Reg. No.					



**BOH 402** 

## First Semester M.Sc. Degree Examination, December 2018 (CBCS) BOTANY Plant Biochemistry (Hard Core)

Time: 3 Hours Max. Marks: 70

I. Answer any three of the following:

 $(3\times10=30)$ 

(Each answer not exceeding 5 pages)

- 1) Describe the chemical composition of plant cell membranes.
- 2) Write on the classification and chemistry of carbohydrates.
- 3) Explain the structure of proteins.
- 4) Give an account on the biosynthesis and distribution of terpenes.
- 5) Write in detail on the biological nitrogen fixation.
- II. Write short notes on **any six** of the following:

 $(6 \times 5 = 30)$ 

(Each answer not exceeding 3 pages)

- 6) Passive transport
- 7) HMP pathway
- 8)  $\beta$  Oxidation
- 9) Vitamin C
- 10) Signal transduction in prokaryotes
- 11) Nitrate to nitrite conversion
- 12) Biosynthesis of purines
- 13) Calcium-calmodulin complex.

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III. Write short notes on **any five** of the following: (5×2=10)

(Each answer not exceeding 1 page)

- 14) Antiport
- 15) Disulphide bond
- 16) Cobalamine
- 17) Methamoglobinemia
- 18) Membrane asymmetry
- 19) Phosphatases
- 20) Vacuolar ATPase.