5 SEM TDC BOT M 5

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(November)

BOTANY

(Major)

Course : 505

(Functional and Chemical Biology)

Full Marks : 48

Pass Marks : 19

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

1. *(a)* Write the correct answer of the
following : 1×3=3

   (i) Haemoglobin is a primary/second-
   ary/tertiary/quaternary protein.

   (ii) Fat/Amino acid/Chlorophyll/Terpe-
   noid is a secondary metabolite.

   (iii) Auxin/Gibberellin/Abscisic acid is
   a growth-inhibiting hormone.

(b) Fill in the blanks :   1×2=2

    (i) Conjugated protein consists of amino acid and a ——.

    (ii) Nucleotide without a —— is called nucleoside.

2. Write short notes on the following :   3×3=9

    (a) Function of DNA

    (b) Metabolic pathway in plants

    (c) Florigen

3. What do you mean by the term 'metabolism'? Give an account on the primary and secondary metabolites synthesized in plants.

                                      3+4+4=11

Or

What are auxins? Write briefly the role of auxin in the growth of plants.   3+8=11

4. What are source and sink in plants? Write briefly about the biochemical activities involved in source-sink relationship in plants.   3+8=11

Or

What are polymeric substances in plants? Give a brief account of polysaccharides mentioning their function.   3+4+4=11

5. Write explanatory notes on any *four* of the following : 3×4=12

(a) Flavonoids

(b) Function of chlorophyll

(c) Phytochrome

(d) Storage products in plants

(e) Chemical composition of lipids

(f) Biomolecules

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