Q1) Write the scientific term of each of the following:

1. Division where the purpose is the production of the gametes. . . . (…………..)
2. The intermediate host for schistosoma heamatobium. (…………..)
3. The intermediate host for schistosoma mansoni. (…………..)
4. The decline in the Biological products of the soil. (…………..)
5. Division where the purpose is the production of the gametes. . . (…………..)
6. This is done by mating pure males of known origin to ordinary females. (…………..)
7. A tissue which transports the manufactured food in the plant. . (…………..)
8. Organisms prepare their food by the help of chemical energy, which results from the oxidation of substances. (…………..)
9. Animals, which do not give birth, but lay eggs and the mother suckle their young milk. (…………..)
10. Presence any substance of energy in wrong place, wrong time or wrong quantity. (…………..)
11. Presence any substance of energy in wrong place, wrong time or wrong quantity. (………..)
12. Energy flows through living organisms in a certain environment in various directions. (………..)
13. It is gradual change that continues through a long period of time.

 ( ……….. )

1. It is the infective stage of bilharzia. (………..)
2. The ductless glands and produce hormones in the blood stream. . . . (…………..)
3. Plant parasite on the stem of clever. (…………..)
4. The actual picture of the energy flow is a net work of food relations. (…………..)
5. A thin protein filament exists in muscles. (…………..)
6. The stage of mitotic division where chromosomes are arranged at the equator of thee cell. (…………..)
7. The ductless glands and produce hormones in the blood stream . . . (…………..)
8. The decline of the biological products of the soil. (…………..)

**Q2) Choose the right answer:**

1. From bryophyte is the …….

**a-riccia b- diatoms c- fucus d- hydra**

1. From the reason which does not cause drought in the environment is ……….

**a-Over grazing b- over cutting**

**c- Change in environmental condition d- rain fall**

1. The adult bilharzias worms settle in specific location in the human body which is the ………

**a-Liver b- lungs c- hepatic portal vein**

1. The adult bilharzias worms settle in specific location in the human body which is the ………

**a-Liver b- lungs c- hepatic portal vein**

1. The relationship between crocodile and plover is ……..

**a-Predation b- commensalisms**

 **c- mutualism d- parasitism**

1. Each cell in maize plant contains ……. Pairs of chromosomes.

**a-10 b- 20 c- 30 d-40**

1. The relationship between crocodile and plover is ……..

**a-Predation b- commensalisms**

 **c- mutualism d- parasitism**

1. Noise is a type of …….. pollutants.

**a-Physical b- chemical c- biological**

1. The anterior sucker in bilharzias is …… than the posterior sucker.
2. **bigger b- smaller c- equal**
3. the tissue which transport of food stuff in plants …….
4. **Phloem b- xylem c- parenchyma**
5. The stage where birth rate is high while death rate is low ….. stage.
6. **Transitional b- primitive c- stable d- all the previous**
7. The organelle which exists in most animal cells and few kind of primitive plant cells ………
8. **Ribosome b- centrosome c- mitochondria d- golgi apparatus.**
9. The infective stage of bilharzias takes place through the human …
10. **Snail b- cercaria c- miracidium d- adult worm**
11. Phylum arthropod contains …….
12. **Class crustacean b- class myriopoda**

**c- insect a d- all the previous**

**3) What happen if:**

1. **A man swallows cercaria in drinking water.**

**……………………………………………………………………**

1. **The nucleus of an amoeba was removed.**
2. **……………………………………………………………………**
3. **Removal of nucleus from ameoba.**
4. **……………………………………………………………………**
5. **If the cell loses its ribosomes.**

**……………………………………………………………………**

**4) Mention one function for each of the following:**

1. **Centrosome.**
2. **Protozoan flagellates in the gut of termites.**
3. **The mucous glands and the smooth slimy skin of frog.**
4. **Gynaecophoric canal in bilharzias.**
5. **Saprophytes.**
6. **Cell wall.**
7. **Diatoms.**

**Q5) Give reasons for:**

1. **Phloem tissue is a live tissue while xylem is a dead tissue.**

**……………………………………………………………………**

1. **Viruses are intermediate link between non living and living organisms.**

**……………………………………………………………………**

1. **The phloem tissue is a compound tissue.**

**……………………………………………………………………**

1. **Absence of anus in bilharzias worm.**

**……………………………………………………………………**

1. **Ozone is a double weapon.**

**……………………………………………………………………**

1. **Abundance of mitochondria in the animal’s muscle cell.**

**……………………………………………………………………**

1. **Parasitism is not common in the plant kingdom.**

**……………………………………………………………………**

1. **Hyacinth plant in Egypt from disturbance in the environmental balance.**

**……………………………………………………………………**

1. **Kangaroo belongs sub class metatheria.**

**……………………………………………………………………**

**Q6) Correct the underlined word:**

1. **Top worm in the class trematode.**
2. **Lysosomes are the important site of energy production.**
3. **The pyramid of mass provides the best representation in food pyramids.**
4. **Soil erosion is the decline in the biological products of the soil.**
5. **Insectivorous plant feed on insects to obtain hydrogen.**
6. **The companion cell exists in xylem tissue.**
7. **Bolti fish is a cartilaginous fish.**
8. **The system is a group of small units called tissues.**
9. **Reptiles respire by gills then by lungs.**
10. **The connective tissue cover the whole surface of the animal.**
11. **The real picture of the food chain is food pyramids.**
12. **The genetic equilibrium of the population may be disturbed and will be liable to go in a new direction called mutations.**
13. **Duck-billed (platy pus) laying eggs and suckle their youngs. So its from class eutheria.**

**Q7) Complete the following statements:**

1. Bread mould is related to kingdom ……… while nostoc is related to kingdom ………..
2. The endoplasmic reticulum may be …….. or granulated with ……. on its outer surface.
3. The egg of urinary bladder bilharzias hatches and …….. comes out of it which searches for ……….. snail.
4. From types of plastids ……… , ……… , ………..

**8) Compare between:**

1. **Ribosome and centrosome. ( position – function )**
2. **Bony fish and cartilaginous fish. “two points only”.**
3. **Male and female bilharzias worms.**
4. **Endocrine – Exocrino gland**
5. **The obligate parasites and the facultative parasites.**
6. **Insect and arachnida.**
7. **Mutualism and commensalisms. ( definition – example )**

**9) Write down a food chain includes:**

**Producer – consumer – decomposer**

**10) Mention the kind of relationship between each two living organisms:**

1. **The shark and remora fish.**
2. **Nepenthes plant and insect.**
3. **White ants and protozoan flagellate.**

**11) Mention an example of:**

1. **A flying mammal.**
2. **An Epithelial tissue.**
3. **A Cartilaginous organ .**
4. **Insectivorous plant.**

**12) Describe how the insectivorous plants obtain their requirements of the nitrogenous compounds.**

**B) Compare between: Chromoplasts and leucoplasts.**

**C) Draw a labeled diagram for: The alimentary canal of bilharzias.**

Test1

**Q1) A)**

**Write the scientific term of each of the following:**

1. **A tissue which transports the manufactured food in the plant.**
2. **Organisms prepare their food by the help of chemical energy, which results from the oxidation of substances.**
3. **Animals, which do not give birth, but lay eggs and the mother suckle their young milk.**
4. **An extinct kind of elephants used to live in North Europe during the late geological epochs and died out completely, but some of them were buried in the snow which preserved them.**

**B) What happen if:**

1. **A man swallows cercaria in drinking water.**
2. **The transverse walls between sieve were not perforated.**

**Q2) A) Choose the right answer:**

1. **The adult bilharzias worms settle in specific location in the human body which is the ………**
2. **Liver b- lungs c- hepatic portal vein**
3. **The relationship between crocodile and plover is ……..**
4. **Predation b- commensalisms c- mutualism d- parasitism**
5. **Each cell in maize plant contains ……. chromosomes.**
6. **10 b- 20 pairs of c- 20**
7. **Noise is a type of …….. pollutants.**

 **a-Physical b- chemical c- biological**

**B) Mention one function for each of the following:**

1. **Gynaecophoric canal in bilharzias.**
2. **Saprophytes. 3-Diatoms.**

**4-Pouch in Kangaroo.**

**Q3) A) Give reasons for:**

1. **Absence of anus in bilharzias worm.**
2. **Ozone is a double weapon.**
3. **Abundance of mitochondria in the animal’s muscle cell.**
4. **Parasitism is common in the plant kingdom.**
5. **Virus is considered as an intermediate link between living organisms and non-living organisms.**

**B) Re-arranges the following organism in a food chain:**

**Frog – Insect – Bacteria – Weeds - Snake**

**Q4) A) Correct the underlined word:**

1. **Soil erosion is the decline in the biological products of the soil.**
2. **Insectivorous plant feed on insects to obtain hydrogen.**
3. **The companion cell exists in xylem tissue.**
4. **Bolti fish is a cartilaginous fish.**

**B) Compare between: (Choose two only):**

1. **Male and female bilharzias worms.**
2. **Cell wall and cell membrane.**
3. **Insect and arachnida.**

**Q4) A) Relate each of the following to their kingdom and phylum: Euglena – Jelly fish.**

**B) What are the Advantages of High Dam.**

**C) Write short notes on:**

1. **The importance of epithelial tissues.**
2. **Introducing new organism in a balanced habitat give example.**
3. **Evolution and improvement.**

**Test 2**

**Q1) A) Complete the following statements:**

1. **Bread mould is related to kingdom ……… while nostoc is related to kingdom ………..**
2. **The endoplasmic reticulum may be …….. or granulated with ……. on its outer surface.**
3. **The egg of urinary bladder bilharzias hatches and …….. comes out of it which searches for …. snail.**
4. **There were two opinions explain the origin of life on earth ……. and ……..**

**B) Draw a labeled diagram for the structure of the nerve cell.**

**Q2) A) Choose the correct answer from between brackets:**

1. **From bryophyte is the …….**
2. **riccia b- diatoms c- fucus d- hydra**
3. **from the reasons which does not cause drought in the environment is ……….**
4. **Over grazing b- over cutting**

**c- change in environmental condition d- rain fall**

1. **………. is the most modern animal.**
2. **Shark b- Dolphin c- Prawn d- Bolti**
3. **One of the vestigial structure is the ……….**
4. **Appendix b- horse leg**

**c- appendix in man d- ear muscle of the dog**

**B) Give reason for:**

1. **Viruses are intermediate link between non living and living organisms.**
2. **The phloem tissue is a compound tissue.**

**Q3) A) Write the scientific term for:**

1. **Presence any substance of energy in wrong place, wrong time or wrong quantity. ( )**
2. **Energy flows through living organisms in a certain environment in various directions. ( )**
3. **It is gradual change that continues through a long period of time.**

 **()**

1. **It is the infective stage of bilharzia. ( )**

**B) What would happen in each of the following:**

1. **If the cell loses its ribosomes.**
2. **The nucleus of an amoeba was removed.**

**Q4) A) Correct the underlined words in the following statements:**

1. **The system is a group of small units called tissues.**
2. **Lysosomes are the important site of energy production.**
3. **The pyramid of mass provides the best representation in food pyramids.**
4. **Reptiles respire by gills then by lungs.**

**B) Compare between:**

1. **Bony fish and cartilaginous fish. “two points only”.**
2. **The obligate parasites and the facultative parasites.**

**Q5) A) Mention the kind of relationship between each two living organisms:**

1. **White ants and protozoan flagellate.**
2. **The shark and remora fish.**
3. **Nepenthes plant and insect.**

**B) Write down a food chain includes:**

**Producer – consumer – decomposer**

**C) Mention one function for each of the following:**

1. **Centrosome.**
2. **Yeast**

**Test3**

**Q1) A) Write the scientific term:**

1. **The intermediate host for schistosoma heamatobium.**
2. **The ductless glands and produce hormones in the blood stream.**
3. **Plant parasite on the stem of clever.**
4. **The decline in the Biological products of the soil.**
5. **Division where the purpose is the production of the gametes.**
6. **This is done by meting pure males of known origin to ordinary females.**

**B) Give reasons:**

1. **Hyacinth plant in Egypt from disturbance in the environmental balance.**
2. **The black bistro betularia butter flies spread with the industrial revolution.**
3. **Kangaroo belongs sub class metatheria.**

**Q2) A) Match (A) with suitable (B):**

|  |  |
| --- | --- |
| **A** | **B** |
| 1. **The inner cabbage leaves.**
2. **The phylum chrysophyta.**
3. **Drawins idea of natural selection can be summarized in his book.**
4. **It is the largest and most obvious organelle in the cell.**
5. **It occurs between two inner chromatids of tetrads in meiotic prophase “I”.**
6. **In 1903 he discovered some eggs in the faeces of a patient (with lateral spines)**
 | 1. **Scientist Manson.**
2. **The Nucleus.**
3. **Crossing over.**
4. **The nuclear membrane.**
5. **Includes diatoms.**
6. **The origin of species.**
7. **Leucoplasts.**
 |

**B) Compare between:**

1. **Ribosome and centrosome. ( position – function )**
2. **Mutualism and commensalisms. ( definition – example )**

**Q3) A) Correct the underline:**

1. **The connective tissue cover the whole surface of the animal.**
2. **Top worm in the class trematode.**
3. **The real picture of the food chain is food pyramids.**
4. **The genetic equilibrium of the population may be disturbed and will be liable to go in a new direction called mutations.**
5. **Duck-billed platy pus laying eggs and suckle their youngs. So its from class eutheria.**

**Q4) A) Choose the correct answer:**

1. **The anterior sucker in bilharzias is …… than the posterior sucker.**
2. **bigger b- smaller c- equal**
3. **the tissue which transport of food stuff in plants …….**
4. **Phloem b- xylem c- parenchyma**
5. **The stage where birth rate is high while death rate is low ….. stage.**
6. **Transitional b- primitive c- stable d- all the previous**
7. **The heart of embryo in early stage has ……..**
8. **One auricle and one ventricle.**
9. **Two auricles and two ventricles.**
10. **The infective stage of bilharzias takes place through the human …**
11. **Snail b- cercaria c- miracidium d- adult worm**
12. **Phylum arthropod contains …….**
13. **Class crustacean b- class myriopoda**

**c- insect a d- all the previous**

**B) What is the function of:**

1. **Protozoan flagellates in the gut of termites.**
2. **The mucous glands and the smooth slimy skin of frog.**

**Q5) A) Choose the correct answer for the following:**

1. **From the insectivorous plants to obtain nitrogenous compounds.**
2. **Cuscuta plant b- utrcularia plant c- sea cucumber**
3. **From Lamark’s lows of the evolution.**
4. **Use and disuse b- struggle for survival c- population genetics**

**B) Write the order only for each: Rabbit – Whale.**

**C) Give the scientific term:**

1. **The actual picture of the energy flow is a net work of food relations.**
2. **It is form the evidences of evolution and it lived then after death it were buried in the sedmentary rocks.**

**TEST4**

**Answer the following questions:**

**Q1) A) Choose the correct answer from between brackets:**

1. **The longest phase in mitotic division is ……..**
2. **Prophase b- metaphase c- migration d- telophase**
3. **Genetic drift is caused by ……….**
4. **Large size of population b- linkage**

**c- migration d- absence of mutation**

1. **The infective stage of bilharzias (Schistosma) is ……**
2. **The egg b- the meracidium c- the cercaria d- the sporocyst**
3. **The organelle which exists in most animal cells and few kind of primitive plant cells ………**
4. **Ribosome b- centrosome c- mitochondria d- golgi apparatus**
5. **The relation between hydra and green algae is …….**
6. **Predation b- mutualism c- commensailisms d- saprophytism**
7. **There is an exoskeleton in the form of a calcareous shell in ….**
8. **Anodonta b- cockroach c- prawn d- crabs**

**B) Draw a labeled diagram for: A nerve cell.**

**C) What is meant by: Grading-up.**

**Q2) A) Give reasons for:**

1. **Eggs of bilharzias hatch in fresh water.**
2. **Termits feed on wood although they can’t digest cellulose.**
3. **Archaeopteryx is an intermediate link.**

**B) Relate each of the following to phylum and class:**

1. **Taenia (tape worms).**
2. **Adiantum**

**C) Compare between: The stable and the transitional stage in demographic theory.**

**Q3) A) Write the scientific term:**

1. **A long, thin walled tubular structure formed inside the respiratory system of the snail.**
2. **A thin protein filament exists in muscles.**
3. **The stage of mitotic division where chromosomes are arranged at the equator of thee cell.**
4. **The space between the deepest part in an ocean and the highest part on a mountain where life exists**
5. **The decline of the biological products of the soil.**

**B) Compare between: Chromoplasts and leucoplasts.**

**C) Draw a labeled diagram for: The alimentary canal of bilharzias.**

**Q4) A) Mention the site and function of:**

1. **The companion cell.**
2. **Gynaecophoric groove.**
3. **The intercalalated discs.**

**B) Describe how the insectivorous plants obtain their requirements of the nitrogenous compounds.**

**C) Mention an example of:**

1. **A flying mammal.**
2. **A vestigial structure.**
3. **Divergent evolution.**
4. **Insectivorous plant.**

**Q5) A) Write short account on:**

**Symptoms, harms and complication of bilharzias.**

**B) Identify what the diagram represent ?**

**Then classify it and Mention its mean for movement ?**

**C) Define:**

**1- Petrifaction.**

**2- The tissue.**