of unwanted substances into water is called _____.

- A. Air pollution
- B. Water pollution
- C. Land pollution
- D. None of these

39. Which system does the heart belongs to?

- A. Digestive
- B. Respiratory
- C. Circulatory
- D. Excretory

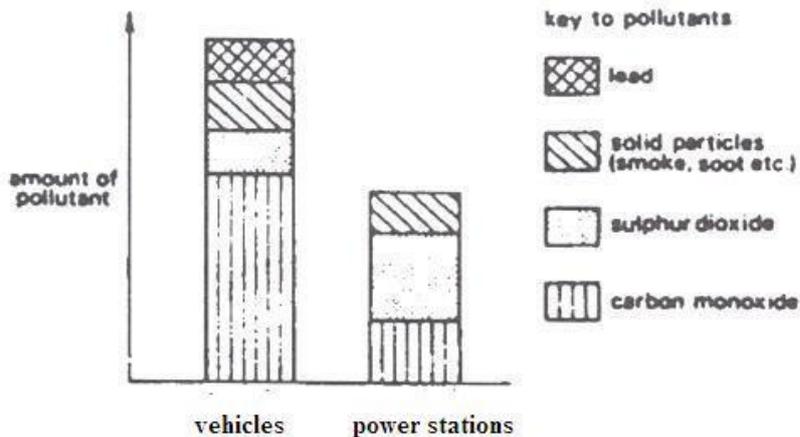
40. Which gas in the air is represented in Part A?



- A. Nitrogen
- B. Oxygen
- C. Carbon dioxide
- D. Water vapour

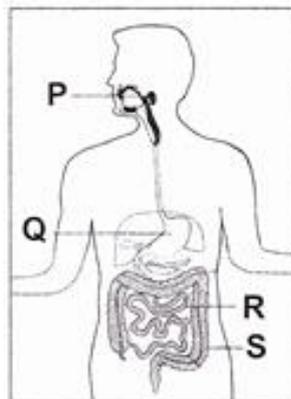
SECTION C – ACHIEVERS SECTION

41. The bar chart shows the amount of pollution, in the atmosphere, produced by petrol driven vehicles and from coal-burning power stations. Which source of pollution produces the most carbon monoxide?



- A. Vehicles
- B. Power stations
- C. Both [a] and [b]
- D. Equal in both.

42. The diagram given below shows the human digestive system. In which part (P, Q, R or S) is food digested and passed into the blood cells?



- A. P
- B. Q
- C. R
- D. S

43. Appu set up the following model to simulate the digestive system by using a thin long tube and banana. She made pieces of banana as balls and allowed it to pass through the tube as shown in the given figure. Which part of the alimentary does 'X' represent?



- A. Windpipe
- B. Oesophagus
- C. Small intestine
- D. Large intestine

44. A teacher while taking a class on teeth said that you have four sets of teeth - 8 incisors, 4 canines, 8 premolars and 12 molars. He is talking about

- A. Temporary teeth.
- B. Permanent teeth.
- C. Teeth of a child.
- D. both [a] and [c]

45. A plant was kept in a dark room for a week. When its leaves were tested with iodine solution, it did not show the presence of starch. From this experiment we can conclude that _____ is required for photosynthesis.

- A. sunlight
- B. iodine
- C. starch
- D. darkness

46. Read the passage and answer the questions below:

Though our body provides antibodies to fight against infection, we should also try to keep ourselves away from diseases. The most important thing for that is to stay clean. We should keep our body as well as our surrounding clean. We should never let the water collect at any open place as it provides the mosquitos a place to bread. Mosquitoes spread the disease called malaria. We should never keep the eatables without covering them. The flies coming from dirty places sit on the uncovered food and spread infections. By eating contaminated food we can fall ill.

We can stay away from diseases by.....

- A. applying beauty products
- B. going to the doctor daily
- C. keeping our selves clean
- D. doing nothing

47. Which process is the opposite of evaporation?

- A. Melting
- B. Freezing
- C. Condensation
- D. Boiling

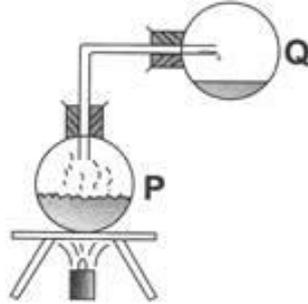
48. A scientist observed a sudden increase in the number of algae in a lake in a few days. The reason behind it could be that _____.

- A. Water cycle in the area got unbalanced
- B. Electronic wastes were being dumped in a nearby area
- C. A factory with heavy smoke discharge has been established nearby
- D. Heavy amount of chemical fertilizers were being used in a nearby field.

49. What determines if an object will sink or float?

- A. Mass of that object
- B. Volume of that object
- C. Density of that object
- D. Weight of that object 2

50. Examine the experiment as shown in the given figure.
400 ml of water in flask P is heated until it is completely evaporated. The amount of water collected in flask Q will be about _____.



- A. 200 ml
- B. 250 ml
- C. 300 ml
- D. 400 ml