Avinashilingam Institute for Home Science and Higher education for Women
(Deemed to be University) Coimbatore-43.

Master's Degree Examination –November 2018
Semester-III

Class-II PG **Time-3hrs.**
Major-Botany **Max.Marks-60**

17MBOC15 Plant Biochemistry
Part –A
Choose the correct answer **10X1/2=5**

1.How are bond length and bond energies related?
a)lower the bond energy, the shorter the bond length
b)higher the bond energy, the longer the bond length
c)they are not related
d)the higher the bond energy, the shorter the bond length

2. In a neutral solution
a) concentration of OH– > concentration of H+.
b) concentration of H+ < concentration of OH–.
c)concentration of OH– = concentration of H+
d)concentration of OH– < concentration of H+.

3. Oligosaccharides linked to proteins are called
a.)glycoprotiens b)glycolipids c)galactosides d)ganglioside

4. In polysaccharides,monosaccarides are joined by
a)peptide bond b)glucose bond c)glycosidic bond d)covalent bond.
5. Hydrolysis of fats by alkalies into fatty acids and glycerol is called
a)Coagulation b) Saponification c) suspension d) colloidal
6. Aminoacid has
a)both amino group and carboxyl group b) both amino group and keto group
c) amino group only d) carboxyl group only
7. The first protein sequenced by Frederick Sanger is
a)heamoglobin b) myoglobin c)insulin d)myosin
8. Which of the following pairs is not correctly matched?
a) vitaminB4 -pellagra b) vitamin B12-pernicious aneamia
c) vitamin C-Scurvy d)vitamin B6 – Beriberi
9. Chlorosis results from deficiency of
a)Chlorine b)Sodium c)Calcium d)Magnesium

10. Alkaloids are naturally occurring compounds which contain .....in their molecules.

a)one or more N atoms b)two heterocyclic rings

c) side-chain on one of benzene rings d)one or more N atoms originating from amino acids

Part B

Answer all the questions **5x4=20**

Each answer should not exceed 200 words or one page

11) a. Write notes on hydrogen bonds.

Or

11) b. Distinguish between acids and bases.

12) a. Discuss the functions of carbohydrates.

Or

12) b. Discuss the different classes of lipids with examples.

13)a.Give a brief account on classification of standard aminoacids

Or

13) b. Explain the biological functions of proteins.

14) a. Mention the vitamins and explain their sources and deficiency diseases in man.

Or

14) b. Illustrate the general characters of water soluble vitamins.

15) a. Write notes on functions of alkaloids.

Or

15) b.Write about the types of sterols.

Part C

Answer all the questions **5x7=35**

Each answer should not exceed 600 words or three pages

16) a.Write an essay on pH and buffer system.

Or

16) b.Explain electrovalent and covalent bonds with examples.

17) a.Explain in detail the classification of carbohydrates.

Or

17) b.Explain the metabolism of lipids

18) a.Write notes on role of aminoacids in disease curing.

Or

18) b.Explain the mechanism of protein synthesis.

19) a.Write an essay on classification of proteins.

Or

19) b.Write general characters and functions of vitamins.

20) a. Explain the synthesis of flavonoids

Or

20) b. Illustrate biosynthesis of tannins and saponins.