1. Indian weddings are matchless in grandeur, glamour and luxury. They are matchless in wastage, extravagance and display of money and wealth. Record your experience of such marriages in your diary in 80 words. (5 marks)

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2. Write a short story of about 80 words on the given visual input. (5 marks)

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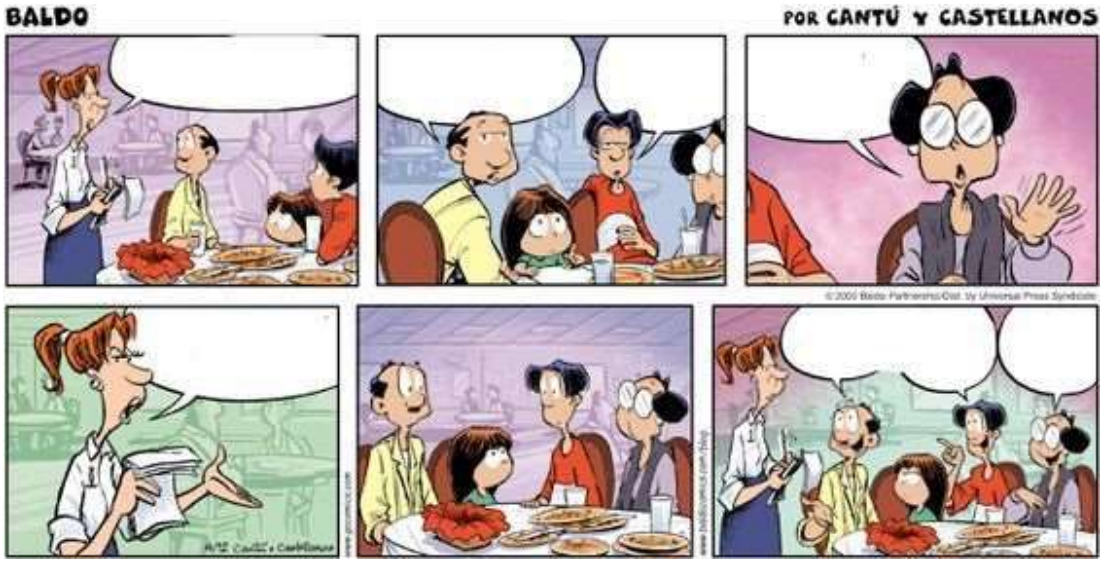
3. Complete the dialogue as given in the cartoon. (5 marks)



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4. Note: Each question from 1 to 10 has four options: a. b. c. d. Candidates are required to select the suitable options out of them. (1 mark each)

1. When we reached there, they ..... the game.

a) Finish b) had finished

c) will finish the game d) none of the above

2. I..... my friend last week.

a) have meet
c) met
b) meet
d) none of the above

3. If it....., we shall stay indoors.

a) will rain
c) had rained
b) rains
d) none of the above

4. It has been raining..... morning

a) From
c) Since
b) For
d) None of the above

5. We have been studying ..... three hours.

a) For
c) From
b) Since
d) None of the above

6. He jumped ..... the river to swim.

a) in b) into c) on d) at

7. Choose the passive of: I am reading a book.

a) A book is being read by me.
b) A book is read by me.
c) A book will be read by me.
d) None of the above.

8. Choose the passive of: Ms Camp teaches me English.

a) English is being taught to me by Ms Camp.
b) English was taught to me by Ms Camp
c) English is taught to me by Ms Camp.
d) None of the above

9. Choose the correct indirect speech of: The Principal said to the students, ' When will you start studying?.'

a) The Principal asked the students that when they will start studying
b) The Principal asked the students that when would they start studying.
c) The Principal asked the students when they would start studying
d) None of the above.

10. Choose the correct indirect Speech of: The boy says, 'I love to read books.'

a) The boy told that he loved to read books.
b) The boy told that he loves to read books.
c) The boy tells that he loves to read books.
d) None of the above.

1. If the length of a wire is doubled and its area is halved then its resistivity will become:

a) Four times b) Double c) Three times d) Remain same

2. No matter where you stand in front of mirror, your image is erect. The mirror is likely to be:

a) plane b) concave c) convex d) Either plane or convex

3. If the object is brought closer to eye, The image distance in eye:

a) Increases b) Decreases

c) Remain same d) May increase or decrease

4. A positively-charged particle (alpha-particle) projected towards west is deflected towards north by a magnetic field. The direction of magnetic field is

a) towards south b) towards east

c) downward d) upward

5. You are given n identical wires, each of resistance R. When these are connected in parallel, the equivalent resistance is X. When these will be connected in series, then the equivalent resistance will be:

a) X/ n^2 b) $n^2 X$ c) X/n d) nX

6. Which of the following statements is true?

a) A convex lens has 4 dioptre power having a focal length 0.25 m

b) A convex lens has –4 dioptre power having a focal length 0.25 m

c) A concave lens has 4 dioptre power having a focal length 0.25 m

d) A concave lens has –4 dioptre power having a focal length 0.25 m

7. Rays from Sun converge at a point 15 cm in front of a concave mirror. Where should an object be placed so that size of its image is equal to the size of the object?

a) 15 cm in front of the mirror

b) 30 cm in front of the mirror

c) between 15 cm and 30 cm in front of the mirror

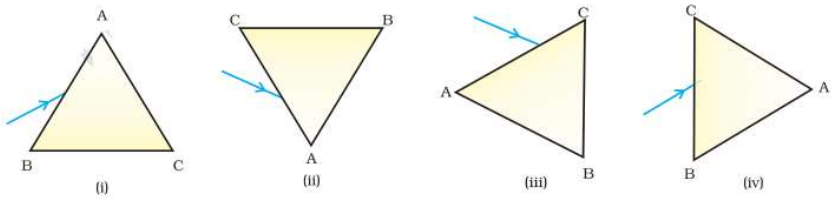
d) more than 30 cm in front of the mirror

8. A child is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. The following is the order of combinations for the magic mirror from the top.

a) Plane, convex and concave b) Convex, concave and plane

c) Concave, plane and convex d) Convex, plane and concave

9. A prism ABC (with BC as base) is placed in different orientations. A narrow beam of white light is incident on the prism as shown in Figure. In which of the following cases, after dispersion, the third colour from the top corresponds to the colour of the sky?



a) (i) b) (ii) c) (iii) d) (iv)

10. The clear sky appears blue because:

a) blue light gets absorbed in the atmosphere

b) ultraviolet radiations are absorbed in the atmosphere

c) violet and blue lights get scattered more than lights of all other colours by the atmosphere

d) light of all other colours is scattered more than the violet and blue colour lights by the atmosphere

11. The focal length of the eye lens increases when eye muscles:

a) are relaxed and lens becomes thinner b) contract and lens becomes thicker

c) are relaxed and lens becomes thicker d) contract and lens becomes thinner

12. A student obtains a blurred image of a distant object on a screen using a convex lens. To obtain a sharp image on the screen he should move the lens:

a) Away from the screen

b) Towards the screen

c) Two opposition very far away from the screen

d) Either towards or away from the screen depending upon the position of the object

13. If an object is placed 21 cm from the converging lens, the image is slightly smaller than the object. If the object is pleased at a distance of 19 cm from the lens, The image formed is slightly larger than the object. The approximate focal length of the lens is:

a) 20 cm b) 18 cm c) 10 cm d) 5 cm

14. The stars appear shifted from their actual position Due to the phenomenon of:

a) Reflection of light b) Refraction of light

c) Scattering of light c) Total internal reflection

15. In the spectrum of light, the colour that has least wavelength is:

a) red b) violet c) green d) yellow

16. Which of the following can make a parallel beam of light when light from a point source is incident on it?

a) concave mirror as well as convex lens

b) convex mirror as well as concave lens

c) Two plane mirrors placed at 90° to each other

d) concave mirror as well as concave lens

17. In torches, search lights and headlights of vehicles, the bulb is placed:

a) between the pole and the focus of the reflector.

b) very near to the focus of the reflector.

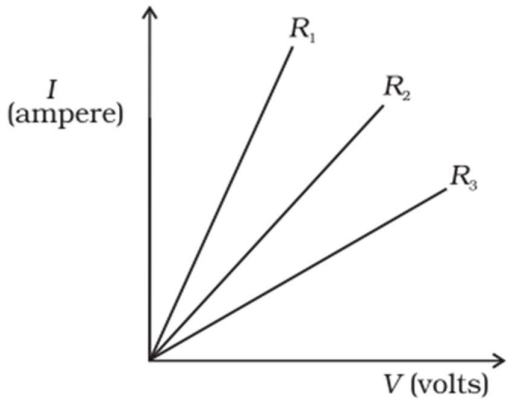
c) between the focus and centre of curvature of the reflector.

d) at the centre of curvature of the reflector.

18. A current of 1 A is drawn by a filament of an electric bulb. Number of electrons passing through a cross section of the filament in 16 seconds would be roughly:

a) 10^{20} b) 10^{16} c) 10^{18} d) 10^{23}

19. A student carries out an experiment and plots the V-I graph of three samples of nichrome wire with resistances R1, R2 and R3 respectively as shown in figure. Which of the following is true?



a) $R_1 = R_2 = R_3$ b) $R_1 > R_2 > R_3$ c) $R_3 > R_2 > R_1$ d) $R_2 > R_3 > R_1$

20. Two resistors of resistance 2 Ω and 4 Ω when connected to a battery will have:

a) same current flowing through them when connected in parallel

b) same current flowing through them when connected in series

c) same potential difference across them when connected in series

d) different potential difference across them when connected in parallel

21. The most important safety method used for protecting home appliances from short circuiting or overloading is

a) earthing b) use of fuse

c) use of stabilizers d) use of electric meter

22. Choose the incorrect statement from the following regarding magnetic lines of field:

a) The direction of magnetic field at a point is taken to be the direction in which the north pole of a magnetic compass needle points

b) Magnetic field lines are closed curves

c) If magnetic field lines are parallel and equidistant, they represent zero field strength

d) Relative strength of magnetic field is shown by the degree of closeness of the field lines

23. Point to be kept in mind for an electric circuit is:

a) Ammeter and voltmeter should be connected in series

b) Ammeter should be connected in series and voltmeter in parallel

c) Ammeter should be connected in parallel and voltmeter in series

d) Ammeter and voltmeter should be connected in parallel

24. At the time of short circuit, the current in the circuit:

a) reduces substantially. b) does not change.

c) increases heavily. d) vary continuously.

25. The force experienced by a current–carrying conductor placed in a magnetic field largest when:

a) Conductor is placed perpendicular to the magnetic field

b) Conductor is placed parallel to the magnetic field

c) both (a) and (b)

d) None of these

Chemistry – XI **MM 25**

1. You are given 3 unknown solutions with pH value as 6,8 & 9.5 respectively. Which solution will contain maximum OH^- ion?

a) Solution sample-1 b) Solution sample-2

c) Solution sample-3 d) Data are insufficient

2. Three beakers labelled as A, B and C each containing 25 ml of water were taken. A small amount of NaOH, anhydrous $CuSO_4$ and NaCl were added to the beakers A, B and C respectively. It was observed that there was an increase in the temperature of the solution contained in beakers A and B, whereas in case of beaker C, the temperature of the solution falls.

Which one of the following statement(s) is (are) correct?

(i) In beakers A and B, exothermic process has occurred.

(ii) In beakers A and B, endothermic process has occurred.

(iii) In beaker C exothermic process has occurred.

(iv) In beaker C endothermic process has occurred.

a) (i) only b) (ii) only c) (i) and (iv) d) (iv), (ii) and (iii)

3. The chemical formula of lead sulphate is

a) Pb_2SO_4 b) $Pb(SO_4)_2$ c) $PbSO_4$ d) $Pb_2(SO_4)_3$

4. The arrangement for Copper, Tin, Lead and Mercury, according to the reactivity series, is:

a) Tin> Lead> Copper> Mercury

b) Lead> Copper> Mercury> Tin

c) Copper> Mercury> Tin> Lead

d) Mercury> Tin> Lead> Copper

5. When hydrochloric acid is added to barium hydroxide, a white-coloured compound is formed. Which of the following option gives the complete chemical reaction?

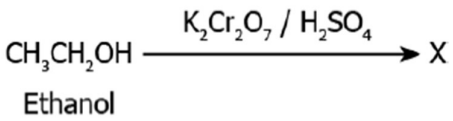
a) $HCl + Ba(OH)_2 \rightarrow BaCl_2 + 2HOH$

b) $2HCl + Ba(OH)_2 \rightarrow BaCl_2 + 2HOH$

c) $2HCl + Ba(OH)_2 \rightarrow BaH_2 + 2HCl + O_2$

d) $HCl + 2Ba(OH) \rightarrow 2BaCl_2 + 2HOH + O_2$

6. The below image represents a chemical reaction where ethanol is oxidised using potassium dichromate and sulphuric acid.



Which of the following option represents the product "X"?

a) CH_2O b) CH_3CHO c) CH_3H_2O d) CH_3COOH

7. Bleaching powder's chemical name is _____

(a) Calcium hypo-Oxychloride

(b) Calcium Oxychloride

(c) Calcium Chloride

(d) Calcium Chloro-Oxide

8. Methane, ethane and propane are said to form a homologous series because all are:

a) Hydrocarbons b) Saturated compounds

c) Aliphatic compounds d) Differ from each other by a CH_2 group

9. When Ag is exposed to air it gets a black coating of

a) $AgNO_3$ b) Ag_2S c) Ag_2O d) Ag_2CO_3

10. An element X on exposure to moist air turns reddish-brown and a new compound Y is formed. The substance X and Y are

a) X = Fe, Y = Fe_2O_3 b) X = Ag, Y = Ag_2S

c) X = Cu, Y = CuO d) X = Al, Y = Al_2O_3

11. The metals that float when treated with water are:

a) Manganese and sodium b) Sodium and calcium

c) Magnesium and sodium d) Magnesium and calcium

12. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is:

a) 1 : 1 b) 2:1 c) 4:1 d) 1:2

13. Which one is different from others

a) Nitric acid b) Sulphuric acid

c) Tartaric acid d) Phosphoric acid

14. What happens when a pellet of sodium is dropped in water?

a) It catches fire and forms oxide

b) It absorbs heat and forms oxide

c) It catches fire and forms hydroxide

d) It absorbs heat and forms hydroxide

15. Ester is formed by the reaction between:

a) An acid and an alcohol b) An acid and a base

c) A base and an alcohol d) An acid and an alkene

16. Reaction between X and Y forms compound Z. X loses electron and Y gains electron. Which of the following properties is not shown by Z?

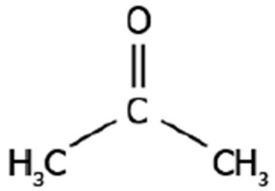
a) Has high melting point

b) Has low melting point

c) Conducts electricity in molten state

d) Occurs as solid

17. The following image represents a carbon compound.



Which functional group is present in the compound?

a) Alcohol b) Aldehyde c) Carboxylic acid d) Ketone

18. An aqueous solution turns red litmus solution blue. Excess addition of which of the following solution would reverse the change?

a) Baking power b) Lime

c) Ammonium hydroxide solution d) Hydrochloric acid

19. Which of the following is the molecular formula of cyclobutane?

a) C_4H_{10} b) C_4H_6 c) C_4H_8 d) C_4H_4

20. The nature of calcium phosphate is present in tooth enamel is

a) Basic b) Amphoteric c) Acidic d) Neutral

21. Choose the correct statement.

a) The ethene molecule is made up of 2 carbon atoms and 4 hydrogen atoms

b) Each carbon atom shares three electrons with three hydrogen atoms to form three carbon-hydrogen single covalent bonds

c) In ethane, the two carbon atoms share one pair of electrons among themselves to form one carbon-carbon single covalent bond

d) All of the above

22. Which of the following gives the correct increasing order of acidic strength?

a) Water < Acetic acid < Hydrochloric acid

b) Water < Hydrochloric acid < Acetic acid

c) Acetic acid < Water < Hydrochloric acid

d) Hydrochloric acid < Water < Acetic acid

23. Although metals form basic oxides, which of the given metals form an amphoteric oxide?

a) Na b) Ca c) Al d) Cu

24. In thermite welding a mixture of …… and …… is ignited with a burning magnesium ribbon which produces molten iron metal as large amount of heat is evolved.

a) iron (III) oxide and aluminium powder

b) iron (II) oxide and aluminium powder

c) iron (III) chloride and aluminium powder

d) iron (III) sulphate and aluminium powder

25. Dilute hydrochloric acid is added to granulated zinc taken in a test tube. The following observations are recorded. Point out the correct observation.

a) The surface of metal becomes shining

b) The reaction mixture turns milky

c) Odour of a pungent smelling gas is recorded

d) A colourless and odourless gas is evolved

Biology – XI **MM 25**

1. Opening and closing of stomatal pore depends on:

a) Atmospheric temperature

b) Oxygen concentration around stomata

c) Carbon dioxide concentration around stomata

d) Water content in the guard cells

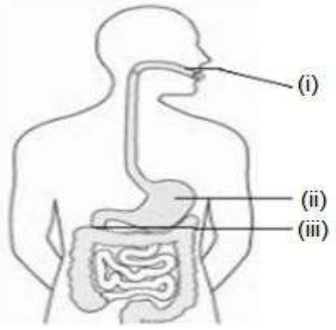
2. Identify the option that indicates the correct enzyme that is secreted in location i, ii and iii.

a) (i)-lipase, (ii)-trypsin, (iii)-pepsin

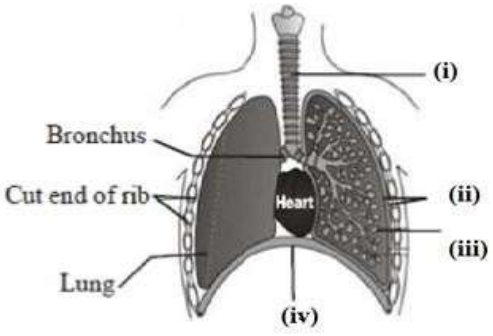
b) (i)-amylase, (ii)-pepsin, (iii)-trypsin

c) (i)-trypsin, (ii)-amylase, (iii)-carboxylase

d) (i)-permease, (ii)-carboxylase, (iii)-oxidase



3. Carefully study the diagram of the human respiratory system with labels (i), (ii), (iii) and (iv). Select the option which gives correct identification and main function and /or characteristic.



a) (i) Trachea: It is supported by bony rings for conducting inspired air.

b) (ii) Ribs: When we breathe out, ribs are lifted.

c) (iii) Alveoli: Thin-walled sac like structures for exchange of gases.

d) (iv) Diaphragm: It is pulled up when we breathe in.

4. In which of the following groups of organisms, blood flows through the heart only once during one cycle of passage through the body?

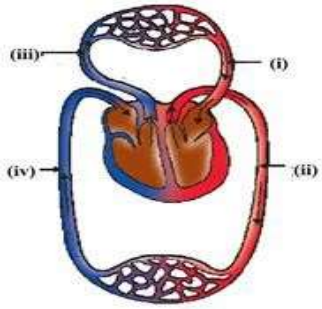
a) Rabbit, Parrot, Turtle

b) Frog, crocodile, Pigeon

c) Whale, Labeo, Penguin

d) Shark, dog fish, sting ray

5. The figure given below shows a schematic plan of blood circulation in humans with labels (i) to (iv). Identify the correct label with its functions?



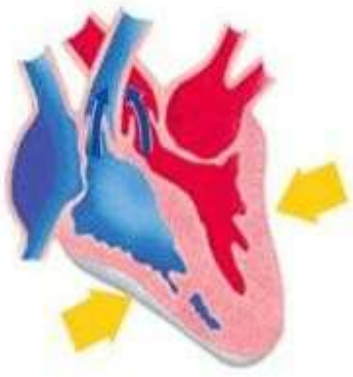
a) (i) Pulmonary vein - takes impure blood from body part.

b) (ii) Pulmonary artery - takes blood from lung to heart.

c) (iii) Aorta - takes blood from heart to body parts.

d) (iv) Vena cava takes - blood from body parts to right auricle

6. Identify the phase of circulation which is represented in the diagram of heart given below. Arrows indicate contraction of the chambers shown.



a) Blood transferred to the right ventricle and left ventricle simultaneously.

b) Blood is transferred to lungs for oxygenation and is pumped into various organs simultaneously.

c) Blood transferred to the right auricle and left auricle simultaneously.

d) Blood is received from lungs after oxygenation and is received from various organs of the body.

7. Plants use completely different process for excretion as compared to animals. Which one of the following processes is NOT followed by plants for excretion?

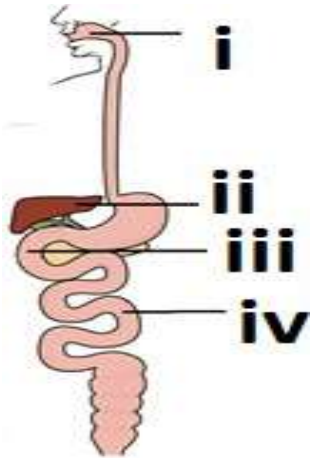
a) They can get rid of excess water by transpiration.

b) They selectively filter toxic substances through their leaves.

c) Waste products are stored as resins and gums in old xylem.

d) They excrete waste substances into the soil around them.

8. Observe the diagram of Human digestive system.



Match the labeling referred in column I and correlate with the function in column II.

Column I	Column II
i	a. The length of this depends on food the organism eats.
ii	b. Initial phase of starch digestion
iii	c. Increases the efficiency of lipase enzyme action
iv	d. This is the site of the complete digestion of carbohydrates, proteins and fats.

a) i.- a) ; ii — b) ; iii — c) ; iv- d)

b) i.- b) ; ii — c) ; iii — d) ; iv- a)

c) i.- b) ; ii — d) ; iii — c) ; iv- a)

d) i.- d) ; ii — a) ; iii — b) ; iv- c)

9. What is common between extensive network of blood vessels around walls of alveoli and in glomerulus of nephron?

a) Thick walled arteries richly supplied with blood

b) Thin walled veins poorly supplied with blood

c) Thick walled capillaries poorly supplied with blood.

d) Thin walled capillaries richly supplied with blood

10. A part of the body which responds to the instructions sent from nervous system is called_____.

a) receptor b) effector c) nerves d) muscles

11. In a person the tubule part of the nephron is not functioning at all. What will its effect be on urine formation?

a) The urine will not be formed.

b) Quality and quantity of urine is unaffected.

c) Urine is more concentrated.

d) Urine is more diluted.

12. Which nerves transmit impulses from the central nervous system towards the effector?

a) Sensory nerves b) Motor nerves

c) Relay nerves d) Cranial nerves

13. Breathing is controlled by which part of the brain?

a) Cerebrum b) Cerebellum

c) Hypothalamus d) Medulla oblongata

14. Which of the following statements is incorrect?

a) For every hormone there is a gene

b) For every protein there is a gene

c) For production of every enzyme there is a gene

d) For every fat molecule there is a gene

15. Select the incorrect statement:

a) Frequency of certain genes in a population change over several generations resulting in evolution.

b) Reduction in weight of organism due to starvation is genetically controlled.

c) Low weight parents can have heavy weight progeny.

d) Traits which are not inherited over generation do not cause evolution.

16. Which of the following is totally impossible outcome of Mendel's experiment?

a) 3 tall 1 short b) 24 tall 8 short

c) 8 tall 0 short d) 4 tall and 1 medium height

17. In few reptiles, the _____ at which fertilized eggs are kept determines the sex of offspring.

a) temperature b) pressure c) place d) all

18. In Rhizopus tubular structure bearing sporangia at their tips are called_____

a) filaments b) rhizoids c) roots d) hyphae

19. Vegetative propagation refers to formation of new plants from_____.

a) stem, roots, flowers b) stem, roots, leaves

c) stem, flowers, fruit d) stem, leaves, flowers

20. Which among the following statements are false for unisexual flowers?

a) They always possess stamen and pistil

b) They possess either stamen or pistil

c) They show cross pollination

d) Unisexual flowers possessing only stamens cannot produce fruits

21. Foetus is a:

a) well-developed embryo b) developing embryo

c) zygote d) male gamete

22. Which of the following is true for food web?

a) The energy available at each level gets diminished

b) Energy moves progressively through different levels

c) Both A and B

d) none

23. Accumulation of non-biodegradable pesticides in the food chain, in increasing amount at each higher trophic level is known as _____

a) eutrophication b) pollution

c) biomagnification. d) accumulation

24. The decomposers in ecosystem:

a) convert inorganic materials to simpler forms

b) convert organic material to inorganic forms

c) do not breakdown organic compounds

d) None

25. Which of the following statement is incorrect?

a) All green plants and blue green algae are producers

b) Green plants get their food from organic compounds

c) Producers prepare their own food from inorganic compounds

d) Plants convert solar energy into chemical energy

Rough Work