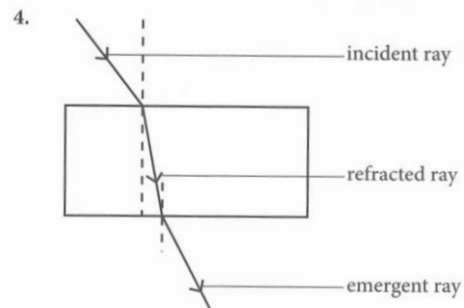


It provides structural support and gives shape to the cell.

Part U : It is the chloroplast. It contains chlorophyll which helps the plant to photosynthesize.

2. (a) 10.71 cm  
(b) 7.97 cm  
(c) 3.52 cm

3. (a) B  
(b) A and C  
(c) D  
(d) C  
(e) Water ( $\text{H}_2\text{O}$ ) and Calcium chloride ( $\text{CaCl}_2$ )



5. (a) Distillation  
(b) A – To measure the temperature of the vapour entering the condenser  
B – To ensure smooth boiling of the mixture  
C – To cool down vapour into liquid

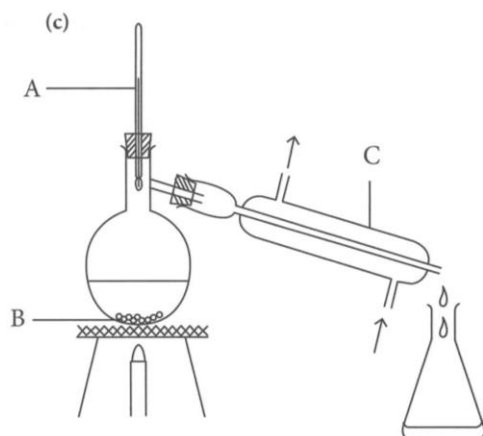
### Final Year Mock Examination Paper 1

#### Section: A

- |      |      |       |       |       |
|------|------|-------|-------|-------|
| 1. D | 5. B | 9. B  | 13. A | 17. D |
| 2. C | 6. A | 10. A | 14. D | 18. B |
| 3. D | 7. A | 11. B | 15. B | 19. C |
| 4. C | 8. D | 12. C | 16. C | 20. C |

#### Section: B

1. (a) Cell X : Animal cell      Cell Y : Plant cell  
(b) Cell membrane, cytoplasm, nucleus and vacuoles  
(c) Part R : It is the cell wall of the plant cell which allows most of the substances in and out of the cell.



### Section: C

1. (a) Flat-bottomed flask

(i)



Function : For containing chemicals when preparing gases in the process that require no heating.

- (ii) Burette

Function : For measuring and dispensing a volume of liquid during an experiment.

- (b) Tripod stand – For supporting apparatus during heating.

Retort stand – For supporting apparatus during experiment.

- (c) (i) Close the air hole.  
(ii) Turn on the gas tap.  
(iii) Light the tip with the lighter.  
(iv) Open the air hole slowly.



2. (a) Modern ceramics are well developed and are widely used to replace metals.

**Uses :** They are used to make engine parts, because they are strong, light and take a long time to wear-out. They are used to make artificial teeth and bones because they are hard and do not corrode. They are used to make jewellery because they can be made to look like real gem stones. They are used to make blades of knives because they can last for many years without sharpening.

- (b) **Advantages:** They are strong, flexible and light. They do not corrode or rot. They are poor conductors of heat and electricity.

**Disadvantages:** They are non-biodegradable products. They release poisonous gas when burnt. They are the main cause for land pollution.

3. (a) Large number of root hairs provide greater surface area for the absorption of water and mineral salts.

- (b) (i) Root hair cells are tubular, elongated in structure. They are hollow, so they can absorb and transport water and mineral salts without any difficulty.

- (ii) Water moves up the plant due to transpiration pull. When water evaporates from leaves, a pulling force is created which pulls the water up the stem.