

**CBSE
Class VII
Science Term 1
Sample Paper - 2**

Biology

Q1. Which of the following does not produce any digestive enzymes?

- (a) Pancreas
- (b) Stomach
- (c) Small intestine
- (d) Large intestine

Sol. (d)

The large intestine does not produce any enzymes, and it is known for the absorption of water.

Q2. Digestion of cellulose in grass – eating animals occurs with the help of ____.

- (a) Enzymes
- (b) Bacteria
- (c) Hormones
- (d) Physical contraction of rumen

Sol. (b)

Cellulose in grass – eating animals is digested in the caecum with the help of bacterial actions.

Q3. Food is ___ in the food vacuole in amoeba.

- (a) Moved
- (b) Transformed
- (c) Digested
- (d) Assimilated

Sol. (c)

Food is digested in the food vacuole in amoeba.

Q4. Plants obtain carbon dioxide from air through ____.

- (a) Stomata in leaves
- (b) Xylem of root
- (c) Leaf veins
- (d) Stem surface

Sol. (a)

Plants obtain carbon dioxide from air through stomata. Gaseous exchange in plants occurs through stomata.

Q5. Which of the following transport water and minerals from the soil to the leaves?

- (a) Xylem vessels
- (b) Sieve tubes
- (c) Parenchymatous cells
- (d) Companion cells

Sol. (a)

Water and minerals are transported to the leaves by the xylem vessels that run like pipes throughout the root system, the branches and the leaves. They form a continuous path for the passage form a continuous path for the passage of water and minerals to each the leaves.

Q6. The colour of chlorophyll in plants is ____

- (a) Red
- (b) Green
- (c) Yellow
- (d) Orange

Sol. (b)

Chlorophyll is a green pigment present in plants.

Q7. During transpiration, loss of water from plant occurs through ____.

- (a) Roots
- (b) Stem
- (c) Stomata
- (d) Flower

Sol. (c)

Q8. The chief function of the lymph node is to ____

- (a) Produce white blood cells
- (b) Destroy old red blood cells
- (c) Produce hormone
- (d) Destroy pathogens

Sol. (a)

Q9. The circulatory system consists of the heart, arteries, veins and ____.

- (a) Capillaries
- (b) Neurons
- (c) Muscle fibres
- (d) Trachea

Sol. (a)

Q10. The flower that contains either the pistil or the stamens is called a ____.

- (a) Bisexual flower
- (b) Complete flower
- (c) Unisexual flower
- (d) Perfect flower

Sol. (c)

Q11. The flowers that contain both stamens and pistil are called ____

- (a) Unisexual flowers
- (b) Pistil late flower
- (c) Staminate flowers
- (d) Bisexual flowers

Sol. (d)

Q12. ____ introduce variability.

- (a) Spore formation
- (b) Vegetative propagation
- (c) Sexual reproduction
- (d) Fragmentation

Sol. (c)

Q13. Which of the following is the correct sequence of food chain?

- (a) Zebra → Lion → Grass
- (b) Lion → Zebra → Grass
- (c) Grass → Lion → Zebra
- (d) Grass → Zebra → Lion

Sol. (d)

Q14. Water droplets that are too heavy to float make ____.

- (a) Clouds
- (b) Rains
- (c) Fog
- (d) Dews

Sol. (b)

Q15. Moisture that falls to the ground is called ____

- (a) Condensation
- (b) Precipitation
- (c) Evaporation
- (d) Clouds

Sol. (b)

Moisture that falls to the ground is called precipitation, and is mostly in the form of rainfall.

Q16. About __ human beings have no access to safe drinking water.

- (a) One million
- (b) One billion
- (c) Ten billion
- (d) Hundred billion

Sol. (b)

It has been reported that more than one billion of our fellow human beings have no access to safe drinking water.

Q17. Arrange the following in the correct sequences as they are performed for water treatment in a waste water plant.

- (i) Removal of large objects
 - (ii) Air is pushed
 - (iii) Addition of chemicals
 - (iv) Removal of grits and sand.
 - (v) Removal of solids like faeces.
- (a) (i), (ii), (iii), (iv) and (v)
 - (b) (i), (iv), (v), (ii) and (iii)
 - (c) (i), (iii), (v), (iv) and (ii)
 - (d) (v), (iv), (i), (ii) and (iii)

Sol. (c)

Q18. Government has not been able to provide complete underwater drainage system to all, because

- _____
- (a) Materials for construction of toilets are unavailable
 - (b) Building toilet costs a lot of money
 - (c) Of improper planning
 - (d) Of protesting people

Sol. (b)
Government has not been able to provide complete underwater drainage system to all, because building toilets costs a lot of money. Besides, illiteracy and a lack of social awareness among large sections of the population also add to this problem.

- Q19.** What is the importance sneezing?
- (a) Sneezing helps in increasing the breathing rate
 - (b) Sneezing expels the foreign particles from the inhaled air
 - (c) Sneezing helps in increasing the heart rate
 - (d) Both a and c

Sol. (b)
When we inhale, the particles get trapped in the hair present in our nasal cavity. However, sometimes these particles may get past the hair in the nasal cavity. Then they irritate the lining of the cavity, as a result of which we sneeze. Sneezing expels these foreign particles from the inhaled air and a dust free, clean air enters our body.

- Q20.** Why the appearance of lime water in a test tube changes when we blow into it for a few times?
- (a) The test tube may contain impurities which changes the appearance
 - (b) Lime water contains carbon dioxide which changes its appearance upon blowing
 - (c) Carbon dioxide in our exhaled air changes the appearance of lime water
 - (d) Oxygen in our exhaled air changes the appearance of lime water

Sol. (c)
Carbon dioxide in our exhaled air changes the appearance of lime water

Chemistry

- Q21.** Acidity, if not controlled, can cause ____
- (a) Mouth ulcers
 - (b) Stomach ulcers
 - (c) Diarrhea
 - (d) Cholera

Sol. (b)
Acidity, if not controlled, can cause stomach ulcers. The excess acid damages the stomach walls and causes ulcers.

Q22. Which of the following is not an example of an indicator??

- (a) Litmus solution
- (b) Turmeric solution
- (c) Red cabbage juice
- (d) Soap water

Sol. (d)

Soap water is basic solution, but not an indicator. Turmeric, red cabbage juice and litmus are indicators.

Q23. ____ change their colour and help to identify acidic and basic solutions.

- (a) Metal salt solutions
- (b) Indicators
- (c) Electrolytes
- (d) Non – metallic liquids

Sol. (b)

Indicators change their colour and help in identifying the acidic or basic nature of a solution.

Q24. Which of the following breed of sheep is found in Jammu and Kashmir?

- (a) Rampur Bushair
- (b) Bakharwal
- (c) Nail
- (d) Lohi

Sol. (b)

Bakharwal breed of sheep is found in Jammu and Kashmir.

Q25. The process of removing the fleece of sheep along with a thin layer of skin is called ____

- (a) Shaving
- (b) Shearing
- (c) Sorting
- (d) Scouring

Sol. (b)

The process of removing the fleece of sheep along with a thin layer of skin is called shearing.

Q26. Silk cloth is highly prized because is its ____.

- (a) Transparency
- (b) Shimmering appearance

- (c) Durability
- (d) Feather like lightness

Sol. (b)
Silk clothes refract light falling on themselves at different angles and give a shimmering appearance. It is on account of his shimmering appearance that silk cloth is highly prized.

Q27. Which of the following not found in tropical rain forests?

- (a) Snakes
- (b) Penguins
- (c) Tigers
- (d) Insects

Sol. (b)
Penguins are not found in tropical rain forests. They are found in the Polar Regions.

Q28. During day, temperature is maximum ____

- (a) In the morning
- (b) In the evening
- (c) At noon
- (d) At afternoon

Sol. (c)

Q29. The ____ sequence of soil horizons found at a given location is collectively called the soil profile.

- (a) Lateral
- (b) Horizontal
- (c) Vertical
- (d) Parallel

Sol. (c)

Q30. ____ is the least porous soil.

- (a) Clay
- (b) Sand
- (c) Loam
- (d) Soil with more gravel

Sol. (a)
Clay particles, being much smaller, bind together tightly, leaving little space, and are, thus, less porous.

Q31. ____ is a mixture of sand, silt and clay.

- (a) Humus
- (b) Loam
- (c) Soil
- (d) Rock

Sol. (b)

Q32. ____ acid is produced in our stomach.

- (a) Hydrochloric
- (b) Sulphuric
- (c) Acetic
- (d) Carbonic

Sol. (a)

Hydrochloric acid is produced in our stomach. The stomach walls produce gastric juices and hydrochloric acid is one of them.

Q33. Which of the following is not a stage in the life cycle of a silk moth?

- (a) Egg
- (b) Caterpillar
- (c) Tadpole
- (d) Pupa

Sol. (c)

Tadpole is not a stage in the life cycle of a silk moth. The stages of development in a silk worm are: eggs → caterpillar → pupa → moth.

Q34. Which of the following is/are true when milk changes into curd?

- (i) Its state is changed from liquid to semi solid.
- (ii) It changes colour.
- (iii) It changes taste.
- (iv) The change cannot be reversed.

Choose the correct option from below :

- (a) (i) and (ii) are correct
- (b) (ii) and (iii) are correct
- (c) (i), (iii) and (iv) are correct
- (d) (i) to (iv) are correct

Sol. (c)

- Q35.** A man painted his main gate made up of iron, to
- (i) Prevent it from rusting.
 - (ii) Protect it from sun
 - (iii) Make it look beautiful.
 - (iv) Make it dust free.
- Which of the above statement(s) is/are correct?
- (a) (i) and (ii)
 - (b) (ii) and (iii)
 - (c) only (ii)
 - (d) (i) and (iii)

Sol. (d)

- Q36.** Iron pillar near the Qutub Minar in Delhi is famous for the following facts. Which of these facts is responsible for its long stability?
- (a) It is more than 7 metres high.
 - (b) It weighs about 6000 kg.
 - (c) It was built more than 1600 years ago.
 - (d) It has not rusted after such a long period

Sol. (d)

- Q37.** The technique that separates a liquid from an insoluble solid by carefully pouring off the liquid is called ____.
- (a) Evaporation
 - (b) Decantation
 - (c) Filtration
 - (d) Distillation

Sol. (b)

Decantation is the process by which, a clear liquid obtained after sedimentation, is transferred into another container, without disturbing the settle particles.

- Q38.** Acids are ____
- (a) Corrosive
 - (b) Pleasant
 - (c) Harmless
 - (d) Insoluble in water

Sol. (a)

Acids are corrosive, harmful unpleasant and are soluble in water.

Q39. Which option best describes a tropical region?

- (a) Hot and humid
- (b) Moderate temperature, heavy rainfall
- (c) cold and humid
- (d) hot and dry

Sol. (b)

Q40. The type of soil suitable for growing masoor dal is

- (a) Sandy soil
- (b) Loamy soil
- (c) Clayey soil
- (d) Bricks

Sol. (b)

Physics

Q41. The stem point is equal to ____ °C

- (a) 0
- (b) 90
- (c) 100
- (d) 45

Sol. (c)

The boiling point of water is the steam point and is equal to 100°C

Q42. Igloos are double walled so as to prevent ____

- (a) Radiation
- (b) Conduction
- (c) Convection
- (d) Reflection

Sol. (b)

The air trapped in between the double wall is a poor conductor of heat. So, it prevents the loss of heat due to conduction and the people inside can feel warm.

Q43. Liquids expand ____ solids but ____ gases.

- (a) More than, less than
- (b) Less than, more than
- (c) More than, same as
- (d) Same as, more than

Sol. (a)
Molecules of liquids are far apart than in solids while the molecules of liquids are far apart than in gases. Thus, liquids, expand more than solids and gases expand more than liquids.

Q44. An electromagnet is used in an electric ____.

- (a) Bell
- (b) Fuse
- (c) Bulb
- (d) Cell

Sol. (a)

Q45. ____ is a temporary magnet.

- (a) A bar magnet
- (b) An electromagnet
- (c) A transistor
- (d) An electric fuse

Sol. (b)

Q46. The amount of heat produced in a wire depends on the material, thickness and its ____.

- (a) Insulation
- (b) Length
- (c) Volume
- (d) Breadth

Sol. (b)

Q47. An electric cell is diagrammatically represented by ____

- (a) One longer and one shorter lines parallel to each other
- (b) Two lines of equal length parallel to each other
- (c) Point and one line
- (d) Only one line

Sol. (a)

An electric cell in a circuit is diagrammatically represented by one longer line and one shorter line parallel to each other.

Q48. In an electric circuit ____ work as sources of electricity.

- (a) Switch
- (b) Wires
- (c) Cell
- (d) Bulb

Sol. (c)

Q49. ____ is used to read very small print.

- (a) Magnifying glass
- (b) Concave mirror
- (c) Convex mirror
- (d) Plane mirror

Sol. (a)

Q50. When light is reflected from the surface of a compact disc, we see different colours because sunlight is a mixture of ____ colours.

- (a) Six
- (b) Three
- (c) Four
- (d) Seven

Sol. (d)

Q51. Which among the following is not an application of a concave mirror?

- (a) Reflectors of torches
- (b) Reflectors of the headlights of cars
- (c) Dentist's mirror
- (d) Magnification of sound

Sol. (d)

Q52. The image formed by a plane mirror is ____

- (a) Inclined
- (b) Inverted
- (c) Tilted
- (d) Erect

Sol. (d)

Q53. Cyclones can often survive for a long period of time, as much as ____.

- (a) 1 day
- (b) 3 days
- (c) 4 days
- (d) 2 – 3 weeks

Sol. (d)

Cyclones can often survive for a long period of time, as much as two to three weeks.

Q54. A balloon filled with air gets a shape because the air inside it exerts ____ pressure on the balloon which is ____ than the air pressure outside it.

- (a) Inward, less
- (b) Inward, greater
- (c) Outward, greater
- (d) Outward, less

Sol. (c)

As the air pressure inside the balloon is greater than the air pressure outside the balloon, the balloon gets a shape.

Q55. When air is ____ it expands and occupies more space.

- (a) Heated
- (b) Cooled
- (c) Having more matter
- (d) Involved with many gases

Sol. (a)

Q56. An important condition for formation of cyclone is high ____.

- (a) Density of air
- (b) Temperature
- (c) Viscosity
- (d) Speed of air

Sol. (b)

An important condition for formation of cyclone is high temperature. High evaporation depends on warm waters where only tropical cyclones are developed. Thus, the temperature of water should be above 27° C for a consider depth.

Q57. The objects which do not allow the heat to pass thorough them are called ____.

- (a) Conductors
- (b) Convertor's
- (c) Radiators
- (d) Insulators

Sol. (d)

The objects which do not allow the heat to pass through them are called insulators.

Q58. The odometer of a car reads 57321.0 km when the clock shows the time 08:30 AM. If at 08:50 AM, the odometer reading has changed to 57336.0 km, Calculate the speed of the car in km/hr during this time.

- (a) 45 km/hr
- (b) 90 km/hr

- (c) 22.5 km/hr
- (d) 15 km/hr

Sol. (a)

Time taken = 20 min = $20/60$ hr = $1/3$ hr

Distance travelled = 15 km

So, speed = Distance/time = 45 km/hr

Q59. What are the points that should be kept in mind while choosing scale for drawing a graph?

- (a) The difference between the highest and the lowest values of each quantity.
- (b) The intermediate values of each quantity to mark the values on the graph.
- (c) To utilize the maximum part of the paper on which graph is to be drawn.
- (d) All of the above

Sol. (d)

Q60. Two boys ran in a race of 10 km. First boy ran with a constant speed 2 km/h for the whole race, while the second boy ran at 1 km/h for half of the race and at 5 km/h for the other half. Who won the race?

- (a) First boy
- (b) Second boy
- (c) Both reaches at the same time
- (d) Condition given is not feasible

Sol. (a)

Total time taken by first boy = $10/2 = 5$ h.

Total time taken by second boy = $(5/1) + (5/5) = 5 + 1 = 6$ h.

Thus first boy won the race.