A   ((Printed Pages 4)

Roll No. _____

S-641

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

(Old Course)

BOTANY

Second Paper

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

Note : Answer five questions in all. Question No.1 is compulsory. Attempt one question from each Unit. All parts of a question be attempted together.

keâue heeBe ØeMveeW keâe Gòej oerpeS~ ØeMve meb.1 DeefveJeeÙe&nw~ ØelÙeskeâ FkeâeF&mes Skeâ ØeMve keâerefpeS~ Skeâ ØeMve keâer meYeer Yeeie meeLe-meeLe efkeâÙes peeves ÛeeefnS~

1. Comment upon any five of the following:

eqecceeuÙeeKele ceWmes efkeâvneRheeBBe hej efšhheCeer keâerefpÙes :

(a) Inversion $5 \times 4 = 20$

ØeefleueesceerkeâjCe (FvJeueepeve)

(b) Ecological pyramid

heeefjefmLeeflekeâer efhejeefce[

(c) Test cross and Back cross

hejer#eCe mebkeâj SJeb yeskeâ ›eâeme (mebkeâj)

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(4)

7. Write notes on any two of the following:

    $4 \times 3\frac{1}{2} = 7\frac{1}{2}$

(a) Plant succession in a pond

(b) Adaptations of xerophytes

(c) Energy flow in ecosystem

efvecveefueefKele cesB mes efkeâvneRoes hej efšhheCeer efueefKeÙes

(a) leeueeye cesYeeohe DeveppeâeceCe

(b) ce™oer™eod keâer Devegkeäuele ue#eCe

(c) heeefjefmLeeflekeâer lev$e cesWTpee&Øeeen

Unit-IV/FkeâeF&-IV

8. Give the classification of soils. Also give a comparative account of zonal, interzonal and azonal soils. $7\frac{1}{2}$

ce=oe keâe JeieeakeâjCe oerefpeÙes~ peesveue, Fvšjpeesveue SJeb Speesveue ce=oe keâe efleYeexole oeJepeeefjkeâ Yeer oerefpeÙes~

9. Write notes on any two of the following:

    $4 + 3\frac{1}{2} = 7\frac{1}{2}$

(a) Soil formation

(b) Gully erosion and sheet erosion

(c) Reclamation of usar soils

efvecveefueefKele cesB mes efkeâvneRoes hej efšhheCeer efueefKeÙes

(a) ce=oe efvecee&Ce

(b) ieueer Dehe]jove SJeb hej]le Dehejove

(c) Tmej ce=oe keâe Gæej

(d) Transition and Transversion

šêÙpeMeve SJeb šêvmeJepeše

(e) Soil Conservation

ceÌe meÌj#eÌe

(f) Soil Profile

ceÌe heefjÛÚ÷Fokeâe

Unit-I / FkeâeÌF-I

2. What do you understand by gene interaction? Describe dominant and recessive epistasis giving suitable examples. 7½

peÌve DeveÌejÌfeâÙee (FvšjSkeMeve) mes Deehe keÌÙee cePeÌes n0? GheÙeÌgeâ GoenjCe okeâj ØeYeeÌJeer SJeb DeØeÙeeÌJeer SefmešÌefmeme keâe JeÌCeÌe keâÌefjÙes-

3. Write short notes on the following: 3×2½=7½

(a) Salivary gland chromosome

(b) Nucleosome

(c) Sex determination

efvecveefÌueeÌKele hej metÌ#ehle efšhheCeer efÌueeKeÙes

(a) ueÌej «eÌLe ieÇ̂emešÌe

(b) vÙeÌÌefkeâÙeÌÌueÌeÌpeÌmeÌe

(c) efÌ̂efÙe efveÌ0eeÊÙÌ̂Ce

Unit-II / FkeâeÌF-II 7½

4. What do you understand by polyploidy? Name and describe the different types of polyploids and give the differences between autopolyploids and allopolyploids. 7½

yenÙegÌCÌeCelee mesDeehe keÌÙee mecePeÌes n0? efÌueÌeYeÌÙe ØeÌkeâej keâ yenÙegÌCÌeCÌCele keâe veece yeleÌeFÙes SJeb JeÇÌfÌ̂Ce keâÌefÙes DeeÙj mJeÙe yÌÌegÌCÌCÌele SJeb hej yenÙegÌCÌCÌele (SueÌeÌ̂emÌJeÌ̂ehueÌ̂ÙeÌ̂[) ceÌWÌ̂YeÌÙeÌelee eÌueÌeKeÙes-

5. Write notes on the following: 3×2½=7½

(a) Translocation

(b) Physical mutagens

(c) Synthetic theory of evolution

efvecveefÌveeueKele hej efÌšhheCeer efÌueeKeÙes

(a) mLeeveevÌeÙejCe (šÌ̂ÌÌvmeueeeÌkeâÌMeMeve)

(b) YeeÌÌefleÌkeâeÙÌ̂Ù GÌheÌefjÌJeÌ̂eJÌ̂ele keâjÌkeâ

(c) efÌJeÌ̂keâÌeme keâe keâeÌ̂$ece (efmevevLeÌesÌeÌ̂Škeâ) efÌmeÌefeÌ̂evÌ̂le

Unit-III / FkeâeÌF-III

6. What is meant by eco-system? Describe any terrestrial eco-system. 7½

heeefjefmÌLeeÌ̂efÌekeâ lev$e keâe keÌÙee lelÌheÙeÌ&Ìn0? efkeâ Skeâ mÌLeÌueÙe heeefjefmÌLeeueÌekeâ lev$e keâ JeÌCeÌe keâÌefjÙes-