

(4)

7. Write notes on following : 11

Write notes on following :

(i) CLUSTAL W

Cluster analysis

(ii) Phylogenetic analysis

Phylogenetic analysis

Unit-IV/First Paper

8. Describe the principle underlying chromatography. Elaborate ion exchange and gel filtration chromatography. 12

Describe the principle underlying chromatography. Elaborate ion exchange and gel filtration chromatography.

Describe the principle underlying chromatography. Elaborate ion exchange and gel filtration chromatography.

9. Write notes on any two of the following : 12

Write notes on any two of the following :

(i) Dark field microscopy

Dark field microscopy

(ii) Absorption spectrum

Absorption spectrum

(iii) Centrifugation

Centrifugation

A

((Printed Pages 4)

Roll No. _____

S-666

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

GENETICS & GENOMICS

First Paper

(Biostatistics, Bioinformatics & Bioinstrumentation)

Time Allowed : Three Hours] [Maximum Marks : 75

Note : Answer five questions in all. Question No.1 is compulsory. Attempt one question from each unit.

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1. Write short notes on the following : $3 \times 10 = 30$

Write short notes on the following :

(i) Kurtosis

Kurtosis

(ii) Variance

Variance

(iii) CPU

CPU

(2)

- (iv) World Wide Web
eWorlD Je Yej cellJeve
- (v) Website
JeyemeFŠ
- (vi) Entrez System
SvŠpe DeCeevee
- (vii) Fluorescence Microscopy
Deleoeehle me#ceelMekeae
- (viii) email
FDeve
- (ix) Affinity Chromatography
yevDejce JeCeeDeKekae
- (x) Beer-Lambert law
eJDej - ue#yeŠ

Unit-I / FkeaeF-I

2. Ovary weight of 50 fishes and their frequency is given in the table below. Calculate the standard deviation. 11

Ovaries Weight	2-2.9	3-3.9	4-4.9	5-5.9	6-6.9
Frequency	6	13	11	8	12

50 ceUeUeeleae De[eMeDe Jeyeve Deej Gvekeae DeJeebe veDee Deeekeae

cellOer ieF#n# Gvekae ceevekae eDeDeeve keae ieCeeve keae#peS-

De[eMeDe Jeyeve	2-2.9	3-3.9	4-4.9	5-5.9	6-6.9
DeJeebe	6	13	11	8	12

(3)

3. Write notes on any two of the following : 11
e#re#ve cellmes ekeavn# oes hej eŠheCeer eDeeKeS :
- (a) Skewness
JewecDe
 - (b) Chi-square test
keaeF & Jee# hej e#eCe
 - (c) Probability and its application.
me#veJeeve Deej Gmekeae DeJeebe-
- Unit-II / FkeaeF-II
4. Write notes on any two of the following : 11
e#re#ve cellmes ekeavn# oes hej eŠheCeeDeeBeDeeKeS :
- (i) Nucleic acid databases
vDekeaekeae Dece [Šeyeme
 - (ii) Search engines
Keape FDeve
 - (iii) Concept of home page
nese hepe keae DeJeeDeej Cee

5. What is operating system? Describe few operating systems in brief. 11
DeDeevee heze eDe keDee n# me#ehle cellkegU DeDeevee heze eDeDeeDee
JeCee keae#peS-

Unit-III / FkeaeF-III

6. Describe pair wise and multiple sequence alignments. 11
peel[eWDeej SkeaeDekeae Devegeae me#KeCe keae keae#peS-