

Virtual University of Pakistan

Bio201

Cell biology

Midterms Past Papers

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Course Instructor

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Bio201 MID TERM

Q difference between purine and pyrimidine?

Q difference between Nucleoside vs Nucleotide?

Q Chargaff's Rule?

Q PCR Requirements?

Q 5Helicase vs Primase?

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Q Function of DNA?

Q What type of bacterial colonies F. Griffith was used in his experiment? (2 marks)

Q Different between Helicase and Primase? (2)

Q Different between Purines and pyrimidines? (3)

Q Write the main three dilemma of DNA replication? (3)

Q Write the functions of DNA? (5)

Q Enlist the requirements of Polymerase chain reaction? (5)

Q techniques of genetic engineering (long),

Q cell cycle (long),

Q 3 dilemmas of DNA replication,

Q mitochondrial features,

Q restriction endonucleases,,

Q macromolecules present in cell.

Q Define Electronegativity?.

Q What is Chargaff rule?

Q Write Mitochondrial features.

Q Briefly note on cell cycle.

Q Define Genetic engineering

Q Incomplete Dominance

Q co dominance

Q Mutation

Q Epistasis

Q diffentiale between dispersive, conservative , semi-conservative model of dna(5)

Q difference between Nucleoside vs Nucleotide?(3)

Q difference between dna and rna?(5)

Q Describe process of mitosis?(5)

Q Describe the techniques used by Mendel in his experiment.2

Q Role of lipids.2

Q Macromolecules in cells.2

Q Differ b/w meiosis and mitosis.3

Q Differ b/w DNA and RNA.5

Q Describe the dispersive, conservative and semi conservative method of DNA replication.5

Q define aquaporins

Q law of inheritance

Q role of lipids

Q-role of proteins

Q stages of meiosis 1

Q PCR applications

Q d/f between DNA and RNA

Q ENLIST OF CELL organelles

Q define threshold effect and write the rate of occurrence first degree of relative and identical twins?

Q denature of protein structure ?

Q Klinefelter syndrome and Turner syndrome difference ?

Q replication of DNA semiconservative conservative and dispersive?

Q Abbreviation of VNTRs

Q Ionic bond

Q PCR requirement

Q Co enzyme. Co factor and prosthetic group

Q Threshold theory and its role in identical twins.

Q What is active site in an enzyme?

Q Which type of bacterial colonies F.Griffith used in his experiments?

Q Define carbohydrates. Also write their classification.

Q Define polyploid and aneuploid with examples.

Q Write down the functions of cellular membrane. Write down the requirements of PCR.

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1 function of cell (2)

2 function of cell membrane (2)

3 types of cristae golgi apparatus(2)

4 mitosis steps(3)

5 gel electrophoresis (5)

6 down syndrome (3)

bio 201 11:00 am

1:cellcycle

2:function of dna

3:Down syndrome

4:lysosome and heat shock protein

5;types of cristae in golgi bodies