**Directions:**

**1. Answer these questions carefully**

**2. Write according to the marks allotted**

**3. Time allotted is 30 mins to solve this paper**

**4. Each section is of 5 marks. Grand total is 15**

**SECTION A [5]**

1. **Answer the following questions: [2]**
   1. **Why do the walls of the trachea not collapse when there is less air in it?**
   2. **List two functions of stomata.**
2. **List in tabular form three differences between arteries and veins. [3]**

**SECTION B [5]**

1. **Answer the following questions: [2]  
   (a) Define olfactory indicators. Name two substances which can be used as olfactory indicator.**   
   **(b) Choose strong acids from the following:**  
   **CH3COOH, H2SO4, H2CO3, HNO3**
2. **State the chemical properties on which the following uses of baking soda are based: [3]**  
   **(i) as an antacid**  
   **(ii) as a soda acid fire extinguisher**  
   **(iii) to make bread and cake soft and spongy**

**SECTION C [5]**

1. **Give Reasons for the following: [2]**
   1. **Why is red colour selected for danger signal lights?**
   2. **Sky is blue when looked from the surface but appears dark to an astronaut**
2. **Draw a ray diagram to show the refraction of light through a glass prism. Mark on it (a) the incident ray. (b) the emergent ray and (c) the angle of deviation. [3]**