BCM SCHOOL BASANT AVENUE DUGRI LUDHIANA

1 Contains nitrogen base and a pentose sugar.
2 Messelson and Stahl.
3 By N-glycosidic linkage.
4 RNA Polymerase
5 Start codon and codes for Methionine.
6 Varible number of Tandem repeat.
7 (1) Presence of Thymine in place of Uracil confers additional stability (2) DNA mutates but at a slower rate than that of RNA and hence chemically less reactive.
8 (1)Exons are coding sequences that forms part of mRNA,Introns are non –coding sequences that donot become part of mRNA.(2) Exons are joined together during splicing to make the information continous, Introns are removed during splicing.
9 DNA strand with polarity 3'-> 5' called template strand is transcribed as RNA polymerase can function only in 5'->3' direction because it is complementary to the3'->5' direction of the template .
10 To catalyse polymerization of nucleotides into polynucleotides. Proof reading .
11 Francis Crick postulated tRNA as an adapter molecule.(1)It has amino acid binding siteat 3' end .(2)It has anticodon to recognize the codon on mRNA for the amino acid.
12 (i) Transcription level, Processing level ,Transport of mRNA to cytoplasm , Translationlevel. (ii) Gene i