7. Write notes on the following: 7½

evecveeueeKele hej eš hheeCeÙee eueeKeS:

(i) Phage lambda (λ)

heâepe uecye[e (λ)

(ii) Microbial and recombinant products

jeieeCeJeeÙe leLee heveÙeeiepe heoeLe

(iii) Bacterial conjugation and Transduction.

peeJeeeCJekeâ meÙeiceve leLee heej›eâceCe~

Unit-IV / FkeâæF-IV

8. Give a detailed account of genome imprinting and mitochondrial syndromes. 7½

mepeeve DeOÙekeâve leLee me$ekeâeCekeâeÙe meue#eCe keâe eJemlele eJeJejCe oeepeS~

9. Write notes on the following: 7½

evecveeueeKele hej eš hheeCeÙee eueeKeS:

(i) Inheritance of X-linked diseases

X-menueive eyeceeejÙee keâe JeMeeieele

(ii) Human Karyotype analysis

ceeveJe ieCeme$e-ø™he keâe eJeMue<eCe

(iii) Management of Genetic Disorders

DeeveJeeMekeâ JÙeeeOeÙee keâe øeyevOeve~

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(Printed Pages 4)

Roll No. _____

S-665

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

GENETICS & GENOMICS

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.

keâue heeÙe øeMvee keâ Gòej oeepeS~ øeMve me. 1 DeeveJeeÙe ø elÙekeâ FkeâeF me Skeâ øeMve keâeepeS~

1. Describe briefly the following: 2×10=20

evecveeueeKele keâe mee#ehle JeCeve keâeepeS:

(i) Cell mediated immunity

keâeeMekeâe peevele jeOe#ecelee

(ii) Pedigree Analysis

JeMeeJeuee eJeMue<eCe

(iii) Bacterial Transformation

peeJeeeCJekeâ ™heevlejCe

(iv) Metastasis

Dehej™heevlejCe

(v) Genomic Instability

peeveeÙe DeemLejlee

(vi) HLA Complex

SÛe.Sue.S meecceße

(vii) Biological Carcinogens

peeJekeâ keâvmejpeve

(viii) Turner's Syndrome

Šjveme meue#eCe

(ix) Prenatal diagnosis

ØemeJeheJe eveoeve

(x) Molecular probes

DeeeCJekeâ DevJe<ee

Unit-I / FkeâeF-I

2. What are Complement proteins? Describe classical Complement pathway. 7½

hejkeâ ØeeŠeve keÙee n? eÛejmeccele hejkeâ heLe keâe JeCeve keâeepeS~

3. Write notes on the following: 7½

evecveeueeKele hej eŠhheeCeÙee eueeKeÙe :

(i) Structure of Immunoglobulin

Øeelej#eeiueeyÙeeueve keâe mejÛevee

(ii) Clonal Selection

keueeveeÙe Jejce

(iii) Antigen processing and presentation.

Øeelepeve Øekeâjce SJe ØemleleekeâjCe~

Unit-II / FkeâeF-II

4. Give an account of Cell transformation and Tumerogenesis. 7½

keâeeMekeâe ™heevlejCe leLee Deyeo Glheeòe keâe eJeJejCe oeepeS~

5. Write notes on the following:

evecveeueeKele hej eŠhheeCeÙee eueeKeS :

(i) DNA markers

[e.Sve.S. eÛevnkeâ

(ii) Cell cycle and its regulation

keâeeMekeâe Ûe>eâ Je Gmekeâe eveÙe$eCe

(iii) Tumor specific genes and oncogenes

Deyeo eJeeMe° peeve Je DeyeoeÙe peeve

Unit-III / FkeâeF-III

6. Describe the life cycle and advantages of any organism commonly used in genetic studies. 7½

DeeveJeeMekeâ DeOÙeÙeve ce GheÙeeie neve Jeeue ekeâmee peeJe keâe peeJeve Ûe>eâ leLee ueeYe keâe JeCeve keâeepeS~