7. Give an illustrated account the process of symbiotic Nitrogen fixation in leguminous plants. 7½

menpeeJee veeFšepeve mLejekeâjCe keâe Øee>eâÙee keâe meeÛe$e JeCeve keâeepeS~

Unit-IV / FkeâeF-IV

8. What are the different types of growth movements found in plants? 7½

heeOee ce heeÙe peeve Jeeue eJeeYeVe Øekeâej keâ «eeLe ceJeceš keâeve me n?

9. Discuss the process of vernalization in detail. 7½

JeveueeFpeMeve keâe Øee>eâÙee keâe eJemleej me keâeepeS~

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Roll No. _____

S-642

B.Sc. (Part-II) Examination, 2015

(Old Course)

BOTANY

Paper-III

(*Plant Physiology*)

Time Allowed : Three Hours] ***[Maximum Marks : 50***

Note : Answer five questions in all. Question No. 1 is compulsory. In addition to this, attempt one question from each of the four units. Attempt all parts of a question together.

keâue heeÙe ØeMvee keâ Gòej oeepeS~ ØeMve me. 1 DeeveJeeÙe n~ Fmekeâ Deeleejòeâ Üeej FkeâeFÙee ce me ØelÙekeâ FkeâeF me Skeâ ØeMve keâeepeS~ Skeâ ØeMve keâ meYee Yeeiee keâe Gòej SkeâmeeLe oeepeS~

1. Differentiate between the following: 4x5=20

(a) Anaerobic respiration and fermentation

(b) Absorption and Adsorption

(c) Stomata and Lenticels

(d) Calcium deficiency and Nitrogen deficiency in plants

(e) Wilmott's bubbler and Ganong's potom-eter

evecveeueeKele keâ ceOÙe Devlej mhe° keâeepeS:

(a) DeJeeÙeJeeÙe MJemeve SJe ekeâCJeve

(b) DeJeMee<eCe SJe DeeOeMee<eCe

(c) jOe SJe ueevšmeue

(d) keâeuMeÙece keâe keâcee SJe veeFšepeve keâe keâcee

(e) eJeuceeš yeyuej SJe ieveeie heešeceešj

Unit-I / FkeâeF-I

2. Write short notes on:- 2½ + 2½ + 2½ = 7½

(a) RUBISCO

(b) Factors affecting enzyme activity

(c) Donan equilibrium

evecveeueeKele hej mee#ehle ešhheeCeÙee eueeKeÙe :

(a) RUBISCO

(b) ekeâCeJekeâ e>eâÙeeMeeuelee keâe ØeYeeeJele keâjve Jeeue keâejkeâ

(c) [eveeve meleueve

3. What are essential nutrients? Discuss the role of Fe and Zn in plants. 7½

DeeJeMÙekeâ vÙeešÙevšme keÙee nele n? Fe SJe Zn keâ cenlJe keâe eJeJejCe keâeepeS~

Unit-II / FkeâeF-II

4. "Transpiration is a necessary evil". Explain. Add a short note on opening and closing of stomata. 7½

''ØemJeove Skeâ DeeJeMÙekeâ yejeF n'' mecePeeFÙe~ jvOe keâ Keueve Je yevo neve keâe Øee>eâÙee hej Skeâ mee#ehle ešhheCee eueeKeS~

5. Explain the process of cyclic and non-cyclic photophosphorylation. 7½

Ûe>eâeÙe SJe DeÛe>eâeÙe heâešeheâemheâejeFueMev keâe e>eâÙee keâe mecePeeFÙe~

Unit-III / FkeâeF-III

6. Discuss the process of glycolysis and formation of Acetyl co A during respiration. 7½

iueeFkeâeeueememe keâe e>eâÙee SJe Smeešue keâ SvpeeFce S keâ eveceeCe keâe Øee>eâÙee keâe eJeJeÛevee keâeepeS~