This question paper contains 2 printed pages]

B-55-2019

FACULTY OF SCIENCE

B.Sc. (Fifth Semester) EXAMINATION

MARCH/APRIL 2019

(CGPA Pattern)

BOTANY

Paper XII

(Plant Physiology)

| (Mo | onday, | 25-3-2019) Time: 10.00 a.m. to 12.00 noon |
|-----|---------------|---|
| Tim | ne—2 F | Hours Maximum Marks—40 |
| N.B | 8. :— | (i) Attempt All questions. |
| | (| ii) All questions carry equal marks. |
| | (i | ii) Draw neat and well-labelled diagram wherever necessary. |
| 1. | Give | an account of different theories of mechanism of closing and opening |
| | of st | omata. 8 |
| | | |
| 98 | (a) | Transpiration pull theory of Ascent of sap 4 |
| | (b) | Paratonic and nastic movements. 4 |
| 2. | Desc | ribe ion exchange and carrier concept theory. |
| | | \mathcal{O}_{r} |
| | (a) | Role of Nitrogen and Phosphorus 4 |
| | (b) | Munch mass flow hypothesis. 4 |
| 3. | Desc ethy! | ribe chemical nature and biological applications of Abscisic acid and lene. |

P.T.O.

| WT | | (2) | B—55—2019 |
|----|---------------|--|----------------------|
| | | Or STATE OF | |
| | (a) | Methods of breaking seed dormancy | |
| | (<i>b</i>) | Photoperiodism. | |
| 4. | Give prote | an account of structure and biological functions of primarins. | y and secondary 8 |
| | | Or. | |
| | (a) | Polysaccharides | 4 |
| | (<i>b</i>) | Biological functions of flavonoids alkaloids. | 4 |
| 5. | Write | e short notes on (any four): | 8 |
| | (a) | Osmosis | |
| | (<i>b</i>) | Deficiency of potassium | |
| | (c) | Role of nitrogen | |
| | (d) | Practical applications of Gibberelin | |
| | (e) | Vernalisation | |
| | (f) | Biological functions of liquids. | |