

Q IV.1. 2. (A) Explain the following (any one)

1. Draw the structure of proline.

2. Define pI

(2M)

2. (B) Answer of the following (any three)

1. Proline is _____ amino acid. (polar/nonpolar/basic)
2. In peptide bond _____ atoms are involved. (3/4/6)
3. Porphyrin ring is a _____. (cofactor/ coenzyme/ prosthetic group)
4. Histidine contains _____ ring. (indole/imidazole/benzene)
5. Angle between C α -C is called _____. (phi/psi/theta)
6. Alpha-helix is a _____ structure. (local/primary/secondary)

(3M)

Q IV 3.(A) Explain the following (any one)

1. Disaccharides.

2. Draw structures of mannose and ribose.

(2M)

3. (B) Answer of the following: (any three)

1. The type of glycosidic bond in cellulose is (α 1,4/ α 1,6/ β 1,4)
2. Enzyme that acts on starch is (amylase/carbohydrase/glucanase).
3. The polymer of N-acetyl glucosamine is
..... (cellulose/peptidoglycan/chitin).
4. Mesodiaminopimelic acid is associated with the structure of
(chitin/peptidoglycan/amylopectin).
5. is similar in structure to amylopectin (starch/cellulose/glycogen).
6. is not an example of heteropolysaccharide
(inulin/peptidoglycan/heparin).

(3M)