

### 3. TRANSPORTATION

1. The \_\_\_in above cells and the \_\_\_\_\_in below cells causes to continues column of moving water
2. If we remove all tissues from the cambium outwards \_\_\_\_\_will not occur
3. In B. P 120/80 , the numerator indicates\_\_\_\_\_
4. Hypertension is due to \_\_\_\_\_
5. In B. P 120/80 , the denominator indicates\_\_\_\_\_
6. Blood is collected from upper parts of the body by \_\_\_\_\_
7. In man, caval veins open into\_\_\_\_\_
8. The largest artery in the body of man is\_\_\_\_\_
9. The left ventricle receives \_\_\_\_\_blood from \_\_\_\_\_atrium.
- 10.Right \_\_\_\_\_pumps \_\_\_\_\_ blood to lungs.
- 11.From the left ventricle of man \_\_\_\_\_arises.
- 12.Pulmonary aorta arises from\_\_\_\_\_
- 13.The contraction phase of the chambers of heart is\_\_\_\_\_
- 14.The relaxation phase of the chambers of heart is \_\_\_\_\_
- 15.Hemoglobin is the most efficient carrier of \_\_\_\_\_
- 16.In man \_\_\_\_\_fluid present in pericardium protects the heart from injury
- 17.Chambers present below the atria are\_\_\_\_\_
- 18.The \_\_\_\_\_atria is smallest than \_\_\_\_\_atria.
- 19.Heart attack is due to\_\_\_\_\_
- 20.Doctors measure blood pressure with the instrument called\_\_\_\_\_
- 21.\_\_\_\_\_discovered blood capillaries
- 22.\_\_\_\_\_end in capillaries.
- 23.\_\_\_\_\_ start in blood capillaries
- 24.Valves are present in\_\_\_\_\_

25. The whole cardiac cycle completed in \_\_\_\_\_
26. The rate of the pulse will be equal to \_\_\_\_\_
27. \_\_\_\_\_ has taken up the transporting system in Nematelminthes.
28. If blood flows through heart only once for completing one circulation is called \_\_\_\_\_
29. If blood flows through heart twice for completing one circulation is called \_\_\_\_\_
30. Systolic pressure means \_\_\_\_\_
31. People who have high B.P during rest period are said to have \_\_\_\_\_
32. The enzyme released by the platelets \_\_\_\_\_
33. Thrombokinase converts \_\_\_\_\_ into thrombin.
34. Thrombin acts on dissolved fibrin to form \_\_\_\_\_
35. \_\_\_\_\_ vitamin helps in the coagulation of blood
36. The evaporation of water through leaves is called \_\_\_\_\_
37. An oak tree transpires as much as \_\_\_\_\_ liters of water per day.

### Key

- 1) Transpiration pull, root pressure
- 2) Transportation of food
- 3) Systolic pressure
- 4) Constant strain and stress smoking and alcohol consumption
- 5) Diastolic pressure
- 6) Superior vena cava
- 7) Right atria
- 8) aorta
- 9) Oxygenated, left
- 10) ventricle, deoxygenated
- 11) Systemic aorta
- 12) right ventricle
- 13) Systole
- 14) diastole
- 15) O<sub>2</sub> and CO<sub>2</sub>
- 16) Pericardial
- 17) Ventricles
- 18) Left, right
- 19) The blocking of coronary artery
- 20) Sphygmomanometer

- |   |                               |
|---|-------------------------------|
| 21) Marcello Malpighi   | 22) Artery                    |
| 23) Vein  | 24) Veins                     |
| 25) 0.8 sec   | 26) the number of heart beats |
| 27) Pseudocoelom  | 28) Single circulation        |
| 29) Double circulation  |                               |
| 30) strongest pressure the time blood is forced out of the ventricles |                               |
| 31) Hypertension  | 32) Thrombokinase             |
| 33) Prothrombin   | 34) Insoluble fibrin          |
| 35) K   | 36) Transpiration             |
| 37) 900   |                               |

#### 4. EXCRETION [The wastage disposing system]

1. Earthworm excretes its waste material through\_\_\_\_\_
2. The dark colored outer zone of kidney is called\_\_\_\_\_
3. The process of control of water balance and ion concentration within organism is called\_\_\_\_\_
4. Re-absorption of useful product takes place in \_\_\_\_\_ nephron.
5. Gums and resins are the \_\_\_\_\_ product of the plants.
6. Bowman's capsule and tubule taken together make a \_\_\_\_\_
7. The alkaloid used for malaria treatment is \_\_\_\_\_
8. The principle involved in dialysis is\_\_\_\_\_
9. Rubber is produced by \_\_\_\_\_of Heavea Brasiliensis.
10. \_\_\_\_\_invented dialysis machine.
11. Renal artery brings \_\_\_\_\_ blood
12. In the L.S of kidney, the pale colored inner zone is called\_\_\_\_\_
13. \_\_\_\_\_are the structural and functional units of the kidney
14. Squamous epithelial cells are called \_\_\_\_\_
15. The first part of the renal tubule is called\_\_\_\_\_
16. \_\_\_\_\_leads to the water
17. The peritubular capillaries join to form renal\_\_\_\_\_
18. The \_\_\_\_\_hormone is secreted only when concentrated urine is to be passed out.
19. Deficiency of vasopressin causes the disease\_\_\_\_\_
20. Movement of urine in the ureter is through\_\_\_\_\_
21. Maximum capacity of urinary bladder is\_\_\_\_\_
22. The failure of the kidney is called\_\_\_\_\_
23. Swelling of legs with extra water and waste products is called\_\_\_\_\_
24. The best long term solution for kidney failure is \_\_\_\_\_
25. We can collect organ from \_\_\_\_\_patients.

26. The process of transplantation of organs from brain dead patients is called \_\_\_\_\_
27. \_\_\_\_\_ are the excretory organs in Platyhelminthes.
28. The chemical name of tobacco is \_\_\_\_\_
29. Latex from \_\_\_\_\_ is the source of bio diesel
30. Distal convoluted tubule opens into \_\_\_\_\_
31. The size of kidney is \_\_\_\_\_ C.M
32. The diameter of \_\_\_\_\_ is less than afferent arterioles.
33. The filtration in glomerulars is called \_\_\_\_\_
34. \_\_\_\_\_ secretion is active secretion.

### Key

- |                                |                             |
|--------------------------------|-----------------------------|
| 1) Nephridia                   | 2) Cortex                   |
| 3) Osmo regulation             | 4) Tubular                  |
| 5) Secondary metabolic         | 6) Malpighian tubule        |
| 7) Quinine                     | 8) Separation               |
| 9) Latex                       | 10) Dr. Charles Hufnagel    |
| 11) Oxygenated                 | 12) Medulla                 |
| 13) Nephrons                   | 14) podocyte cells          |
| 15) Proximal convoluted tubule | 16) pelvis                  |
| 17) Venule                     | 18) Vasopressin             |
| 19) Diabetes insipidus         | 20) Peristalsis             |
| 21) 700-800ml                  | 22) End state renal disease |
| 23) Urena                      | 24) Kidney transplantation  |
| 25) Brain dead                 | 26) Cadaver transplantation |
| 27) Flame cells                | 28) Nicotiana tobacum       |
| 29) Jatropha                   | 30) Collecting tubule       |
| 31) 10 cm                      | 32) Efferent arteriole      |
| 33) Ultra filtration           | 34) Tubular                 |

## 5. COORDINATION-THE LINKING SYSTEM

1. The largest region of the brain is \_\_\_\_\_
2. A point of contact between two neurons is \_\_\_\_\_
3. \_\_\_\_\_ phytohormone is responsible for cell elongation and differentiation of shoots and roots.
4. Thyroxine is responsible for \_\_\_\_\_
5. Gibberellins and auxins promote growth in plants while abscisic acid arrests the same some situations are discussed here. State which hormone would be needed and why?
  - (a) A gardener wants large dahlias, he should use along with nutrients and other things \_\_\_\_\_ hormone
  - (b) In a dwarf plant the branches have to be thickened one would use \_\_\_\_\_ hormone
  - (c) Seeds are to be stored along time \_\_\_\_\_ hormone can help.
  - (d) Cutting the apex or tip of plants so that there are several lateral buds \_\_\_\_\_ hormones can be used
  - (e) The part of the brain that helps you in solving puzzles is \_\_\_\_\_
6. Myelin sheath is interrupted at a regular intervals called \_\_\_\_\_
7. \_\_\_\_\_ link together the afferent and efferent nerves.
8. The existence of the knee jerk was noted in \_\_\_\_\_
9. Nerve transmission from stimulus to a response can occur at a maximum speed of about \_\_\_\_\_ meters per second.
10. \_\_\_\_\_ is the structural and functional unit of nervous system
11. \_\_\_\_\_ pathways are usually longer passing through the brain
12. The brain is present in the hard bony box like structure called \_\_\_\_\_
13. The space between the inner layers of brain is filled with fluid called \_\_\_\_\_

14. In brain the grey matter is present on the \_\_\_\_\_ white matter is present towards \_\_\_\_\_

15. \_\_\_\_\_ refers to actions upon a blood vessel which alter its diameter.

16. \_\_\_\_\_ coordinates reflexes like swallowing, coughing, sneezing and vomiting.

17. Brain uses 20% of the whole body \_\_\_\_\_

18. \_\_\_\_\_ maintain posture, equilibrium and muscle tone.

19. \_\_\_\_\_ controls thinking, memory, reasoning, perception emotions and speech

20. The functions of the left side of the body are controlled by the \_\_\_\_\_ cerebral hemisphere.

21. Parts of the brain below the cerebrum are together known as \_\_\_\_\_

22. \_\_\_\_\_ is the largest part of the brain

23. The brain of adults weights approximately \_\_\_\_\_ grams

24. In spinal cord \_\_\_\_\_ matter is towards periphery \_\_\_\_\_ matter is towards the center of the spinal cord.

25. In 1822, Bell and Francois Magendie suggested that \_\_\_\_\_ carried messages of sensation inwards

26. The peripheral nervous system that controls involuntary actions is called \_\_\_\_\_ nervous system

27. The reduction and expansion of the pupil of our eye is controlled by \_\_\_\_\_ nervous system

28. The system nick named as a small brain is enteric nervous system which is present in \_\_\_\_\_

29. \_\_\_\_\_ of pancreas secrete insulin

30. Sugar diabetes is a condition in which the amount of free sugar in the \_\_\_\_\_ and \_\_\_\_\_ is abnormally high

31. In Latin, Insula means an \_\_\_\_\_

32. Banting, Best and Macleod succeeded in extracting \_\_\_ from degenerate animal pancreas
33. Insulin is administered to patients of diabetes by \_\_\_ into the skin
34. The glands secreting hormones are called \_\_\_ glands
35. The various actions of the body are controlled by hormones and coordinated by \_\_\_\_
36. \_\_\_ hormone is also called fight and flight hormone
37. Increased levels of \_\_\_\_ is responsible for anger
38. \_\_\_\_ hormone is responsible for dilation of pupil
39. The timing and amount of hormones released by endocrine glands is controlled by the \_\_\_\_\_ mechanism
40. The pad like swellings at the leaf base of mimosa pudica are\_\_
41. The hormones present in the plants are called\_\_\_\_\_
42. Plant hormones are also called\_\_
43. closing of stomata and seed dormancy are caused by\_\_\_\_
44. Bending of shoot towards light is due to accumulation of \_\_\_ on the other side of shoot.
45. The first plant hormone auxin was discovered by\_\_\_\_\_
46. Directional movements in plants in response to specific stimuli are called \_\_\_\_\_ movements.
47. Growth inhibiting plant hormone is\_\_\_\_\_
48. The type of response to make contact or touch is called\_\_\_\_\_
49. High concentration of \_\_\_\_\_ stimulates stem growth and inhibits root growth.
50. \_\_\_\_\_ cells supply nutrients to nerve cells.

## Key

1) Cerebrum

2) Synapse



- 3) Auxin
- 4) General growth rate and metabolic rate
- 5) a) Auxin b) Gibberellin c) abscisic acid d) Cytokinins e) Cerebrum
- 6) Nodes of Ranvier
- 7) Association nerves
- 8) 1875
- 9) 100
- 10) Nerve cell (or) Neuron
- 11) Voluntary
- 12) Cranium
- 13) Cerebrospinal fluid
- 14) Periphery, center
- 15) Vasomotor
- 16) Medulla oblongata
- 17) Energy
- 18) Cerebellum
- 19) Cerebrum
- 20) Right
- 21) Diencephalon
- 22) Cerebrum
- 23) 1300-1400
- 24) White, grey
- 25) Dorsal root
- 26) Autonomous
- 27) Autonomous
- 28) Digestive tract
- 29) Islets of langerhans
- 30) Blood, urine
- 31) Island
- 32) Insulin
- 33) Injection
- 34) Ductless glands, Endocrine glands
- 35) Nervous system
- 36) Adrenaline
- 37) Adrenaline
- 38) Adrenaline
- 39) Feedback
- 40) Pulvini
- 41) Phytohormones
- 42) Growth substances
- 43) Abscisic acid
- 44) Auxin
- 45) F.W. went
- 46) Tropic
- 47) Abscisic acid
- 48) Thigmotropism
- 49) Auxin
- 50) Glial

## 6. REPRODUCTION [The generating system]

1. Organisms capable of giving rise to off springs by the process of \_\_\_\_\_
2. 'Budding' can be seen in \_\_\_\_\_
3. Fragmentation can be seen in \_\_\_\_\_
4. The process in which female gametes develops into zygote without fertilization \_\_\_\_\_
5. Regeneration can be observed in \_\_\_\_\_
6. Vegetative propagation through leaves can be observed in \_\_\_\_\_
7. Examples for stolons \_\_\_\_\_
8. Examples for bulbs \_\_\_\_\_
9. Example for tuber \_\_\_\_\_
10. Rose plants can be propagated through \_\_\_\_\_
11. \_\_\_\_\_ method is useful in propagation improved varieties of various flower and fruits
12. Example for layering method of propagation \_\_\_\_\_
13. Cut stem of the plant without roots is called \_\_\_\_\_
14. In grafting, the stem part that is attached to the soil is called \_\_\_\_\_
15. In Rhizopus, the reproduction takes place through \_\_\_\_\_.
16. "Bread mould" \_\_\_\_\_
17. The leaf of fern is called \_\_\_\_\_
18. External fertilization takes place in \_\_\_\_\_
19. The major obstacle in external fertilization is \_\_\_\_\_
20. The two testes are located in \_\_\_\_\_
21. Vasefferentia forms \_\_\_\_\_
22. The fluid secreted by the male reproductive system is called \_\_\_\_\_
23. The structure of sperm cell \_\_\_\_\_
24. The male sex hormones is called \_\_\_\_\_

25. The secondary sexual characters are controlled by \_\_\_\_\_
26. The life span of a sperm cell is \_\_\_\_\_
27. The cellular bubbles in the ovary are called \_\_\_\_\_
28. The release of ovum (or) eggs is called \_\_\_\_\_
29. The widened funnel of oviduct is called \_\_\_\_\_
30. The fertilized ovum attaches to the soft tissues of \_\_\_\_\_
31. From the third month of pregnancy, the embryo is called \_\_\_\_\_
32. Gestation period in human beings \_\_\_\_\_
33. Finger like projections grow from the outer membrane of the embryo are called \_\_\_\_\_
34. Chorion and the adjacent uterine tissue make up \_\_\_\_\_
35. Placenta is formed during \_\_\_\_\_
36. \_\_\_\_\_ is the important structure for the nourishment of the embryo.
37. The embryo gets oxygen, nutrients by the process of \_\_\_\_\_
38. Amniotic fluid protects the embryo from \_\_\_\_\_
39. The membrane that originates from the digestive canal of the embryo \_\_\_\_\_
40. The tubeless structure of allantois is called \_\_\_\_\_
41. During birth \_\_\_\_\_ comes first.
42. During birth \_\_\_\_\_ is tied off and cut by the doctors to separate the new born baby
43. The number species of flowering plants are present \_\_\_\_\_
44. The reproductive parts of flowers \_\_\_\_\_
45. Flowers containing either stamens or carpels are called \_\_\_\_\_
46. Example for unisexual flowers \_\_\_\_\_
47. The flowers which contain both stamens and carpels are called \_\_\_\_\_
48. Give examples for bisexual flowers \_\_\_\_\_
49. Example for self pollination \_\_\_\_\_

50. The agents of pollination \_\_\_\_\_
51. Stamens contains sac like structure at its head containing small ball like structures are called \_\_\_\_\_
52. The embryo sac of flowering plants contain \_\_\_\_\_
53. Two polar nuclei combine to form \_\_\_\_\_
54. The large central cell containing two nuclei are called \_\_\_\_
55. The second sperm unites with the fusion nucleus to form \_\_\_\_\_
56. Function of endosperm tissue \_\_\_\_\_
57. Union of one sperm with the egg, and the second sperm with the fusion nucleus is called \_\_\_\_\_
58. The embryo consists of two cotyledons namely \_\_\_\_\_
59. The function of cotyledons is \_\_\_\_\_
60. The endosperm tissue continues to grow as the ovule matures into a seed in \_\_\_\_\_
61. The ovary grows rapidly and ripens to form \_\_\_\_\_
62. The seed produced after fertilization contains the future plant that develops into a seedling under appropriate condition is called \_\_\_\_\_
63. " cell theory " was proposed by \_\_\_\_\_
64. Robert Hooke was associated with the discovery of \_\_\_\_\_
65. " Chromosomes carried heritable characters" was proposed by \_\_\_\_\_
66. 'In successive generations individuals of the same species have the same number of chromosomes' was proposed by \_\_\_\_\_
67. 'Mitotic Division ' was confirmed by \_\_\_\_\_
68. DNA stands for \_\_\_\_\_
69. The structure of DNA was discovered by \_\_\_\_\_
70. Mitosis takes place in \_\_\_\_\_
71. Meiosis takes place in \_\_\_\_\_
72. The period between two cell divisions is called \_\_\_\_\_

73. Expand AIDS \_\_\_\_\_
74. ART centers supplies \_\_\_\_\_
75. "ASHA" stands for \_\_\_\_\_
76. \_\_\_\_\_ State has the highest number of HIV patients in the country.
77. Any device or drug which prevents pregnancy in woman is called \_\_\_\_\_
78. In vasectomy, \_\_\_\_\_ is removed by surgery in males.
79. In females, a small portion of oviducts, is removed by surgical operation and the cut ends are tied this method is called \_\_\_\_\_

### Key

- |  |                                |
|--|--------------------------------|
| 1) Reproduction  | 2) Yeast and Hydra             |
| 3) Flatworms, moulds   | 4) Parthenogenesis             |
| 5) Planaria  | 6) Bryophyllum                 |
| 7) Vallisneria, strawberry                                   | 8) Onions and corns, colacasia |
| 9) Potato  | 10) Cutting                    |
| 11) Grafting   | 12) Nerium                     |
| 13) Scion  | 14) Stock                      |
| 15) Sporulation  | 16) Rhizopus                   |
| 17) Sporophyll   | 18) Fish and frogs             |
| 19) Fertilization is controlled by nature (external factors) |                                |
| 20) Scrotum  | 21) Epididymis                 |
| 22) Semen  | 23) Flagellated structure      |
| 24) Testosterone   | 25) Testosterone               |
| 26) 24 to 72 hours   | 27) Graafian follicle          |
| 28) Ovulation  | 29) Fallopian tube             |
| 30) Uterus   | 31) Fetus                      |
| 32) 280 days or 9 months                                     | 33) Chorion                    |
| 34) The placenta   | 35) 12 weeks of pregnancy      |
| 36) Placenta   | 37) Diffusion                  |

- 38) Minor Mechanical injury  
40) Umbilical cord  
42) Umbilical cord  
44) Stamens and carpels  
46) Bottle gourd and papaya  
48) Datura  
50) Insects, birds, wind, water  
52) Seven cells and eight nucleus  
54) Polar nuclei  
56) Providing food materials to the ovules  
58) Epicotyl and hypocotyls  
59) Absorb and storage of food and water from endosperm  
60) Corn and castor  
62) Germination  
64) Chromosomes  
66) August Weismann  
68) Deoxyribonucleic acid  
70) Somatic cells  
72) Interphase  
73) Acquired Immune Deficiency Syndrome  
74) Medicines to HIV patients  
76) Accredited Social Health Activist  
78) A small portion of vas deferens
- 39) Allantois  
41) Head  
43) 2,75,000  
45) Unisexual flowers  
47) Bisexual flowers  
49) Pea family  
51) Pollen  
53) A single fusion nucleus  
55) Endosperm  
57) Double fertilization  
61) the fruit  
63) Virchow  
65) Wilhelm roux  
67) Theodor Boveri  
69) Crick and Watson  
71) Sex cells  
75) Andhra Pradesh  
77) Contraceptive  
79) Tubectomy

## 7. COORDINATION IN LIFE PROCESS

1. 3:2:1:2 the ratio of our dentition. Here 1 Represents \_\_\_\_\_
2. Large protein molecule are broken down in \_\_\_\_\_ of digestive track \_\_\_\_\_
3. \_\_\_\_\_ is the strong acid which is secreted during digestion
4. Olfactory receptors present in \_\_\_\_\_ trigger signals to brain
5.  $P_H$  of saliva is \_\_\_\_\_ in nature
6. Fill in the blanks with suitable words given below

Fluctuations of hormone (i) \_\_\_\_\_ levels results in sensation of hunger and motivation of consuming food. When you feel your stomach is full and there is no need of food any more. Another hormone (ii) \_\_\_\_\_ that gets secreted suppresses hunger. When we take food into the mouth it has to be chewed thoroughly. For this purpose the (iii) \_\_\_\_\_ Muscles help in chewing actions, while the (iv) \_\_\_\_\_ muscles of the Jaw moves the Jaw up, down, forward and backward during food mastication . The (v) \_\_\_\_\_ nerve controls the muscles of the jaw under the action of (vi) \_\_\_\_\_ nervous system saliva are released by the salivary glands moistens the food to make chewing and swallowing easier. The salivary (vii) \_\_\_\_\_ in the saliva breaks down the starch into sugar. As a result of chewing the food is transported into the oesophagus by the action of swallowing which is coordinated by the swallowing centre in the (viii) \_\_\_\_\_ and the (ix) \_\_\_\_\_ the tongue which is gustatory recognizes the taste and (x) \_\_\_\_\_ nerve plays an important role in sensation of taste.

### Choose the right ones

- (i) Leptin, Ghrelin, Gastrin, Secretin
- (ii) Ghrelin, Leptin, Secretin, Gastrin
- (iii) Deep muscles, surface muscles, circular muscles, striated muscles
- (iv) Surface muscles, deep muscles, neck muscles, long muscle.

(v)Fifth cranial nerve, second cranial nerve, fifth facial nerve, spinal nerve.

(vi)Central nervous system, peripheral nervous system, autonomous nervous system.

(vii)Lipase, Sucrose, Galactose, Amylase

(viii)Medulla oblongata, cerebrum, brain stem, 7<sup>th</sup> cranial nerve.

(ix)Pons varolii, brain stem, medulla oblongata, mid brain.

(x)6<sup>th</sup> Cranial nerve, 5<sup>th</sup> cranial nerve, 10<sup>th</sup> cranial nerve, optic nerve

7. Ghrelin is secreted from \_\_\_\_\_

8. \_\_\_\_\_ play a major role in carrying the hunger pangs.

9. Increase of ghrelin levels result in \_\_\_\_\_

10. The sense of taste is carried to the brain for analysis only after \_\_\_\_\_

11. The food in the mouth has been broken down in small pieces to \_\_\_\_\_

12. Teeth helps in the process of \_\_\_\_\_

13. The teeth which have sharp and pointed edges are \_\_\_\_\_

14. \_\_\_\_\_ have blunt and nearly flat surface

15. \_\_\_\_\_ muscles help in the movement of jaws

16. \_\_\_\_\_ muscles help in pushing the food into the mouth

17. Starch is broken down into maltose and dextrose by the action of \_\_\_\_\_

18. Swallowing is coordinated by \_\_\_\_\_

19. P<sub>H</sub> beyond 7 is known as \_\_\_\_\_

20. P<sub>H</sub> below 7 is known as \_\_\_\_\_

21. P<sub>H</sub> 7 is known as \_\_\_\_\_

22. \_\_\_\_\_ litres of saliva is secreted daily.

23. \_\_\_\_\_ acts as lubricant in the oesophagus

24. Bleaching and burning sensation of stomach is due to \_\_\_\_\_

25. Partially digested food in stomach \_\_\_\_\_





28) Mucus

29) Villi

30) Secretion, Cholecystokin

31) Rectum

32) 2123\2123

## 8. Heredity [From parent or progeny]

1. The process of acquiring change is called\_\_\_\_\_
2. Mendel's experiment stands for\_\_\_\_\_
3. The four characters observed in the experiments on law of independent assessment are\_\_\_\_\_
4. If we cross pollinate red flower plant with white flower we will get\_\_\_\_\_ percent of mixed color plants
5. TT or YY, Tt or Yy are responsible for a \_\_\_\_\_character
6. Female baby having 23 pairs of autosomes at the age of 18 years she has \_\_\_\_\_ progression
7. The population grows in \_\_\_\_\_ progression whereas food sources grown in \_\_\_\_\_ progression
8. A goat which walks properly can't live for a long time, According to Darwin this represents\_\_\_\_\_
9. Forelimb of whale for swimming whereas in horse it is used for\_\_\_\_\_
- 10.The study of fossils is called\_\_\_\_\_
- 11.The dihybrid ratio is\_\_\_\_\_
- 12.“Laws of inheritance” was proposed by\_\_\_\_\_
- 13.Mendel did his experiments in\_\_\_\_\_ garden
- 14.Mendel choose \_\_\_\_\_ pair of contrasting characters for his study
- 15.The life cycle of a pea plant is \_\_\_\_\_
- 16.The Modern name for 'Factor' \_\_\_\_\_
- 17.Passing of characters from parents to offspring is called\_\_\_\_\_
- 18.The process in which traits are passed from one generation to another generation is called \_\_\_\_\_
- 19.\_\_\_\_\_ is a segment of DNA which is present on the nucleus of each cell
- 20.The detailed structure of DNA was discovered by \_\_\_\_\_
- 21.The structure of DNA \_\_\_\_\_

22. Each human cell contains \_\_\_\_\_ pairs of autosomes
23. Y chromosome is present in \_\_\_\_\_
24. \_\_\_\_\_ discovered sex chromosome.
25. Setton and Morgan conducted experiments on \_\_\_\_\_
26. Variations are developed during \_\_\_\_\_
27. Change in \_\_\_\_\_ tissue cannot be passed on to the DNA
28. 'Inheritance of acquired Characters are proposed by \_\_\_\_\_
29. \_\_\_\_\_ conducted experiments on rat to prove the Lamarck theory is wrong
30. Charles Darwin voyaged in the ship named \_\_\_\_\_
31. Darwin was influenced by \_\_\_\_\_ theory
32. Darwin observed the variations in \_\_\_\_\_ birds in \_\_\_\_\_ islands
33. 'Principles of Geology' was written by \_\_\_\_\_
34. Survival of the fittest struggle for existence and Natural Selection was proposed by \_\_\_\_\_
35. The book of Darwin is \_\_\_\_\_
36. Alfred Russel Wallace done his studies in \_\_\_\_\_
37. Darwin and Wallace jointly published an article in the \_\_\_\_\_
38. Structurally different but functionally similar organs are called \_\_\_\_\_
39. Structurally similar and functionally different organs are called \_\_\_\_\_
40. Study of fossils \_\_\_\_\_
41. Connecting link between reptiles and birds \_\_\_\_\_
42. Ketosis fossil which lived 160 million years ago was obtained in \_\_\_\_\_
43. The Study of human evolution \_\_\_\_\_
44. The scientific name of man \_\_\_\_\_
45. Moving Museum of Vestigial organs \_\_\_\_\_
46. \_\_\_\_\_ number of vestigial organs are present in human beings.

## Key

- 1) Evolution,
- 2) Gametes
- 3) Yellow, Round green, wrinkled
- 4) 50% Heterozygous
- 5) Allele
- 6) 22, 01
- 7) Geometrical, Arithmetic
- 8) Survival of the fittest
- 9) Running
- 10) Palaeontology
- 11) 9:3:3:1
- 12) Gregor Mendel
- 13) Monastery
- 14) 7
- 15) One year
- 16) Gene
- 17) Heredity
- 18) Inheritance
- 19) Gene
- 20) Francis Crick and James Watson
- 21) Double Helix
- 22) 22
- 23) Gametes produced
- 24) Setton and Morgan
- 25) Drosophila
- 26) Reproduction
- 27) Non-reproductive
- 28) Jean Baptist Lamarck
- 29) August Weismann
- 30) HMS Beagle
- 31) Malthus
- 32) Finch, Galapagos
- 33) Sir. Charles Lyell
- 34) Sir Charles Darwin
- 35) The origin of species in 1859
- 36) Indonesian islands
- 37) Journal of Linnaean Society about Natural selection
- 38) Analogous organs
- 39) Homologous organs
- 40) Paleontology
- 41) Archeopteryx
- 42) Yamanapalli of Adilabad dist
- 43) Anthropology
- 44) Homosepiens
- 45) Man
- 46) 180

## 9. OUR ENVIRONMENT – OUR CONCERN

1. The energy in the ecosystem flows in the form of \_\_\_\_\_
2. Food web ends at \_\_\_\_\_
3. Domination of herbivores can be seen in \_\_\_\_\_
4. Cacti and thorny bushes are examples for \_\_\_\_\_ plants
5. Lianas are \_\_\_\_\_
6. Ecological pyramids were proposed by \_\_\_\_\_
7. Producers are occurred in a ecological pyramid at \_\_\_\_\_
8. Position of top carnivores in a ecological pyramid is at \_\_\_\_\_
9. \_\_\_\_\_ is vital in the absorption of solar energy
10. Light energy is converted into \_\_\_\_\_ energy in photosynthesis
11. Anaerobic decomposition of buried dead organism head to the formation of \_\_\_\_\_
12. The fewer steps in the food chains, the \_\_\_\_\_ will be the species at the top.
13. \_\_\_\_\_ are undigested animal food.
14. The bio mass of each tropic level is always less than \_\_\_\_\_
15. Minamata disease is caused due to \_\_\_\_\_
16. 10% law was introduced by \_\_\_\_\_
17. Producers-> Herbivores->secondary \_\_\_\_\_ cal.  
1000 cal    100 cal    consumers
18. Who proved that the loss of energy at each exchange is to be 20-30% \_\_\_\_\_
19. The process of entering of pollutants in a food chain is called \_\_\_\_\_
20. Methyl mercury poisoning is responsible for \_\_\_\_\_ disease in \_\_\_\_\_ country
21. The reason for the disturbed behavior of bird is \_\_\_\_\_
22. D. D. T and B. H. C are examples for \_\_\_\_\_
23. Expand D.D.T \_\_\_\_\_
24. Expand B.HC \_\_\_\_\_

25. Bio magnification is due to \_\_\_\_\_

26. Bio magnification is high in \_\_\_\_\_

**key**

- 1) Food chains
- 2) Tertiary consumers
- 3) Grassland ecosystem
- 4) Xerophytic
- 5) Woody vines with stems that climb up and hand down from trees
- 6) Chester Elton
- 7) the base
- 8) The top
- 9) Chlorophyll
- 10) Chemical
- 11) Fossil fuels
- 12) More energy
- 13) Hair, Feathers, cartilage, bone
- 14) Lindeman
- 15) the tropic level below
- 16) Pollution of mercury
- 17) According to 10% law
- 18) Steel
- 19) Bio accumulation
- 20) Minamata, Japan
- 21) Pesticide poisoning
- 22) Chlorinated hydrocarbons
- 23) Dichloro Diphenyl Trichloro Ethane
- 24) Benzene Hexa Chloride
- 25) Non bio- degradable pesticides
- 26) Top carnivores

## 10. NATURAL RESOURCES

1. \_\_\_\_\_ plants are used for production of bio fuel
2. Bio diversity is important for more than just food and for \_\_\_\_\_ also
3. Example for non renewable resource is \_\_\_\_\_
4. \_\_\_\_\_ is the alternative method to prevent ground water depletion
5. Cultivation of paddy is suitable for \_\_\_\_\_ areas
6. Bishnoi community belongs to \_\_\_\_\_ state
7. The purpose of percolation tank is \_\_\_\_\_
8. In India the rain depends upon \_\_\_\_\_
9. \_\_\_\_\_ % of fresh water is available as surface water.
10. \_\_\_\_\_ % of saline water is present on the earth
11. Expand ICRISAT \_\_\_\_\_
12. \_\_\_\_\_ plants are growing in dry lands to improve nitrates in the soil
13. \_\_\_\_\_ technique can reduce water consumption by 70%
14. \_\_\_\_\_ % of land is under drip irrigation cultivation
15. Total water available in A.P. \_\_\_\_\_
16. Major source of irrigation \_\_\_\_\_
17. Actually, bamboo is a type of \_\_\_\_\_
18. \_\_\_\_\_ number of species could be losing from the earth every year
19. \_\_\_\_\_ number of species are utilizing as medicines
20. Plastic and synthetic rubber are made from \_\_\_\_\_
21. Bio fuel is obtained from \_\_\_\_\_
22. Example for fossil fuels \_\_\_\_\_
23. \_\_\_\_\_ is the percent of coal consumption in India.
24. The percentage of nuclear energy consumption in India \_\_\_\_\_
25. Expand MTR \_\_\_\_\_
26. Mining activity destroy \_\_\_\_\_
27. Expand IUCN \_\_\_\_\_



28. Expand ONGC \_\_\_\_\_

29. A rich source of natural gas in A.P \_\_\_\_\_

30. Example for water harvesting structures \_\_\_\_\_

### Key

1) Jatropha

2) Life

3) Petrol

4) Water shed

5) Delta

6) Rajasthan

7) Harvesting rain water

8) Monsoon

9) 0.01

10) 97

11) International Crop Research Institute for Semi Arid Tropics

12) Gliricidia

13) Drip irrigation

14) Only 2%

15) 3814 thousand million cubic feet (TMC)

16) Ground water

17) Grass

18) 200 to 1,00,000

19) 50 -70 thousand petroleum

20) Petroleum

21) Jatropha

22) Coal, petroleum, natural gas

23) 42%

24) 1%

25) Mountain top removal mining

26) Soil, plant and animal habitats

27) The international union for conservation of nature

28) Oil and natural Gas Corporation

29) K G Basin

30) Check dams, per collation tanks, contour trenches etc,