**1.LIFE AND LIVING**

**A Cells**

**Question 1**

1 A. cell wall

B cell membrane

C. vacuole

D. cytoplasm/cytosol

E. nucleus

F. mitochondrion

G. chloroplast

2. a A. Gives the cell strength, support and shape. Also protects the cell.

b. C. Gives support to the cell. Acts as a storage organ.

c. G. Has chlorophyll that absorbs light for photosynthesis.

d. E. Breaks down food to release energy. Responsible for cellular respiration.

3. a. G

b. B

c. D

4. Plant cell. Has a cell wall. Has chloroplast. Has a large vacuole.

5**. Differences between a Plant and an Animal cell**

|  |  |
| --- | --- |
| **Plant cell** | **Animal cell** |
| 1. Has a cell wall present. | 1. Cell wall absent. |
| 2. Has chloroplasts. | 2. No chloroplasts present |
| 3. Large vacuole present. | 3. Vacuoles are small, temporary or absent |
| 4. Has a rigid regular shape. | 4. Has a flexible irregular shape |

**Question 2**

1. cell

2. microscopic

3. macroscopic

4. unicellular

5. cell wall

6. cell membrane.

7. vacuole

8. cytosol

9. nucleus

10. chloroplast

11. mitochondrion

12. tissue

13. system

14. system

15. stem cells

**Question 3**

1.

1. Eyepiece
2. Body tube
3. Objective
4. Stage
5. Diaphragm
6. Condenser
7. Mirror
8. Base
9. Clip
10. Arm
11. Fine adjustment knob
12. Coarse adjustment knob

2.

1. B holds the eyepiece
2. C magnifies the specimen
3. E controls light intensity
4. G reflects light onto specimen
5. J used to carry the microscope
6. K used to bring the specimen sharply into focus

3.

1. D
2. L
3. F
4. I

4. Total magnification of specimen = magnification of eyepiece x magnification of objective

= 15x 20

= 300 X