

CBSE
Class VII
Science Term 2
Sample Paper - 3

Biology

- Q1. How much of urine is passed out from the body of a normal adult in 24 hours?
- (a) 1 Liter
 - (b) 2 Liters
 - (c) 1 – 1.8 Liters
 - (d) 1.4 – 2 Liters

- Q2. Which one is not a feature of arteries?



- (a) Arteries are thick walled
 - (b) Arteries carry oxygenated blood
 - (c) Blood in the arteries flow at low pressure
 - (d) Arteries have elastic walls
- Q3. Mammalian erythrocytes (red blood cells) have short life span due to absence of



- (a) Endoplasmic reticulum
 - (b) Nucleus
 - (c) Golgi complex
 - (d) Mitochondria
- Q4. Vagus, the tenth cranial nerve, arises from the medulla and carries both afferent and efferent fibers.
Stimulation of the vagus nerve will make the heart beat _____.



- (a) Faster
(b) Slower
(c) Norma
(d) 72 times per minute
- Q5. Which of the following animals use tentacles to catch its prey?
(a) Hydra
(b) Amoeba
(c) Paramecium
(d) Grasshopper
- Q6. Carbohydrates play a critical role in the proper functioning of the immune system, fertilization, pathogenesis, blood clotting, and human development. A deficiency of carbohydrates can lead to impaired functioning of all these systems. On the other hand, excessive consumption of carbohydrates, especially refined carbohydrates like sugar or corn syrup, can lead to obesity, type II diabetes, and cancer. Where does the digestion of carbohydrates star in humans?
(a) Stomach
(b) Small intestine
(c) Large intestine
(d) Buccal cavity
- Q7. Where is the maximum water absorbed in the digestive tract?
(a) Small intestine
(b) Large intestine
(c) Stomach
(d) Oesophagus
- Q8. In the process of holozoic nutrition, which step is not correctly matched with its function?
1. Ingestion: The process of food intake by an animal.
2. Digestion: The process of breaking down of complex insoluble molecule into simple one.
3. Absorption: The process in which simple, soluble molecules present in the digested food passes into the body fluids.
4. Assimilation: The process of throwing out of undigested food from the animal body.
(a) 1
(b) 2
(c) 3
(d) 4
- Q9. The chest cavity _____ during exhalation
(a) Contracts
(b) Expands

- (c) Expands
- (d) Remains same

Q10. Which gas in the air helps in the breakdown of carbohydrates in the cells?



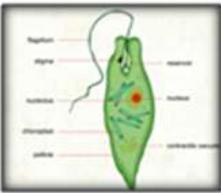
- (a) Carbon dioxide
- (b) Nitrogen
- (c) Oxygen
- (d) Argon

Q11. Coaches advise their athletes to take a hot shower after heavy workouts. Why?



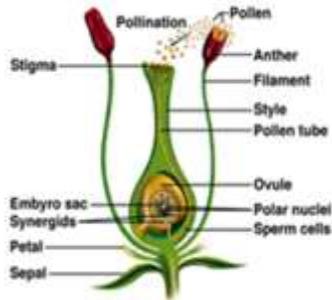
- (a) To enhance carbon dioxide supply
- (b) To improve blood circulation
- (c) To decrease glucose break down
- (d) To reduce pulse rate

Q12. In most unicellular organisms



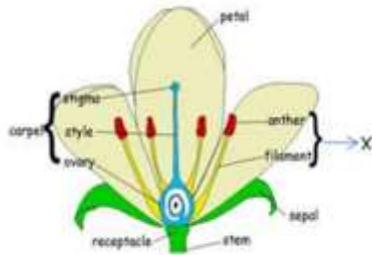
- (a) Oxygen is absorbed through lungs
- (b) Oxygen is absorbed through alveoli
- (c) Oxygen is diffused into cell
- (d) Oxygen is absorbed by spiracles

Q13. When a male reproductive cell in a pollen tube enters the ovule and fuses with the female reproductive cell, _____ takes place.



- (a) Fertilisation
- (b) Pollination
- (c) Dispersion
- (d) Germination

Q14. X stands for _____. It is a mal organ and is made up of anther and filament.



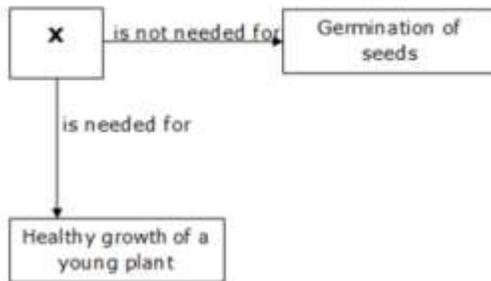
- (a) Stamen
- (b) Pistil
- (c) Radicle
- (d) Ovule

Q15. The Rafflesia plant produces the largest flower found on the Earth. How do the flowers get pollinated?



- (a) The flowers smell sweet and attract insects.
- (b) They smell like rotten meat and attract insects.
- (c) Flowers are wind pollinated
- (d) Flower are water pollinated

Q16. Study the concept map carefully. What could x be?



- (a) Water
- (b) Air
- (c) Sunlight
- (d) Minerals

Q17. Suction pull helps in the upward movement of

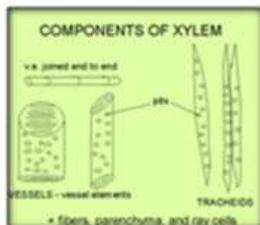
- (a) Water & Food
- (b) Minerals & Food
- (c) Food
- (d) Water & Minerals

Q18. If you observe the leaf carefully, you will see hairs. What is the function of these hairs?



- (a) To enhance gaseous exchange
- (b) They have no specific function
- (c) To prevent guttation
- (d) To reduce transpiration

Q19. Xylem is made up of four different types of cells, tracheids, vessels, xylem fibres and xylem fibres and xylem parenchyma.



- (a) Tracheids and vessels
- (b) Tracheids and Xylem fibres
- (c) Xylem fibres and Xylem parenchyma
- (d) Tracheids and Xylem parenchyma

- Q20. Which of the following statements explains how the circulatory system in a plant works?
1. Xylem tubes transport oxygen to all parts of the plant
 2. Phloem tubes transport food from the leaves to all parts of the plant
 3. Phloem tubes transport water and mineral salts from then roots to the leaves
 4. Xylem tubes transport water and mineral salt from the leaves to the roots
- (a) 1
(b) 2
(c) 3
(d) 4

Chemistry

- Q21. A first aid hand out suggests that wasp sting should be treated with vinegar. What is the chemical nature of wasp sting?



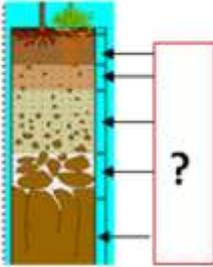
- (a) Basic
(b) Acidic
(c) Neutral
(d) Depends on the gender of wasp
- Q22. Calamine solution is prescribed to neutralize the effect of ant sting which is acidic in nature. Which carbonate is present in calamine solution?
- (a) Zinc
(b) Sodium
(c) Potassium
(d) Magnesium
- Q23. What is the link between slaked lime and lime water?
- (a) Both are acids.
(b) Both are indicators.
(c) Both contain carbonates of calcium.
(d) Both contain calcium hydroxide.
- Q24. Which compound of potassium is used as an ingredient for making soap?
1. Potassium hydroxide
 2. Potassium chloride
 3. Potassium carbonate
 4. Potassium sulphate
- (a) 1
(b) 2
(c) 3
(d) 4

- Q25. Which of the following options does not represent copper sulphate?
1. Blue vitriol
 2. $CuSO_4$
 3. Green vitriol
 4. Neela Thotha
- (a) 1
(b) 2
(c) 3
(d) 4
- Q26. Which one of the following statements is incorrect?
1. Making of wine is a physical change
 2. Crystallisation of sugar is a physical change
 3. Chemical change is also called chemical reaction
 4. Rusting leads to huge monetary loss
- (a) 1
(b) 2
(c) 3
(d) 4
- Q27. Which of the following processes does not result in a chemical change?
1. Putting an iron nail in copper sulphate solution
 2. Heating of magnesium
 3. Keeping a slice of apple in open
 4. All are examples of chemical change
- (a) 1
(b) 2
(c) 3
(d) 4
- Q28. In an experiment, a student dropped a blade in the solution of copper sulphate. He observed a change in the colour of solution from _____.
- (a) Blue to colourless
(b) Blue to green
(c) Blue to red
(d) No change in colour
- Q29. Size of silt particles is between the size of _____ and _____ particles.
- (a) Rocks and gravel
(b) Sand and gravel
(c) Sand and clay
(d) Humus particle and gravel

Q30. _____ type of soil retains least amount of water and _____ type of soil percolates least amount of water?
(a) Clayey and loamy soils
(b) Clayey and sandy soil
(c) Sandy and clayey soils
(d) Sandy and loam soils

Q31. What are loams?
(a) Soil having fine particles
(b) Soil having mixture of sand clayey particles
(c) Soil having big particles
(d) Soil having light and loosely packed particles

Q32. What are the different layers observed through a section of the soil known as?



(a) Horizons
(b) Weathering
(c) Soil profile
(d) Soil sections

Q33. The density of sea water is _____ and its freezing point is _____ than fresh water
(a) Higher, lower
(b) Higher, higher
(c) Lower, higher
(d) Lower, lower

Q34. Which of the following can be part of the water cycle?
1. Melting of snow
2. Sweating of animals
3. Giving out water vapour by plants
4. Evaporation of water from rives
(a) 1 and 2
(b) 1 and 2 and 3
(c) 2 and 3 and 4
(d) All of them

Q35. In an experiment, a student carried out the following steps.



1. He filled a beaker with water.
2. He added some sugar into the beaker of water and stirred it until all the sugar dissolved.
3. He then heated the solution until boiling point was reached.
4. Using a thermometer, he measured and recorded the boiling point of the sugar solution.
5. He repeated the experiment but this time with salt instead of sugar.

Choose the correct option on his observations

- (a) Adding sugar and salt to water does not affect the boiling point of water
 - (b) Adding of sugar decreases the boiling point of water
 - (c) Adding of salt decreases the boiling point of water
 - (d) Both sugar and salt when added to water increases its boiling point
- Q36. Which of the following statement is not correct about the importance of water to living things?
1. It plays important role in human life processes.
 2. It is used as good solvent in various industrial processes.
 3. It is released by plant in the photosynthesis.
 4. Rivers and seas serve as modes of transport.
- (a) 1
 - (b) 2
 - (c) 3
 - (d) 4
- Q37. To which type of climate are animals in the tropical rainforests adapted?
- (a) Hot and humid
 - (b) Wet and cold
 - (c) Cold any dry
 - (d) Hot and dry
- Q38. The animal shown in the picture lives in the rainforest of western Ghats and also known as 'beard ape'. Identify the animal.



- (a) Toucan
- (b) Siberian crane
- (c) Red-eyed frog
- (d) Lion tailed macaque

- Q39. What is the average weather pattern of a place taken over a long period of time known as?
- Weather
 - Climate
 - Weather forecast
 - None of the above
- Q40. Penguins are excellent swimmers. Which of the following adaptations aid their swimming ability?
- Streamlined body
 - Wide paws
 - Webbed feet
 - Thick and fatty skin
- 1 and 2
 - 1 and 3
 - 2 and 3
 - 1 and 4

Physics

- Q41. Choose the wrong statement
- High speed winds are accompanied by increased air pressure
 - Thunderstorms are same as cyclones
 - Thunderstorms are always accompanied by lightning
 - Earthquakes are rare and only affect the land mass
- Only 1 and 2
 - Only 1 2 and 3
 - Only 3 and 4
 - All are wrong
- Q42. How do cyclones decrease the fertility of the soil in the coastal areas?
- By flooding the land with saline water
 - By dissolving the water table of the place
 - By increasing the water table of the place
 - By decreasing the water table of the place
- Q43. The winds of the earth do not flow in the exact "north to south" or "south to north" directions because
- Of the seasons of the earth
 - Of the shape of the earth
 - Of the rotation of the earth
 - All the above

Q44. What is the size of the cloudy region of a cyclone?

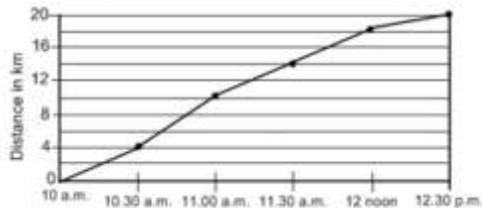


- (a) 50 – 70 km
- (b) About 200 km
- (c) More than 500 km
- (d) About 150 km

Q45. For the given velocity-time graph, which of the following statements is true?

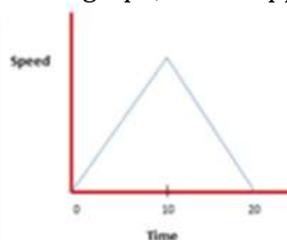
- (a) The body has a uniform acceleration, and its initial velocity is zero.
- (b) The body has some initial velocity, and undergoes uniform acceleration.
- (c) The body has zero initial velocity, and it has variable acceleration.
- (d) The body has some initial velocity, and undergoes uniform de-acceleration or negative acceleration.

Q46. The graph below shows the distance a person jogged on Tuesday over a period of time. What was his average speed for the whole journey?



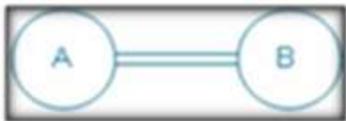
- (a) 6.5 km/hr
- (b) 10 km/hr
- (c) 12.5 km/hr
- (d) 8 km/hr

Q47. In this graph, what happens to the distance covered by a vehicle from 0 to 20 minutes?



- (a) It goes on increasing
- (b) It goes on decreasing
- (c) It first increases and then decreases
- (d) It first decreases and then increases

- Q48. Which order of magnitude is used to express the age of stars and planet?
(a) Billion of years
(b) Hundreds of year
(c) Million of years
(d) Thousands of years
- Q49. At 9:30 am odometer reading was 37, 625.0 km. What is the distance covered by the car if at 10: 40 am the reading was 37, 670.0 km.
Also, calculate the speed of the car in km/min.
(a) 45 km; 0.21 km/min
(b) 45 km; 38.57 km/min
(c) 145 km/23.7 km/min
(d) 45 km; 0.64 km/min
- Q50. Latent heat of vaporization of water boiling under normal pressure is
(a) 470 cal/g
(b) 540 cal/g
(c) 580 cal/g
(d) 640 cal/g
- Q51. Roughly speaking, liquids expand about ____ times more than solids.
(a) 50
(b) 20
(c) 10
(d) 100
- Q52. Two bodies A and B are at the same temperature (70°C). They are connected by a metal rod.
The final result will be

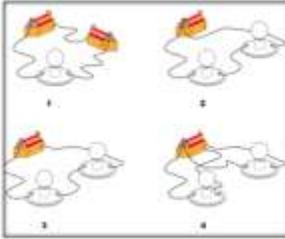


- (a) Temperature of A becomes 100 degree centigrade
(b) Temperature of B will become 100 degree centigrade
(c) There will not be any temperature change
(d) Temperature of both will become 100 degree centigrade
- Q53. Four containers were heated on a flame. Which one will absorb the greatest amount of heat?



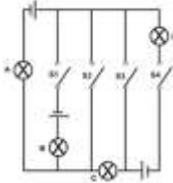
- (a) 1
(b) 2
(c) 3
(d) 4

Q54. In which circuit/s, the bulbs will not glow



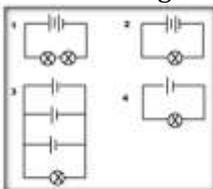
- (a) 1 and 2
- (b) 2 and 4
- (c) 3 only
- (d) 2 only

Q55. An electric circuit using identical bulbs A, B, C and D was set up as shown in the figure. Which switch should be closed to light up only bulbs A and C?



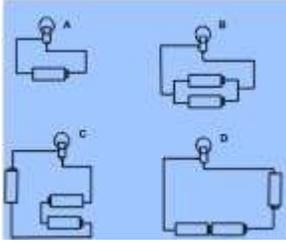
- (a) S1
- (b) S2
- (c) S3
- (d) S4

Q56. Which two circuits shown below should be used to compare how the numbers of batteries affect the brightness of the bulb?



- (a) 1 and 2
- (b) 1 and 3
- (c) 2 and 4
- (d) 1 and 4
- (e) 3 and 4

Q57. The batteries and the bulbs used in the circuits below are identical. In which of the above circuits do the bulbs produce light of equal brightness?



- (a) A and B only
 - (b) C and D only
 - (c) B and C only
 - (d) B, C and D only
- Q58. Which amongst the following diverges light?
- (a) Concave lens
 - (b) Convex lens
 - (c) Plane mirror
 - (d) Plano convex lens
- Q59. The outer surface of a stainless steel spoon acts as a ___ mirror.
- (a) Plane
 - (b) Convex
 - (c) Concave
 - (d) Semi convex
- Q60. The swift movement of the ___ water droplet along with the ___ air creates lightning and sound.
- (a) Falling , falling
 - (b) Rising , rising
 - (c) Rising , falling
 - (d) Falling , rising