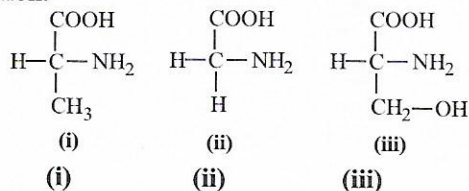


- A. *X* occurs in the life cycle of *Zygnema*, *Oedogonium* and *Vaucheria*.
 B. Plant in which *X* occurs has gametophytic plant body and sporophyte is parasitic over gametophyte.
 C. *Y* occurs in plants undergoing haplontic life cycle where zygote is the only diploid cell.
 D. *Y* occurs in the life cycle of *Sargassum*, *Chlamydomonas* and *Cladophora*.

43. Select the incorrect statement regarding the birth control measures.

- A. Oral pills are hormonal preparations that prevent ovulation.
 B. Vasectomy involves removal of a small portion of vas deferens by surgical operation.
 C. Diaphragm is a thin rubber cup which fits inside vagina.
 D. Hormone releasing copper-T is inserted inside the uterus and it prevents implantation.

44. Identify the given amino acids and select the correct option.

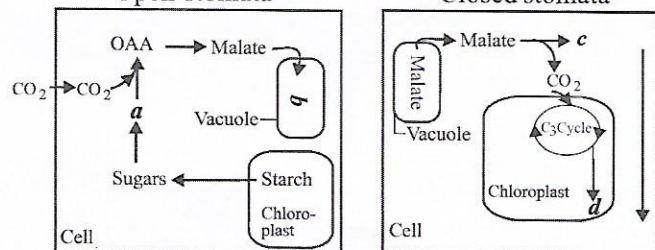


- A. Glycine Serine Alanine
 B. Alanine Glycine Serine
 C. Alanine Serine Glycine
 D. Serine Alanine Glycine

45. Which of the following are harmful effects of UV radiations?

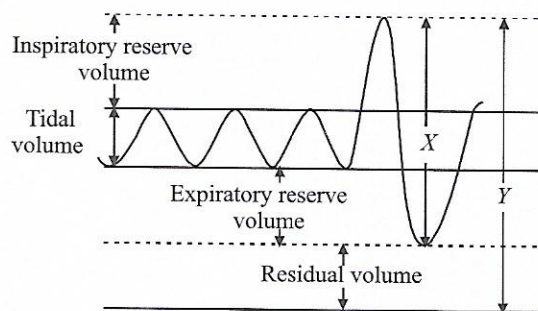
- I. Damage to eyes
 II. Lowering body's resistance to diseases
 III. Increased mortality of developing embryos
 IV. Decline in photosynthesis
 V. Acidic rain
 A. I and V only
 B. I, II and V only
 C. I, IV and V only
 D. I, II, III and IV only

46. Refer to the given outline of CAM pathway in plants. Select the option that correctly identifies *a*, *b*, *c* and *d*.



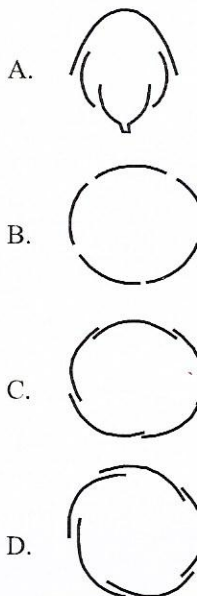
- | | | | | |
|----|----------|----------|----------|----------|
| | <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> |
| A. | PEP | Malate | Pyruvate | Starch |
| B. | Pyruvate | PEP | Malate | Sugar |
| C. | Sugar | Malate | Pyruvate | PEP |
| D. | Malate | Pyruvate | PEP | Sugar |

47. The given graph shows various pulmonary air volumes and capacities. What is depicted by *X* and *Y* in the graph?



- | | | |
|----|------------------------------|------------------------------|
| | <i>X</i> | <i>Y</i> |
| A. | Functional residual capacity | Vital capacity |
| B. | Total lung capacity | Inspiratory capacity |
| C. | Vital capacity | Total lung capacity |
| D. | Inspiratory capacity | Functional residual capacity |

48. Aestivation of petals in the flower of cotton is correctly shown in



49. Read the following statements and find out the incorrect statements.

- (a) The dorsal surface of tongue has small projections called papillae and these all bear taste buds.
 (b) Oesophagus opens into the cardiac part of stomach.
 (c) Arrangements of teeth in each half of upper and lower jaw is represented by dental formula.