Date: 09/08/2022

Class: Standard VII

Subject: Competitive Exams

Time: 00:45 hrs

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1. Era walks 6 km towards north and then she turns towards right and walks 8 km. Again, she turns towards right and walks 2 km. Now she turns back and walks 4 km. How far is she from her starting point?

   ✗ **A.** 10.33 km

   ✓ **B.** 11.31 km

   ✗ **C.** 23.12 km

   ✗ **D.** 25.45 km

   11.31 km

2. The motion in which all points of the body move through the same distanced in the same time is

   ✗ **A.** Rotatory motion

   ✗ **B.** Linear motion

   ✗ **C.** Circular motion

   ✓ **D.** Translatory motion

   Translatory motion

3. Which of the following statements is false?

- ✔ **A.** Shadows cannot be formed when an object allows some light to pass through it
- ✘ **B.** Shadows are always formed on the opposite side of the light source
- ✘ **C.** A shadow has a similar shape to the object that forms the shadow
- ✘ **D.** An object can form as many shadows as there are light sources around it

Shadows cannot be formed when an object allows some light to pass through it

4. Anjali placed a meter stick in the playground at 8.00 a.m. in the morning. How will the shadow of the stick at 12:00 noon be in comparison to the one at 8:00 a.m.?

- ✘ **A.** There will be no shadow
- ✘ **B.** The shadow will be longer and on the opposite side of the stick
- ✘ **C.** The shadow will be shorter and on the same side as the sun
- ✔ **D.** The shadow will be shorter and on the opposite side of the sun

The shadow will be shorter and on the opposite side of the sun

5. Most of the electricity carrying wires near highways do not have a plastic covering like the wires used at homes. But there is no substantial loss of energy because

- ✘ **A.** Air is a bad insulator of electricity
- ✔ **B.** Air is a bad conductor of electricity
- ✘ **C.** Electricity flows very fast near highways
- ✘ **D.** Both Air is a bad conductor of electricity & Electricity flows very fast near highways

Air is a bad conductor of electricity

6. A magnet will attract objects made of _____ (i) Iron (ii) Cobalt (iii) Nickel (iv) Copper

- ✔ **A.** (i), (ii) & (iii)
- ✘ **B.** (i), (ii) & (iv)
- ✘ **C.** (ii), (iii) & (iv)
- ✘ **D.** (i), (ii), (iii) & (iv)

(i), (ii) & (iii)

7. You should not store a floppy disk near a magnet because _____

- ✘ **A.** The magnet will rust
- ✘ **B.** The magnet will become weaker
- ✔ **C.** The information in the disk may be erased
- ✘ **D.** The magnet will break the disk

The information in the disk may be erased

8. Which of the following does not contain a magnet in it?

- ✔ **A.** Torch
- ✘ **B.** radio
- ✘ **C.** Fan
- ✘ **D.** Compass

Torch

9. The change in state from aliquid to a solid is known as

- ✗ **A.** Melting
- ✗ **B.** Boiling
- ✓ **C.** Freezing
- ✗ **D.** Sublimation

Freezing

10. As the temperature of a liquid solvent increases, the amount of solute that can dissolve in it

- ✗ **A.** decreases by one degree Celsius for every milliliter of solvent
- ✓ **B.** increases
- ✗ **C.** decreases
- ✗ **D.** remains constant

increases

11. What is the best thing to do when strong winds blow over a hut having a weak thatched roof?

- ✓ **A.** Open the doors and windows
- ✗ **B.** Close all the doors and windows
- ✗ **C.** Make holes in the roof
- ✗ **D.** Burn wood inside

Open the doors and windows

12. "Water vapor in the atmosphere condenses to form clouds? From this statement, what can be concluded?

- ✔ **A.** the temperature decreases as we go higher
- ✘ **B.** the temperature increases as we go higher
- ✘ **C.** pressure decreases as we go higher
- ✘ **D.** pressure increases as we go higher

the temperature decreases as we go higher

13. A device used to measure the wind speed is-

- ✔ **A.** Anemometer
- ✘ **B.** Venturimeter
- ✘ **C.** Hydrometer
- ✘ **D.** Speedometer

Anemometer

14. Change P = Coconut oil in water solidifies. When we leave it in the sunlight, it liquifies again.
Change Q = In winters, when iron gate of park is exposed to moist air, it gets rusted.What type of changes are P and Q?

- ✘ **A.** P - Chemical change, Q - Reversible change
- ✔ **B.** P - Physical change, Q - Chemical change
- ✘ **C.** P- Chemical change, Q - Physical change
- ✘ **D.** P - Reversible change, Q - Physical change

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15. Read the following statements.
(i) I am present in air.
(ii) I enter your lungs when you breathein.
(iii) Your body needs me to produce energy.
These statements are regarding_____

- ✗ **A.** Carbon dioxide
- ✗ **B.** Nitrogen
- ✗ **C.** Hydrogen
- ✓ **D.** Oxygen

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16. Which of the following materials upon burning smells like burning paper?
(i) Cotton (ii) Silk (iii) Flax (iv) Wool (v) Fur (vi) Jute

- ✓ **A.** (i),(iii) & (vi)
- ✗ **B.** (ii),(iv) & (v)
- ✗ **C.** (i),(ii),(iv) & (vi)
- ✗ **D.** (iv) & (v)

17.

One of the following object is not opaque. This one is

- **A.** Ground glass
- **B.** Brick
- **C.** Book
- **D.** Wood

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18. An example of a physical change is :

- **A.** magnetisation of iron
- **B.** burning of wood
- **C.** photosynthesis by plants
- **D.** digestion of food

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19. Main constituent in air is

- **A.** nitrogen
- **B.** oxygen
- **C.** argon
- **D.** water vapour

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20.

Which of the following statements is correct regarding atmosphere ?

A. Wind blows, clouds build up and weather changes take place in stratosphere.

B. The ozone layer, which acts as huge shield protecting us from the harmful ultraviolet rays of the Sun lies in the thermosphere

C. Stratosphere is a clear, cloudless layer where the star shine and aeroplanes fly

D. Exosphere is very thin and very hot layer and has electrically charged particles which help radios to work

.

21. Read the given passage.

Heat of the sun causes (i) of water from the surface of the earth, oceans, lakes, rivers and other water bodies. Water vapour is also continously added to the atmosphere through (ii) from the surface of the leaves. These vapours (iii) to form tiny droplets of water. These droplets floating in the air along with the dust particles form (iv).

Select the option that correctly fills the blanks in the above passage.

A. (I)-Transpiration, (II)-Condense, (III)-Clouds, (IV)-larger droplets

B. (I)-Transpiration, (II)-Evaporation (III)-Condense, (IV)-Clouds

C. (I)-Evaporation, (II)-Transpiration(III)-Condense, (IV)-Clouds

D. (I)-Condense, (II)-Transpiration (III)-Evaporation, (IV)-larger droplets

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22. Kanya has a material X whose molecules are separated by large distances or spaces. Nidhi has a material Y which takes the shape of its container. Gagan has a material Z which has no definite volume. Which of the three materials is/are in gaseous state ?

- **A.** X
- **B.** Y
- **C.** Both X and Y
- **D.** Both X and Z ✓

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23. Identify the incorrect statements from the following :

- **A.** Interparticle distance is more in gas
- **B.** Solid has definite shape and volume
- **C.** Ice is heavier than water ✓
- **D.** Matter can be changed from one form to another

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24. Which of the following statements is not true ?

- **A.** Fabric is made of yarn
- **B.** Jute is the outer covering of coconut ✓
- **C.** Polyster is a synthetic fibre
- **D.** Silk fibre is obtained from silk worms

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25. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed?

- ✗ **A.** Yellow in both acid and base
- ✓ **B.** Yellow in acid and red in base
- ✗ **C.** Pink in acid and yellow in base
- ✗ **D.** Red in acid and blue in base

Turmeric is yellow in colour. It remains unaffected by acids but turns red upon the addition of bases.

26. Complete the following analogy.
Ant sting : Organic acid : : Methyl orange : _____

- ✓ **A.** Visual indicator
- ✗ **B.** Olfactory indicator
- ✗ **C.** Inorganic acid
- ✗ **D.** Alkali

27. The action of _____ is confirmed using the iodine test.

- ✔ **A.** saliva
- ✘ **B.** bile juice
- ✘ **C.** water
- ✘ **D.** Hydrochloric acid

- Iodine test is used to detect the presence of starch.
- Saliva contains digestive enzymes which helps in the breakdown of starch into simple sugars.
- Therefore, the action of saliva is confirmed using the iodine test.

28. Who am I?

"I am white and soft. I grow well in the rainy season. Children pluck me from the ground and admire me. I absorb nutrients from decomposed dead parts of plants and animals in the soil."

- ✘ **A.** *Cuscuta*
- ✘ **B.** Variegated leaf
- ✔ **C.** Mushroom
- ✘ **D.** Tomato plant

A mushroom is **the reproductive structure produced by some fungi**. It is somewhat like the fruit of a plant, except that the "seeds" it produces are in fact millions of microscopic spores that form in the gills or pores underneath the mushroom's cap.

29. Which of the following is not the primary function of the stem?

A. Conduction of water

B. Photosynthesis

C. Formation of branches

D. Bearing flowers and fruits

Photosynthesis is the primary function of leaves. The primary function of the stem is conduction of water from the root to other parts of the plant. Branches are formed on the stem. It provides support to the plant. All other parts of the plant are attached and formed on the stem including flowers and fruits.

30. Choose the correct option.

(a)	Transpiration	(i)	Arrangement of veins on leaf
(b)	Venation	(ii)	Preparation of food for the plant
(c)	Photosynthesis	(iii)	Release of water vapour from the leaf

A. a-ii, b-iii, c-i

B. a-i, b-iii, c-ii

C. a-iii, b-i, c-ii

D. a-iii, b-ii, c-i

- The process through which the excess water is released in the form of vapour from the plants is known as transpiration.
- The arrangement of veins in the lamina is known as venation.
- Photosynthesis is the process by which green plants prepare their food using sunlight from carbon dioxide and water.

31. 'Roughage has no nutritive value, yet it is needed by our body'. Which of the following gives the correct reason for this statement?

A. It is required for haemoglobin formation.

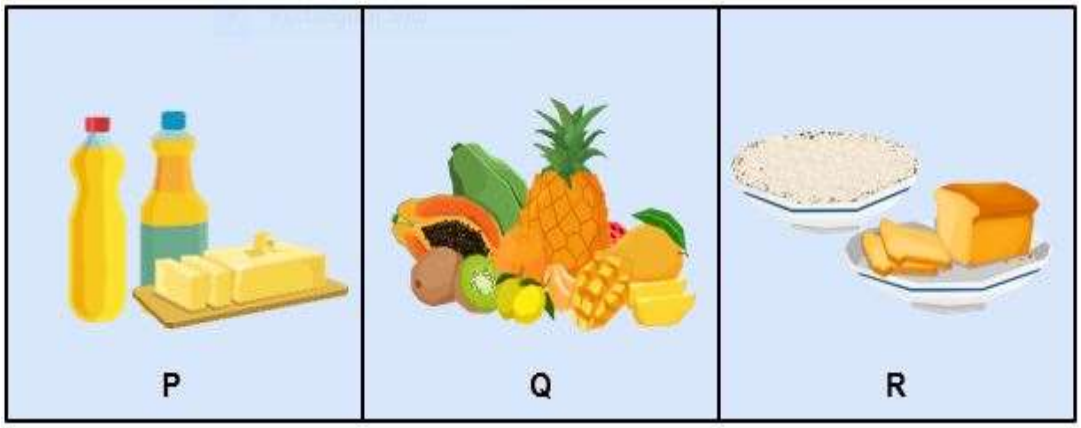
B. It helps to transport substances within the body.

C. It helps to maintain constant body temperature.

D. It helps to get rid of undigested food.

- Roughages are dietary fibres which are found in vegetables and fruits.
- They cannot be digested and does not add any nutritional value in our diet.
- They help in the removal of undigested food and thus, helps to maintain a healthy digestive system.

32. Which of the following labelled boxes contain food that helps fight against diseases?



A. P only

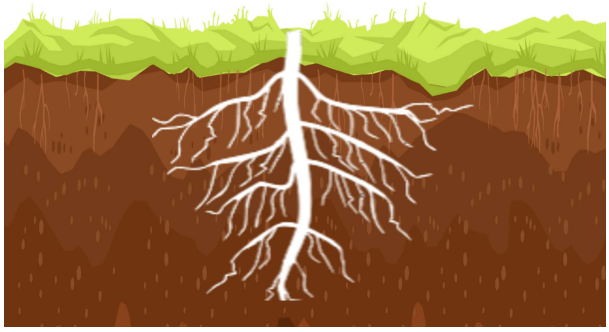
B. Q only

C. P and R

D. Q and R

- Vitamins are the group of nutrients that helps to fight against diseases. Sources of vitamins are vegetables, fruits etc.
- Carbohydrates rich food such as bread, rice, potato etc., provide energy to the body.
- Fat rich food such as oil, butter, ghee etc., also provide energy to the body much more than the same amount of carbohydrates.

33. Which of the following statements hold true for the root system shown in the given figure?



(i) It is a fibrous root system.

(ii) The branches that arise from the main root are called fibrous roots.

(iii) It is a taproot system.

(iv) Examples of this type of root system are pea, radish, carrot and turnip.

✗ **A.** (i) and (ii) only

✗ **B.** (ii) and (iv) only

✓ **C.** (iii) and (iv) only

✗ **D.** (ii) and (iii) only

- The given figure is of a taproot system.
- Taproots have one main root called as the taproot and other smaller roots emerging out of it called as lateral roots.
- Pea, radish, carrot and turnip are examples of taproot system.

34. Savita found a living organism with the features described as follows :

1. Streamlined body
2. Hollow and light bones
3. Strong breast muscles

To which group does this living organism belong?

✗ **A.** Fish

✗ **B.** Insects

✓ **C.** Birds

✗ **D.** Reptiles

Birds have streamlined body, liht and hollow bones and strong breast muscles as adaptations to fly.

35. Which of the following statements is incorrect for the given food item?

Kheer bowl

(i) The ingredients used to prepare this food are obtained from both plant and animal sources.

(ii) The major nutrients in this food are carbohydrates and proteins.

(iii) This food is also a source of vitamin C.

(iv) The ingredient sourced from plants is actually a seed.

✗ **A.** (i) and (ii)

✓ **B.** (iii) only

✗ **C.** (ii) and (iv)

✗ **D.** None of these

his food is not a source of Vitamin C.

36. Read the given passage carefully.
The organisms P and Q occur on the forest floor. They convert the dead organic waste generated in forest into simpler substances which can be then reused by organisms R for their growth and development.
Identify P, Q and R and select the correct statement.

✔ **A.** P and Q could be bacteria and fungi respectively whereas R could be plants.

✘ **B.** P and Q could be bacteria and plants respectively whereas R could be fungi.

✘ **C.** P and Q could be plants and animals respectively whereas R could be bacteria.

✘ **D.** P and Q could be herbivores whereas R could be a detrivore.

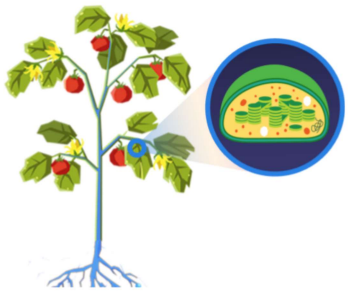
- Decomposers are microorganisms that convert the dead plants and animals to humus.
- Bacteria and fungi are the two types of decomposers.
- They help in the process of recycling of nutrients by decomposing various dead organisms such as plants and animals to form humus.
- Nutrients released in the soil by the process of decomposition are then utilised by plant for their growth and developement.

37. Which of the following results if the part labelled ‘X’ is removed?

I. Capture of energy will not take place.

II. Production of carbohydrates will get affected.

III. Gaseous exchange will get affected.



A. I and III only

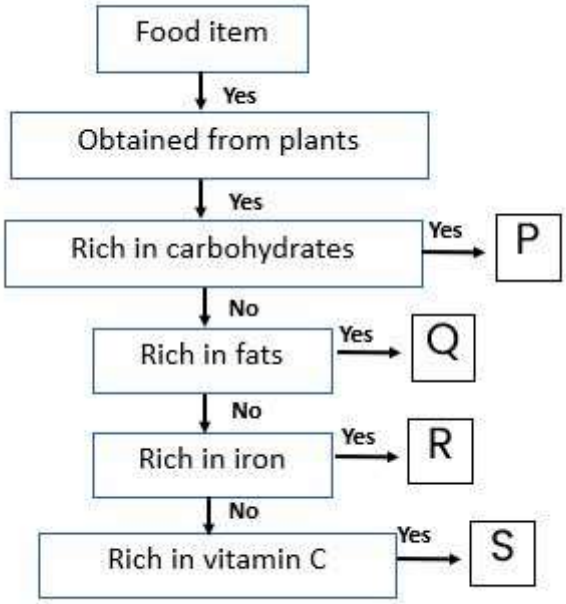
B. II and III only

C. I and II only

D. I, II, and III

- Chloroplast consists of a pigment called chlorophyll which absorbs light energy from the sun.
- If it is removed then the sunlight will not be captured and photosynthesis will be affected.
- Therefore, the production of carbohydrate will be affected.

38. Refer to the given flow chart and select the correct option regarding P, Q, R and S.



A. P could be honey or sugarcane whereas Q could be soyabean or maize.

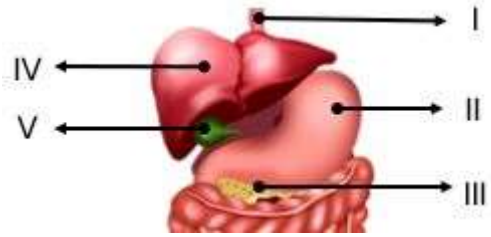
B. R should be taken in large quantities by patients suffering from goitre.

C. Deficiency of S leads to bleeding gums and swelling of joints.

D. Q should be taken in large quantities by patients suffering from kwashiorkor.

- P is obtained from plants and is rich in carbohydrates. Honey is rich in carbohydrates but is sourced from animals. Sugarcane is also rich in carbohydrates but obtained from plants.
- Q is also obtained from plants but rich in fats. Soyabean and maize are rich in proteins and carbohydrates respectively.
- Goitre is the result of iodine deficiency. Therefore, food rich in iodine needs to be consumed.
- Deficiency of vitamin C leads to scurvy which is charaterised by bleeding gums and swelling of joints.
- Patients suffering from kwashiorkor requires protein rich diet because it's a protein deficiency disease.

39. Refer to the given diagram which shows various parts of human digestive system labelled as I, II, III, IV and IV.



Identify the organs and select the incorrect statement regarding them.

A. Organ V is involved in storage of bile and not in its production.

B. Organ II secretes digestive juice which contains mucus, hydrochloric acid and digestive enzymes.

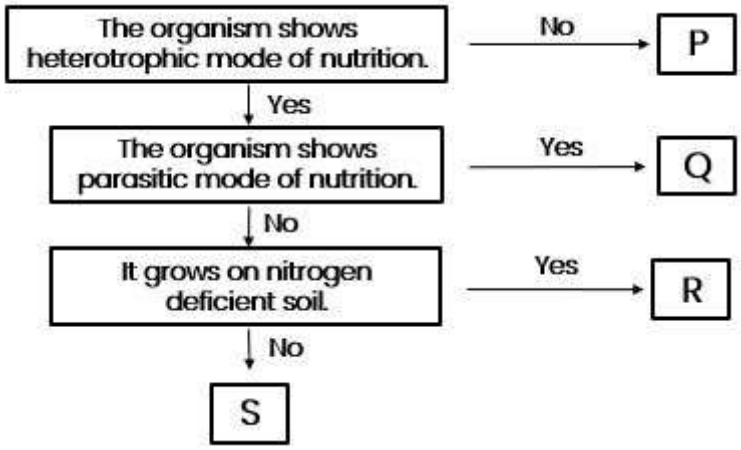
C. Organ IV is the largest gland of the body.

D. Organ I is involved in the absorption of water from food.

The digestive system of the human body comprises a group of organs that helps in digestion of food.

- Oesophagus (Organ I): The chewed food from buccal cavity passes into stomach via oesophagus.
- Stomach (Organ II): The inner lining of the stomach secretes mucous, hydrochloric acid and digestive juices which contains enzymes for digestion of chewed food.
- Pancreas (Organ III): The pancreas secretes pancreatic juice that breaks down carbohydrates, fats and proteins present in the food into the simpler forms.
- Liver (Organ IV): It is the largest gland in the body. It secretes bile juice that is stored in a sac called the gall bladder (Organ V).

40. Refer to the given flow chart and select the correct option regarding P, Q, R and S.



✗ **A.** P: *Hydrilla*; Q: *Hydra*; R: *Dionaea*; S: *Amoeba*

✗ **B.** P: *Hibiscus*; Q: *Taenia*; R: Bladderwort; S: *Croton*

✓ **C.** P: *Elodea*; Q: *Cuscuta*; R: *Rhizopus*; S: *Gambusia*

✗ **D.** P: *Ocimum*; Q: *Coleus*; R: Mistletoe; S: *Spirogyra*

Nutrition is the process of obtaining food and utilising it for growth and development. They can be classified into following 2 types:

- Autotrophic (P): Organisms who prepare their own food. Example: *Elodea*, *Hibiscus, Algae, Coleus, Ocimum, Croton, etc.*
- Heterotrophic (S): Organisms who obtain their food from other plants or animals. Example: *Gambusia, Humans, Dionaea, etc.*

Heterotrophic nutrition can be further divided into following 3 types.

- Parasitic nutrition (Q): Organisms that live on their hosts and acquire nutrition at the expense of them. Example: *Cuscuta, Rafflesia,* Australian Christmas Tree, *Taenia*, etc.
- Holozoic nutrition: An organism that involves the consumption of solid and liquid food by internal process. Example: *Amoeba,* Human, etc.
- Saprophytic nutrition (R): Organisms who feed on dead and decaying matter. Example: *Rhizopus, Mushroom, etc.*

Some organisms are partially autotrophic and partially heterotrophic. Example: Bladderwort, Venus flytrap*, etc.*

Pre_NSEJS_CBSE_07

Question	Subject	Question	Subject	Question	Subject	Question	Subject	Question	Subject
1	Phy	11	Phy	21	Che	31	Bio	41	
2	Phy	12	Phy	22	Che	32	Bio	42	
3	Phy	13	Phy	23	Che	33	Bio	43	
4	Phy	14	Che	24	Che	34	Bio	44	
5	Phy	15	Che	25	Che	35	Bio	45	
6	Phy	16	Che	26	Che	36	Bio	46	
7	Phy	17	Che	27	Bio	37	Bio	47	
8	Phy	18	Che	28	Bio	38	Bio	48	
9	Phy	19	Che	29	Bio	39	Bio	49	
10	Phy	20	Che	30	Bio	40	Bio	50	