Current Paper Z00505

Q: Define ORF
Q: Explain Spliceosome?
Q: Write Down Core element of poll II?
Q: Types of polymerase found in eukaryotes and plant also?
Q: Function of RNA Helicase
Q: Difference b/w Alternating Spliceosome and Isoform?
Q: DNA Mutation? (10) Marks.
Q Effect of Human?
Q Elongation of transcription?
Q Loops of trager RNA
Q Elongation of trancription?
Q: DNA Helicase?
Q: Alternating splicing?

Z00505 (Cell and Molecular)

① Synthesis of DNA is catalyzed By DNA polymerase.

② All DNA polymerase Require a Primer

③ Each DNA Helicase moves along ssDNA in a defined direction.

4 Supercoils are Removed By the Action of topoisomerases.

5 The initiator protein involved in the initiation of Replication.

6 Telomerase Specifically Elongates the 3 "OH" of telomeric ssDNA Sequence.

7 The Basic process Responsible for gene expression include All.

8 Becteria have single RNA polymerase while Eukaryotes have Ans #3

9 Elongation Performs proof Reading of RNA.

10 In some Cells, well Characterized Sequence triggers Termination.

11 RNA polymerase initiates transcription at promoters.

12 Open Complex has 5 Channels.

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13 In addition to pol I initiation Requires SL1 & UBF.

14 Non Coding Sequence is called introns.

15 Stop Codon Sequence is UAA.

16 RBS means Ribosomes binding site.

17 "A-site" is the Binding site for Amino Acylated tRNA.

18 Theoder Schwann publish A Report On the Cellular Basis of Animal life.

19 Fluid Mosaic Model is Proposed By S. Jonithan Singer & Garth Nicolson.

20 Sphingolipid Consist of sphingosine linked to a fatty Acid is Ceramid.

21 Diffusion is A spontaneous Process in which A substance moves from a Region of High Conc to Low.

Q: 22 LDL contains 1500 Cholestaol molecules.

Q: 23 Intermediate filaments are encoded By Approximately 70 different genes.

Q: 24 phospholipids Molecule travels from One end to Other in 1-sec.

Q: 25 ER in Most eukaryotes cell stores Calcium.

Q: 26 Golgi Complex is a Major site of Carbohydrate synthesis.

Q: 27 Lysosomes Contains 40 types of Hydrolytic enzyme.

Q: 28 Perxisomes are Multifunctional organelles Containing More than 50 enzymes.

Q: 29 Model for DNA Replication proposed that two parental

Strand separate serve as template

Ans. Watson Crick.

Q.30 Okzaki fragments in Beeteria varies from 1000 - 2000.

Q:31 The Replicator is defined as Cisacting DNA sequence.

Q:32 Type II topoisomerase have Ability to Break a dsDNA

Q:33 RNA polymerase does not Need a Primer.

Q:34 tRNA is transform RNA.

Q:35 Transesterification reactions are Madeade By a Machine.

Ans: Spliceosomes.

Q:36 Phosphodiester bond is formed in an SN_2 Reaction.

Q:37 Only when Corret Nucleotides

comes the 3 "OH" of primer and α - phosphate of nucleotide coming in **Optimum position.**

Q: 38 The junction b/w newly separated template strand and unreplicated DNA is known as **Replication fork.**

Q: 39 Okazaki fragments vary in length and form **100 to 400** nucleotides in Eukaryotes.

Q: 40 The Replicon Model was explained by Fracois Jacob, Sydney Brenner in **1963.**

Q: 41 **Replicator** is cisacting DNA sequence that are sufficient to Direct the initiation of DNA Replicate.

Q: 42 In Case of Linear Chromosome The Replication fork Machinery Cannot Complete **Replication.**

Q: 43 After Replication of Circular

Chromosomes resulting Daughter DNA Linked Together Called **Catenanes.**

Q: 44 Transcription is **Less Accurate** Than Replication.

Q: 45 In the Case Of Escherichia Coli the predominant σ factor is called **σ 70.**

Q: 46 Downstream DNA enters Active Centers from downstream **DNA Channel.**

Q: 47 Within Active Centre Cleft DNA strand separate from position **+3.**

Q: 48 The Space in Active Centre Cleft occupied By Region **1.1** or By **DNA.**

Q: 49 Rho binds to RNA polymerase Throughout the **transcription Cycle.**

Q: 50 Rho dependent terminators have ill defined RNA element Called as **Rut sites.**

Q:51 Rho Independent terminators are also called **intrinsic terminator.**

Q:52 The Coding SeQuence are called **exons.**

Q:53 Intervening SeQuences are Called **introns.**

Q:54 U2AF is Made up of two subunits Larger of which **65** binds to Py tract and the Smaller **35** binds to the 3' splice site.

Q:55 Arrangement of protiens & RNA is Called early **(E)** Complex.

Q:56 U2 SnRNP binds to Branch site Aided By U2AF And Displacing BBP This arrangement Called As **A Complex.**

Q:57 The final Major player in translation is **Ribosomes.**

Q:58 The so called Group I and II are Called **Self splicing introns**

Q: 59 Eukaryotic mRNA almost always contains a single ORF.

Q: 60 mRNA containing multiple ORF are known as Polycystronic.

Q: 61 Polycystronic mRNAs found in Becteria.

Q: 62 mRNA containing single ORF known as Monocistronic.

Q: 63 Observation of T_4 RNA binding to E. Coli Ribosomes first made in 1960.

Q: 64 A single mRNA molecule can simultaneously be read by several Ribosomes.

Q: 65 Many ORFs in parokaryotes contain short sequence upstreams of staot codons called RBS.

Q: No: 66

The heart of protein Synthesis is the "translation" of Nucleotide into amino Acid.

Q: No: 67

Pseudouridine (ψ) is derived from uridine by an **isomerization.**

Q: No. 68 (D) dihydrouridine is Derived from uridine by an **enzymatic Reduction** of the double bond.

Q: No. 69

Zamencnik & Hoagland are adaptor Molecules postulated By **Crick.**

Q. No. 70

The Active X makes interference RNA antisist gene appropriately called **Tsix.**