Unit-III / FkeâæF-III

6. Give a detailed account on anxiety disorders and personality disorders. 11

JÙe«elee eJekeâeje SJe JÙeeòeâlJe eJekeâeje keâe Skeâ eJemlele eJeJejCe oeepeS~

7. Write short notes on the following: 5½×2

(i) Linkage

(ii) Memory

evecveeueeKele hej mee#ehle eŠhheeCeÙee eueeKeS :

(i) menueivelee

(ii) mceele

Unit-IV / FkeâæF-IV

8. Describe the methods for the detection of nucleic acids with examples. 12

vÙeekeuekeâ Decuee keâe henÛeeveve keâe eJeeOeÙee keâe GoenjCe meenle JeCeve keâeepeS~

9. Write short notes on the following: 6×2=12

(i) Hybridoma technology

(ii) DNA Drugs

evecveeueeKele hej mee#ehle eŠhheeCeÙee eueeKeS :

(i) mekeâjeyeo ØeeÅeeeiekeâe

(ii) [e Sve S Dee<eeOeÙee

A

Roll No. _____

S-667

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

GENETICS & GENOMICS

Paper - II

(Population, Genetics, Behaviour Genetics & Applied Molecular Genetics)

Time Allowed : Three Hours] [Maximum Marks : 75

Note : Answer five questions in all. Question No. 1 is compulsory. Remaining questions to be answered should be one question from each Unit. Illustrate your answers with suitable diagrams.

keâue heeÛe ØeMvee keâ Gòej oeepeS~ ØeMve me. 1 DeeveJeeÙe n~ Me<e ØeMveeòej ØelÙekeâ FkeâeF me Skeâ ØeMve keâ ne~ Deheve Gòeje keâe GeÛele eÛe$ee Éeje mhe„ keâeepeS~

1. Write short notes on the following:

evecveeueeKele hej mee#ehle eŠhheeCeÙee eueeKeS: 3×10=30

(i) Genotype

peeve Øe™he

(ii) Point mutation

eyevo Glheejjeleve

(iii) Phenocopy

ue#eCe keâele

(iv) DNA probe

[e Sve S meheejj#ekeâ

(v) Electroporation

JeÅele ØeJeMeve

(vi) Hardy-Weinberg equilibrium

ne[e-Jeeveyeie meecÙe

(vii) Western blotting technique

Jemšve Oeyyeekeâjce lekeâveekeâe

(viii) Learning

DeeOeiece

(ix) Inbred strain

Devle: Øepeele ØeYeo

(x) Heredity

DeeveJeeMekeâlee

Unit-I / FkeâeF-I

2. Discuss the different forces of evolution with example of mutation and natural selection.11

Glheejjeleve SJece Øeekeâelekeâ Jejce keâe Goenjce ole nS eJekeâeme keâ eJeeYeVe yeuee keâe eJeJeÛevee keâeepeS~

3. Write short notes on the following: 5½×2

(i) Allele frequencies

(ii) DNA polymorphism

evecveeueeKele hejj mee#ehle eŠhheeCeÙee eueeKeS :

(i) eJekeâuhee DeeJeeòeÙee

(ii) [e Sve S yen™helee

Unit-II / FkeâeF-II

4. Differentiate between monogenic and polygenic diseases and discuss their mode of inheritance. 11

Skeâ peevee SJe yen peevee jeiee ce Devlej mhe„ keâeepeS SJe Gvekeâ JeMeeieele keâe e›eâÙee keâe eJeJeÛevee keâeepeS~

5. Write short notes on the following: 5½×2

(i) Modifier genes

(ii) Gene-gene interaction

evecveeueeKele hejj mee#ehle eŠhheeCeÙee eueeKeS :

(i) ™heevlejkeâ peeve

(ii) peeve-peeve DevÙeevÙee›eâÙee