



QUAID-I-AZAM UNIVERSITY
ISLAMABAD

Roll No: _____

B.Sc. Annual Examinations--2013
(PART-I)

Answer Book No: _____

SUBJECT: **Biochemistry**

PAPER: B (**Theory**)

Time Allowed: **3 Hours**

June 17, 2013

Max Marks: **40**

Note: Attempt total FIVE questions selecting any FOUR from Section B. All questions carry equal marks. Q. No. 1 is compulsory to be attempted on this page and must be handed over to the Superintendent within first 25 minutes.

SECTION-A (OBJECTIVE) To be attempted in 25 minutes.

Q. No.1

(4)

(a) Encircle the correct one.

- In animals various Purine, Nucleotides and De-oxynucleotides are all degraded to:
(c) CO₂ and water (b) Ammonia (c) Urea (d) Uric acid
- In double standard DNA molecule the ratio of Purine to Pyrimidine is:
(a) variable (b) determined by base sequence in RNA
(b) genetically determined (d) always 1:1.
- Which of the following NUCLEOTIDES bases is not found in RNA?
(a) Thymine (b) Adenine (c) Uracil (d) Guanine
- Which one of the following is not part of DNA?
(a) Purine (b) Pyrimidine (c) De-oxyribose (d) Amino acid.
- Translation is involved in which of the following possible steps in flow of genetic information?
(a) DNA to RNA (b) RNA to Protein (c) RNA to DNA (d) DNA to DNA.
- OKAZAKI fragments are:
(a) short RNA Nucleotides that act as starting points for DNA synthesis
(b) short DNA Nucleotides that are synthesized as a part of lagging strand
(c) DNA Oligo Nucleotides that are synthesized as a part of leading strand
(d) fragments that have sequence GGTTG.
- The enzyme that relaxes the super coils introduce the DNA double helix is:
(c) DNA Polymerase (b) RNA Polymerase (c) Topoisomerase (d) None of these.
- The study of Genetic Code is not related to the discussion of.
(a) Point Mutation (b) Insertion/Deletion (c) Transversion (d) Glycosylation.

(b) Fill in the blanks.

(4)

- Location of Centromere on each Chromosome give the Chromosomes it characteristic shape and can be used to help describe the location of _____.
- Nitrogenous bases found in Nucleotides are the derivative of _____
- Translation proceeds in four phases: initiation, elongation, translocation and termination. All describe the growth of _____.
- Synthesis of RNA from DNA template is called Transcription and is catalyzed by _____.
- In DNA structure WATSON and CRICK deduced that Adenine must pair with Thymine and Guanine with Cytosine because of _____ factor.
- Ultra-violet light can have chemically damaging effects on DNA leading to _____.
- Complete replication of DNA molecule would yield two daughter Duplexes, one consisting of one half parental DNA and the other half new materials. This mode of replication is called _____.
- Restriction enzymes or restriction Endonucleases are found in variety of Prokaryotes; their biological role is to cleave _____.