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Class: 7
Subject: Science
Topic: ASK1507UTO5
No. of Questions: 60

BIOLOGY

Q1. The water table is disturbed by all except ____.
(a) Low rain fall
(b) Population growth
(c) Industrial activities
(d) Excessive plantation of tress

Sol. (d)
Factors that disturb the water table are : low or no rainfall, increase in population, industrial activities, agriculture activities, etc. Plantation of trees increases underground water as it is a source of infiltration of water.

Q2. Organic impurities in sewage are represented by all except ___.
(a) Vegetable waste
(b) Urea
(c) Nitrates
(d) Pesticides

Sol. (c)
Nitrates constitute inorganic impurities of sewage.

Q3. Solid waste extracted in sewage treatment is ____.
(a) A excreta
(b) Sludge
(c) Ozone
(d) Bio gas

Sol. (b)
Solid waste extracted in sewage treatment is sludge. It is a rich organic compound and is used as manure.

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Q4. Sludge is decomposed by ____.

(a) Algae
(b) Bacteria
(c) Fungi
(d) Worms

Sol. (b)

Q5. Another name for human waste is ____.

(a) Day soil
(b) Night soil
(c) Human soil
(d) Organic soil

Sol. (b)

In slums of urban areas, human waste is collected manually, on a regular basis. The collection happens particularly during the night and this waste is used as a fertilizer for the soil. Hence human waste is also called 'night soil'.

Q6. Micro – organism causes water borne diseases, cholera is ___.

(a) An algae
(b) A fungi
(c) A bacteria
(d) A virus

Sol. (c)

Q7. The first links in all food chain are ____.

(a) Herbivores
(b) Carnivores
(c) Green plants
(d) Bacteria and fungi

Sol. (c)

The first link in all food chains are green plants as the energy from plants is passed on from one organism to another.

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Q8. Which of the following is correct sequence of food chain?

(a) Rat → Eagle → Snake
(b) Snake → Rat → Eagle
(c) Rat → Snake → Eagle
(d) Eagle → Snake → Rat.

Sol. (c)

Q9. The maximum height of neem trees is _____.

(a) 47 – 55
(b) 53 – 66
(c) 55 – 65
(d) 35 – 40

Sol. (c)

Neem can grow up to a height of 55 – 65 feet and has widespread branches.

Q10. Plants are called producers because, they ____.

(a) Produce flowers
(b) Produce seeds
(c) Produce food
(d) Produce fruits

Sol. (c)

Plants are called producers because they produce food through photosynthesis.

Q11. Which of the following is an aquifer?

(a) Underground water below and water table.
(b) The water of a fresh water lake.
(c) The water of a lagoon.
(d) Rain water stored in artificial storage

Sol. (a)

Q12. Used water is ____.

(a) Clean water
(b) Filter water
(c) Waste water
(d) Clarified water

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Sol. (c)
Used water is waste water, and it may be used for irrigation.

Q13. In a waste water plant, solids like faeces are removed with a ___.
(a) Scraper
(b) Bar screen
(c) Hand
(d) Sieve

Sol. (a)

Q14. The conversion of human waste into compost in compositing toilet is done by ___.
(a) Algae
(b) Bacteria
(c) Protozoans
(d) Virus

Sol. (b)
In composting toilets, bacteria, fungi and earthworms are used for conversion of human waste into compost.

Q15. Cholera is caused due to ___.
(a) Contaminated food
(b) Contaminated water
(c) Air pollution
(d) Soil pollution

Sol. (b)

Q16. Which of the following timber yielding trees are used to make furniture and ships?
(a) Neem, amla and quinine
(b) Teak, sal and deodar
(c) Tulsi, chinchona and pudina
(d) Rose , jasmine and lotus

Sol. (b)
Teak, Sal and Deodar are timber trees that are used to make furniture, ship etc.

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Q17. ___ is used to make houses, furniture, boats, bridges, sports goods and even matchsticks.
(a) Rubber trees
(b) Medicinal plants
(c) Timber yielding plants
(d) Creepers

Sol. (c)

Q18. Which of the following gas produce in huge amount by forest into the earth's atmosphere?
(a) Hydrogen
(b) Carbon dioxide
(c) Oxygen
(d) Nitrogen

Sol. (c)
Forests produce large amount of oxygen, help regulating the gases in the atmosphere.

Q19. Which of the following is the main source of oxygen in the air?
(a) Rivers
(b) Factories
(c) Trees
(d) Fauna

Sol. (c)
Trees are the main source of oxygen in the air as plants take in carbon dioxide during photosynthesis and release oxygen.

Q20. The water cycle is ____.
(a) The tendency for water to travel in circles
(b) The constant movement of water from the atmosphere to the earth, and its return to the atmosphere
(c) The constant movement of water from high areas to low areas
(d) A bicycle that is powered by water

Sol. (b)

CHEMISTRY

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Q21. Pebbles and stones can be separated from sand by __.
(a) Churning decanting
(b) Decanting
(c) Sieving
(d) Filtration

Sol. (c)

Q22. The separation technique used to separate a solid – solid mixture is ___.
(a) Decantation
(b) Evaporation
(c) Filtration
(d) Handpicking

Sol. (d)

Q23. The mixture of rice and pulses can be separated by ___.
(a) Winnowing
(b) Threshing
(c) Handpicking
(d) Churning

Sol. (c)

Q24. A mixture of soil and water can be separated by ____.
(a) Churning
(b) Decantation
(c) Evaporation
(d) Centrifugation

Sol. (b)

Q25. Which one of the following techniques would not be used to separate soil and water.?
(a) Sedimentation
(b) Decantation
(c) Filtration
(d) Winnowing

Sol. (d)

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Winnowing cannot be used to separate soil and water. Winnowing is used to separate heavier and lighter components of a mixture by wind or by blowing air.

Q26. When muddy water is kept overnight in a bucket, the impurities ___

(a) Float
(b) Settle at the bottom
(c) Disperse in the middle
(d) Show zig – zag movement

Sol. (b)

When muddy water is kept overnight in a bucket, the impurities settle , as the heavy particles settle at the bottom due to gravity.

Q27. Which of the following techniques would be used to remove water insoluble compounds with a higher density?

(a) Evaporation
(b) Decantation
(c) Churning
(d) Distillation

Sol. (b)

Insoluble compounds with a higher density can be removed from water by decantation. Decantation is the process by which, a clear liquid obtained after sedimentation, is transferred into another container, without disturbing the settled particles.

Q28. Which of the following substance cannot be separated by physical means?

(a) Rice and stone
(b) Grain seeds with stalks
(c) Butter from milk
(d) Sodium from sodium chloride

Sol. (d)

Sodium from sodium chloride cannot be separated by physical means. Sodium chloride is a compound made up of sodium and chloride. The separation of sodium from sodium chloride is possible only by chemical methods.

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Q29. Sandy and gravel may be separated from each other by using __
(a) A filter funnel
(b) An evaporation basin
(c) A sieve
(d) A cloth

Sol. (c)

Q30. 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.

Q31. The change of state from liquid to gas is called ___.
(a) Freezing
(b) Condensation
(c) Evaporation
(d) Melting

Sol. (c)

Q32. Evaporation occurs when a ___
(a) Gas becomes a liquid
(b) Solid becomes a liquid
(c) Liquid becomes a gas
(d) Gas becomes plasma

Sol. (c)

Q33. The process used for separating grains from stalk is called ___.
(a) Winnowing
(b) Sieving
(c) Harvesting
(d) Threshing

Sol. (d)

Q34. Threshing is done before__
(a) Filtration
(b) Evaporation
(c) Winnowing
(d) Condensation

Sol. (c)
Threshing is done before winnowing. During winnowing the chaff is separated from the gain.

Q35. The external factor required for evaporation is ___
(a) Light
(b) Heat
(c) Pressure
(d) Moisture

Sol. (b)
The external factor required for evaporation is heat, as it is heat – absorbing process.

Q36. Which of the following experimental procedures is used to separate hydrated copper (ii) sulphate from its aqueous solution?
(a) Decantation
(b) Evaporation
(c) Filtration
(d) Fractional distillation

Sol. (b)
Hydrated copper (II) sulphate from its aqueous solution can be separated by the process of evaporation.

Q37. Paheli bought some vegetables such as French beans, lady's finger, green chillies, brinjals and potatoes all mixed in a bag. Which of the following methods of separation would be most appropriate for her to separate them?
(a) Winnowing
(b) Sieving
(c) Threshing
(d) Hand picking

Sol. (d)

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Q38. During summer, Boohoo carries water in a transparent plastic bottle to his school. One day he left his bottle in the school. the bottle still had some water left in it. The following day, he observed some water droplets on the bottle. These droplets of water were formed due to
(a) Boiling and condensation.
(b) Evaporation and saturation
(c) Evaporation and condensation.
(d) Condensation and saturation.

Sol. (c)

Q39. You might have observed the preparation of ghee from butter and cream at home. Which method(s) can be used to separate ghee from the residue?
(i) Evaporation
(ii) Decantation
(iii) Filtration
(iv) Churning
Which of the following combination is the correct answer?
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (ii) and (iv)
(d) (iv) only

Sol. (b)

Q40. Which of the following mixtures would you be able to separate using the method of filtration?
(a) Oil in water
(b) Cornflakes in milk
(c) Salt in water
(d) Sugar in milk

Sol. (b)

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Q41. Cyclone alert is issued ___ hours in advance of the expected commandment of adverse weather over the coastal areas.
(a) 20
(b) 22
(c) 24
(d) 26

Sol. (c)

Q42. The primary activity of Indian meteorological centre is ___.
(a) Forecasting weather
(b) Releasing newsletter regarding weather
(c) Contracting people on phone
(d) Sending the group of people door to door giving information regarding weather

Sol. (a)

Q43. Air pressure is directly proportional ____ of air.
(a) Volume
(b) Temperature
(c) Density
(d) Surface tension

Sol. (c)
As pressure exerted is given as,
Pressure = height of liquid column × acceleration due to gravity.

Therefore, the air pressure exerted is directly proportional to the density of the air.

Q44. The atmospheric pressure decreases with height because of the ____.
(a) Decrease in the density of air
(b) Increase in the density of air
(c) Increase in viscosity
(d) Decrease in viscosity

Sol. (a)
The atmospheric pressure decrease with height because of the decrease in the density of air. As we go higher up from sea level, the air becomes thinner and thinner and thus the density of air decreases.

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Q45. Balloon float in the air due to ___
(a) Cool air
(b) Variation in the climate
(c) Hot air
(d) The nature of the gas present inside

Sol. (c)

Q46. The larger atmospheric wind that encircle the earth are caused ___.
(a) Due to the pressure of large amount of water on earth
(b) Due to heavy rainfall
(c) As the equator receivers more heat energy from the sun than poles
(d) Due to the spherical shapes of earth

Sol. (c)
The large atmospheric winds that encircle the earth are caused as the equator receivers more heat energy from the sun than the poles. The uneven heating of earth causes the wind to blow and wind circulation is set up form poles to the warmer latitudes.

Q47. ____ plays a major role in the formation of a thunderstorm.
(a) Radiation
(b) Convection
(c) Earth quakes
(d) Conduction

Sol. (b)

Q48. Cyclones are climatological phenomenon in which a _____ exterior.
(a) Low temperature core is surrounded by high temperature
(b) High temperature core is surrounded by low temperature
(c) Low pressure core is surrounded by high pressure
(d) High pressure core is surrounded by low pressure

Sol. (c)
Cyclones are climatological phenomenon in which a low pressure core is surrounded by a high pressure exterior.

Q49. Sunlight consists of seven colours and is known as ____light.
(a) Black
(b) White
(c) Blue
(d) Green

Sol. (b)

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Q50. A ___ is used to read very small print in a book.
(a) Convex lens
(b) Concave lens
(c) Convex mirror
(d) Plane mirror

Sol. (a)
A convex lens is used to read very small print in a book. It is also known as a magnifying lens.

Q51. Which amongst the following diverges light?
(a) Concave lens
(b) Convex lens
(c) Plane mirror
(d) Plano convex lens

Sol. (a)

Q52. The outré surface of a stainless steel spoon acts as a ___ mirror.
(a) Plane
(b) Convex
(c) Concave
(d) Semi convex

Sol. (b)

Q53. The size of the images of objects , when seen in spherical mirrors, ____ the size of the object.
(a) Are always smaller than
(b) Are always larger than
(c) Are always equal to
(d) Can be smaller, larger or equal to

Sol. (d)

Q54. The swift movement of the ___ water droplet along with the ___ air creates lighting and sound.
(a) Falling , falling
(b) Rising , rinsing
(c) Rising , falling
(d) Falling , rising

Sol. (d)

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Q55. ____ is a sinking air at the centre of cyclone.
(a) Eye
(b) Depth
(c) Area
(d) Plate

Sol. (a)
A strong tropical cyclone will harbor an area of sinking air at its centre. This area is called the eye of the cyclone.

Q56. ____ are specially warned against cyclone.
(a) Fisherman
(b) Ladies
(c) Children
(d) Villagers

Sol. (a)
Fishermen are specially warned against cyclone because they go for fishing in sea or ocean.

Q57. Lenses cannot be used in ____.
(a) Spectacles
(b) Telescopes
(c) Microscopes
(d) Reflectors of torches

Sol. (d)
Lenses cannot be used in reflectors of torches. Concave mirrors are used as reflected of torches. Lenses are widely used in spectacles, telescopes and microscopes.

Q58. Light from a candle is not visible when it is seen through a narrow bent tube, because _____.
(a) Light is absorbed by the tube
(b) Light travels in a straight line
(c) Candle does not give light
(d) A tube is narrow and light can't pass through it

Sol. (b)
Light from a candle is not visible when it is seen through a narrow bent tube, because a travel in a straight line and the bent tube does not give light a straight path.

Q59. The reflectors of torches and the headlights of cars and scooter are ___ in shape.
(a) Concave
(b) Convex
(c) Plane
(d) Semi – convex

Sol. (a)

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Q60. The climatic conditions in the Western Pacific Ocean that represent hurricane, are called ____

(a) Typhoons
(b) Cyclones
(c) Storms
(d) High tide

Sol. (a)

In the Atlantic Ocean, Gulf of Mexico, and the Eastern Pacific Ocean, cyclones are called hurricanes. In the western Pacific Ocean, they are called typhoons.