

(DBI01)

ASSIGNMENT-1

PG DIPLOMA DEGREE EXAMINATION, DEC. – 2017

BIO- INFORMATICS

Principles of Cell & Molecular Biology & Bioinformatics

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

Q1) Give an account on the diversity of cell size and shape.

Q2) Describe the structure and functions of Chloroplast.

Q3) Describe Mitosis and its significance.

Q4) Write an account cell cycle.

Q5) Write an account on genetic code and its importance in molecular biology.

(DBI01)

ASSIGNMENT-2
PG DIPLOMA DEGREE EXAMINATION, DEC. – 2017

BIO- INFORMATICS

Principles of Cell & Molecular Biology & Bioinformatics

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

Q1) Explain DNA as genetic material.

Q2) Describe the mechanisms of DNA repair.

Q3) Write an account on transcription and translation.

Q4) Describe the scope of Bioinformatics.

Q5) Enumerate the Knowledge based data analysis with appropriate examples.



(DBI02)

ASSIGNMENT-1

PG DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Numerical Methods, Optimization Tech. & Computer Pro.

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)*** Write an account on parallel computers.
- Q2)*** Explain inherent parallelism in biological phenomenon and their models.
- Q3)*** Write an account on system software.
- Q4)*** Enumerate internal and external coordinate system.
- Q5)*** Describe numerical methods.

(DBI02)

ASSIGNMENT-2

PG DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Numerical Methods, Optimization Tech. & Computer Pro.

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)* Describe the errors involved in the construction of mathematical model for the real physical processes.
- Q2)* Describe minimization and maximization functions
- Q3)* Explain Fourier transform of discretely sampled data.
- Q4)* Explain programming with HTML.
- Q5)* Enumerate designing of web pages.



(DBI03)

ASSIGNMENT-1

P.G. DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Database Mana. & Biological Data Banks Mole. Desi.

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)* Explain biological data banks.
- Q2)* Write an account on tools in bioinformatics.
- Q3)* Explain structural data banks.
- Q4)* Enumerate microbial data banks.
- Q5)* Give an account on NCBI data model.
- Q6)* Describe the PDB data model.

(DBI03)

ASSIGNMENT-2

P.G. DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Database Mana. & Biological Data Banks Mole. Desi.

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)* Describe the PDB data model.
- Q2)* Describe primary structure of proteins
- Q3)* Enumerate DNA and RNA tertiary structure.
- Q4)* Explain molecular modeling and simulation studies.
- Q5)* Describe structure prediction of biopolymers.



(DBI04)

ASSIGNMENT-1

P.G. DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Genomic and Proteomics and Sequencing Analysis

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)* Describe the structure and functions of Organellar genomes.
- Q2)* Write an account on linkage and crossing over.
- Q3)* Explain nature of genetic code and its significance.
- Q4)* Enumerate Genome Projects.
- Q5)* Give an account on drug designing and delivery.

(DBI04)

ASSIGNMENT-2

P.G. DIPLOMA DEGREE EXAMINATION, DECEMBER – 2017

BIO - INFORMATICS

Genomic and Proteomics and Sequencing Analysis

MAXIMUM MARKS-30

ANSWER ALL QUESTIONS

- Q1)* Describe predictive methods using DNA sequences.
- Q2)* Describe protein purification and degradation.
- Q3)* Enumerate Ramachandran plot.
- Q4)* Write an account on Site directed mutagenesis.
- Q5)* Explain automated DNA Sequencing.

