



World Science Olympiad (WSO)

Standard: VII

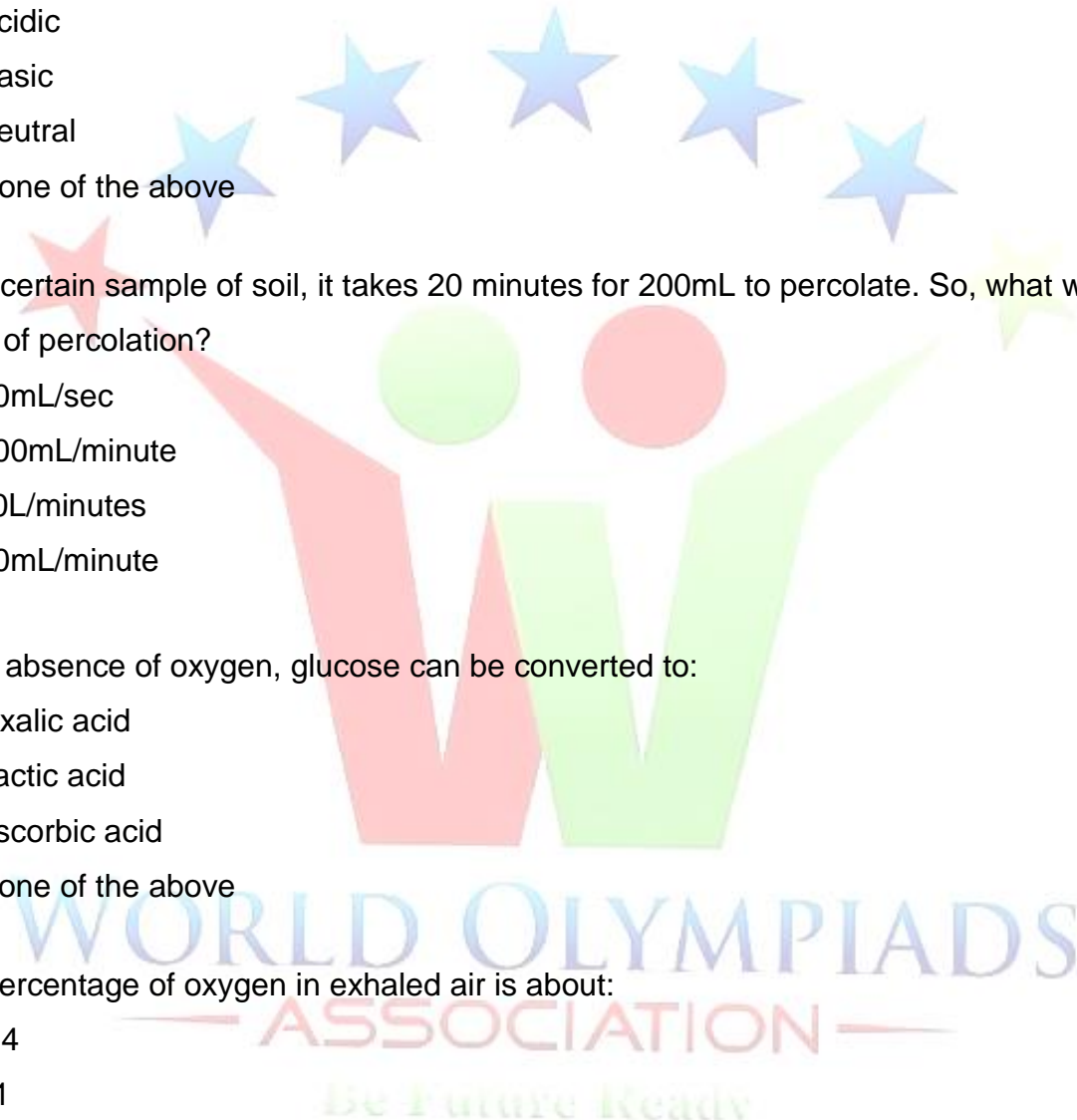
Instructions:

*There are three sections and total 40 questions.
Attempt all the questions.
There is no negative marking for the wrong answers.
Time: 90 minutes*

Doers Section

No. of Questions:30
Marks for each Question: 2

- The mode of nutrition in which organisms derive their nutrition from dead and decaying matter is known as:
 - Saprotrophic
 - Autotrophic
 - Heterotrophic
 - Symbiotic relationship
- 'Oesophagus' is another name for:
 - Buccal Cavity
 - Nose
 - Food Pipe
 - Veins
- A temperature of 0°C on a Fahrenheit scale will be:
 - 32°F
 - 90°F
 - 40°F
 - -40°F

4. The reason for wind is:
- When leaves of trees shake
 - Due to uneven heating of different parts of earth
 - Ocean
 - Mountains
5. The nature of salt is always:
- Acidic
 - Basic
 - Neutral
 - None of the above
6. For a certain sample of soil, it takes 20 minutes for 200mL to percolate. So, what will be the rate of percolation?
- 10mL/sec
 - 100mL/minute
 - 10L/minutes
 - 10mL/minute
7. In the absence of oxygen, glucose can be converted to:
- Oxalic acid
 - Lactic acid
 - Ascorbic acid
 - None of the above
8. The percentage of oxygen in exhaled air is about:
- 0.4
 - 21
 - 16.4
 - 78.6
9. Type of blood vessel carrying oxygen-rich blood from the heart to all parts of the body is known as:
- Arteries
 - Veins
 - Vena Cava
 - None of the above
- 

10. If a car travels a distance of 9km in 30 minutes. What is the speed of the car?

- a. 9m/s
- b. 18m/s
- c. 10m/s
- d. 5m/s

11. The electric bell is the application of :

- a. The electric effect of electric current
- b. The chemical effect of electric current
- c. The magnetic effect of electric current
- d. The heating effect of electric current

12. The process of seeping of water into the ground is called:

- a. infiltration
- b. water cycle
- c. condensation
- d. radiation

13. In which category of microorganism does Rhizobium fall?

- a. Virus
- b. Bacterium
- c. Protozoa
- d. Corona

14. A device used to measure the temperature is known as:

- a. Mercury
- b. Transistor
- c. Thermometer
- d. none of these

15. Heat flow in fluid happens through:

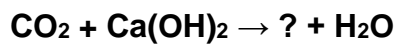
- a. Conduction
- b. Convection
- c. Radiation
- d. Convolution

16. Which acid is present in ant bites?

- a. Ascorbic acid
- b. Oxalic acid
- c. Lactic acid
- d. Formic acid



17. Complete the reaction



- a. CO_3
- b. Ca(CO)_2
- c. Ca(CO)_3
- d. None of the above

18. Choose the correct statement.

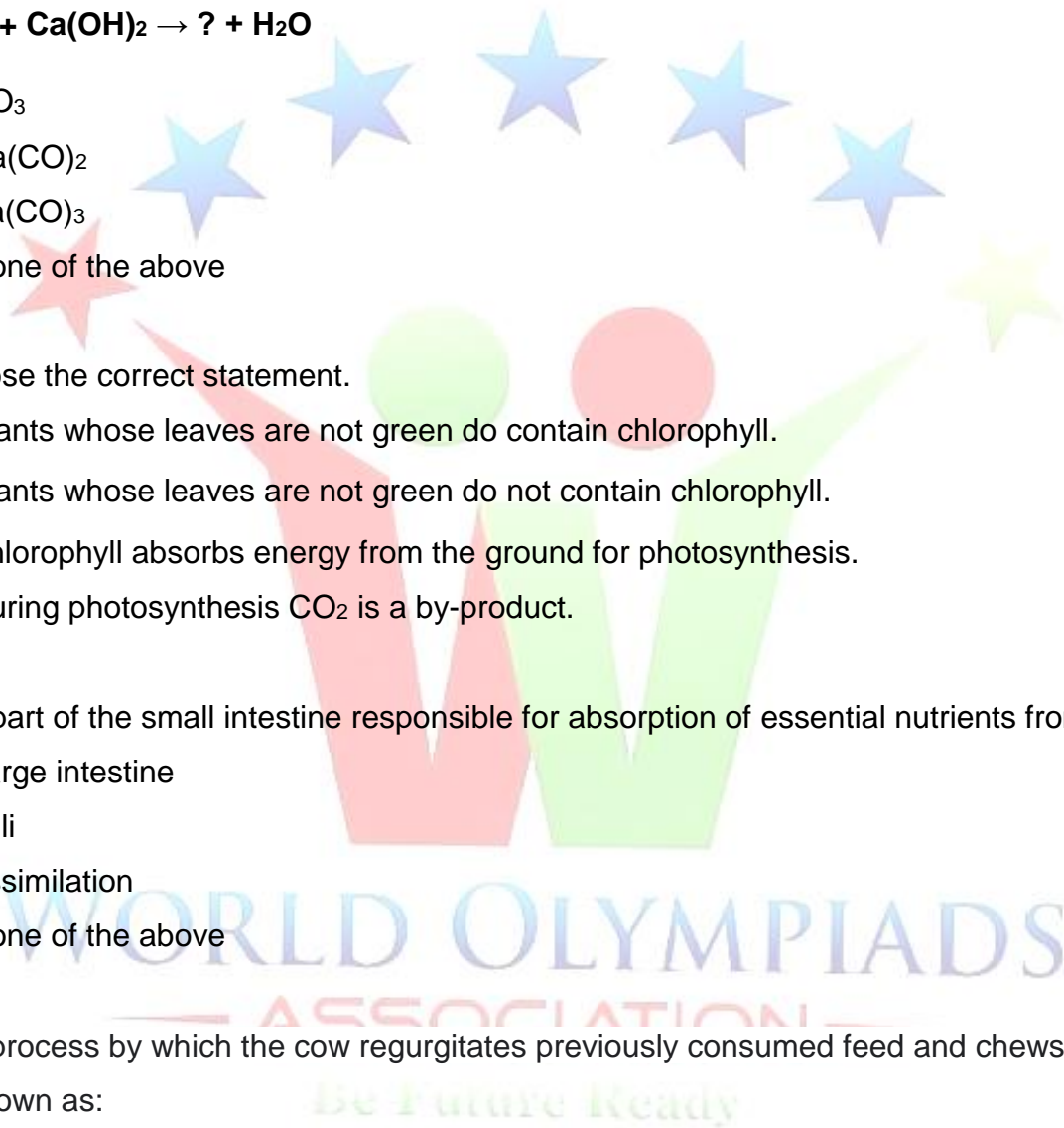
- a. Plants whose leaves are not green do contain chlorophyll.
- b. Plants whose leaves are not green do not contain chlorophyll.
- c. Chlorophyll absorbs energy from the ground for photosynthesis.
- d. During photosynthesis CO_2 is a by-product.

19. The part of the small intestine responsible for absorption of essential nutrients from food is:

- a. Large intestine
- b. Villi
- c. Assimilation
- d. None of the above

20. The process by which the cow regurgitates previously consumed feed and chews it further is known as:

- a. Chewing
- b. Ingestion
- c. Rumination
- d. Egestion



21. The average weather pattern taken over a long time, say 25 years, is called:

- a. Forecast
- b. Good weather
- c. Monsoon
- d. Climate

22. Choose the correct statement.

- a. Air don't exert pressure.
- b. Air expands on cooling and contracts on heating.
- c. Cooler air tends to go upward.
- d. Warm air rises up.

23. Insects like Cockroach have a network of air tubes for gas exchange known as:

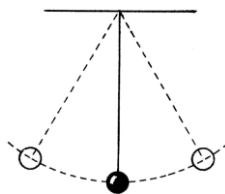
- a. Xylem
- b. Phloem
- c. Tracheae
- d. None of these

24. What is the function of WBC in the blood?

- a. To carry oxygen to different parts of the body
- b. To provide immunity to the body
- c. There is no use of WBC.
- d. WBC is not present in the blood.

25. If a pendulum completes 20 oscillations in 2 seconds what is its time period?

- a. 0.10 seconds
- b. 0.01 seconds
- c. 0.05 seconds
- d. 0.50 seconds



26. Lateral inversion can be observed in which mirror?

- a. Plane mirror
- b. Concave mirror
- c. Convex mirror
- d. All of the above

27. Which one of the following is a chemical change?

- a. Cutting paper
- b. Folding paper
- c. Burning paper
- d. None of the above

28. Which of the following place in India is most likely to be hit by a cyclone?

- a. Puri
- b. New Delhi
- c. Patna
- d. Bangalore

29. Find the next number in the series.

23, 30, 38, 48, 62

- a. 114
- b. 94
- c. 84
- d. 74

30. Choose the odd one out from below.

Salivary Gland, Pancreas, Lungs, Liver

- a. Salivary Gland
- b. Pancreas
- c. Lungs
- d. Liver

Executors Section

No. of Questions: 5
Marks for each question: 3

31. Choose the correct statement.

- a. PITCHER plant is insectivores and CASCUTTA is a parasite.
- b. PITCHER plant is parasite and CASCUTTA is insectivores
- c. PITCHER plant is insectivores and CASCUTTA is also insectivores.
- d. PITCHER plant is a parasite and CASCUTTA is also a parasite.

32. The steps involved in the processing of fibre into wool can be ordered as:

- a. Shearing → Sorting → Scouring → Cleaning of burrs → Dyeing → Rolling
- b. Shearing → Scouring → Sorting → Cleaning of burrs → Dyeing → Rolling
- c. Shearing → Scouring → Sorting → Cleaning of burrs → Dyeing → Rolling
- d. Shearing → Scouring → Sorting → Cleaning of burrs → Rolling → Dyeing

33. Choose the correct statement.

- a. Acid turns red litmus blue. Bases turn red litmus blue.
- b. Acid turns blue litmus red. Bases turn blue litmus red.
- c. Acid turns blue litmus red. Bases turn red litmus blue.
- d. Acid turns red litmus blue. Bases turn blue litmus red.

34. The chemical formula of iron rust is:

- a. Fe_2O_5
- b. Fe_2O_4
- c. Fe_2O_3
- d. Fe_2O_2



35. What happens during inhalation?

- a. Ribs move up and outwards and the diaphragm moves down
- b. Ribs move down and inwards and the diaphragm moves down
- c. Ribs move up and outwards and the diaphragm moves up
- d. Ribs move down and inwards and the diaphragm moves up

Performers Section

No. of Questions: 5
Marks for each question: 5

36. Match the different glands present in the human body with their location in the body.

Name of the Gland		Location in the Body	
A	Pituitary gland	I	Throat
B	Thyroid	II	Brain
C	Adrenal	III	Pelvis Region
D	Ovaries	IV	Above Kidney

- a. A-I, B-II, C-III, D-IV
- b. A-II, B-I, C-IV, D-III
- c. A-IV, B-III, C-II, D-I
- d. A-III, B-IV, C-I, D-II

37. How many statements are correct:

- I. Light travels along a straight line
- II. An image which can be obtained on the screen is called a real image
- III. An image formed by a plane mirror is always real, erect, latterly inverted and of the same size.
- IV. A convex mirror always forms a real image.
- V. A concave lens always form a real image.

- a. 2
- b. 3
- c. 4
- d. 5

38. Human digestive track order in the correct sequence is:

- a. Buccal cavity → oesophagus → stomach → small intestine → large intestine → rectum → anus
- b. Buccal cavity → oesophagus → stomach → large intestine → small intestine → rectum → anus
- c. Buccal cavity → oesophagus → stomach → small intestine → large intestine → anus → rectum
- d. Buccal cavity → stomach → oesophagus → small intestine → large intestine → rectum → anus

39. A car moves with a speed of 40 km/h for 15 minutes and then with a speed of 60 km/h for the next 15 minutes. The total distance covered and overall speed of the car is:

- a. 25km, 25km/h
- b. 25km, 50km/h
- c. 50km, 25km/h
- d. 50km, 50km/h

40. Match the acids present in the first column to their potential source in column B

Name of the Acid		Source	
A	Acetic acid	I	Spinach
B	Citric acid	II	Curd
C	Lactic acid	III	Oranges, Lemons
D	Oxalic acid	IV	Vinegar

- a. A-I, B-II, C-III, D-IV
- b. A-II, B-I, C-IV, D-III
- c. A-IV, B-III, C-II, D-I
- d. A-III, B-IV, C-I, D-II