**MARKING GUIDE PAPER ONE BIOLOGY**

1. C

2.-Do not eat or drink in laboratory. (**1mark)**

 - Do not smell any chemicals in laboratory. (**1mark)**

 - Do not enter in laboratory without permission from the teacher or lab technician. **(1mark)**

 - Follow all instructions when carrying out an experiment. (**1mark)**

3.

|  |  |
| --- | --- |
| **Column A** | **Column B** |
| 1 | B |
| 2 | E |
| 3 | A |
| 4 | G |
| 5 | D |
| 6 | C |
| 7 | F |

4.-It can move. **(1mark)**

 -It can grow. **(1mark)**

-It can breathe. **(1mark)**

-It can respond to change in the environment. (**1mark)**

-It eat can eat or drink. **(1mark)**

-It can reproduce young ones. **(1mark)**

It can make the excretion. **(1mark)**

5.-We classify organisms to identify them clearly. **(1marks)**

 -To know them easily. **(1mark)**

6. Species, Genus Family, order, Class Phylum, Kingdom. **(7marks)**

7.a. A plantae kingdom. **(2marks)**

 b. Monera or protoctista. **(2marks**)

 C. Fungi king dom. **(2marks**)

8. It is dicotyledonous plant. **(2marks)**

9 a) It is site of photosynthesis. (**1mark)**

 -It is food for animals. **(1mark)**

 -some of them used as medicines for animals. **(1mark**)

b)-Leaves are broad and flat to provide large surface area. **( 1mark)**

-Leaves have stomata to exchange of gases. **(1mark)**

c). Pants provides oxygen. **(1mark)**

 -Plants attract tourists. **(1mark)**

 - some of them are food for animals. **(1mark)**

10a). Mg=12cm/4cm

 = 3x

 b).

|  |  |  |
| --- | --- | --- |
| Eyepiece magnification | Objective lens magnification | Total magnification |
| 5x | 25x | 125x |
| 10x | 10x | 100x |

(**4marks)**

11.

|  |  |
| --- | --- |
|  A plant cell |  An animal cell |
|  Has cell wall | Do not have cell wall |
| Has chloroplasts |  Do not have chloroplasts |
| Has large sap vacuole | Has small vacuole |
| Has regular shape | Has irregular shape |
| Has small nucleus which is not located at the center | Has large nucleus located at the center |

 (**10 marks)**

12a). It is site of photosynthesis. (**2marks)**

 b). chlorophyll pigment. (**2marks)**

13.a). Transport of oxygen. **(1mark**)

 . Transport of carbon dioxide. **( 1mark)**

b).- Red blood cells have biconcave shape to increase surface area. (**1mark)**

 -They lack nucleus to provide space of hemoglobin. **(1mark)**

14.

|  |  |  |
| --- | --- | --- |
| **Part** | **Plant cell** | **Animal cell** |
| Nucleus | $$√$$ | $$√$$ |
| Cell membrane | $$√$$ | $$√$$ |
| Cytoplasm | $$√$$ | $$√$$ |
| Cell wall | $$√$$ | x |
| Large vacuole | $$√$$ | x |
| Chloroplasts | $$√$$ | x |

 (**10 marks)**

15.a). milk, eggs, meat peas. Etc **(2marks)**

b) -T o builds the body. (**1 mark)**

 -To replace damaged cells. **(1mark)**

 c). Carbohydrates, proteins, fats/oils, vitamins, water, mineral salts. (**3mark)**

 *END*