

مرحبا هاي المعلومات اجت بامتحان الجينتكس تاينا و تاا السنواا الساباا ، و ان شاء الله كل يوم بصير انزللكم شوي لانه كله مرة وحدة صعب علي .

. موفقين و يا جماعة عنجد اي ايشي اطلبوا اذا بقدر غير اعملوا بس اطلبوا

Slide#8 the Dna is a double strand بين حفظ المقارنة بين Dna + Rna

Slide#9 the shape of the purines and pyrimidines.

Slide# 10 the glycosidic bond between the carbon #1 of the ribose and the :1.N1 in pyrimidines

2. N9 in purines

Slide#14 the shape ester bond. و بسالك عن الرابطة اللي بين الكربونة ٥ و الفوسفات و بتطلع

Slide#25+26 the most form in the human is the B and the right handed.

Slide#29 the RNA denature in the alkali . Breaking the single strand completely bcz is not break the hydrogen bond only and there is a 3'OH in the ribose.

Slide#33 the pro and euo المقارنة بين wts the wrong in the euo and it was that is single circular .

Slide # 41 which wrong about the DNA replication . كلها حفظ مهمين بصير يجب

Slide #45 حفظ مهام كتير بجيبك الانزيم و بقلك شو ماا بيعمل الانزيم [الانزيمات](#)

Slide # 47 pol III it have a 5'to 3' activity and 3' to 5' exonuclease activity " Removes Base pairing errors"

Slide # 49 pol I مهم نعرف وظيفتها انها بتلمي gap after removing the RNA primer.

Slide#50 the function of the DNA ligase phosphodiester bonds from the 3'Oh to 5'" انه بتعمل و بطريقة اخرى بجيبها

Slide # 54 the most important thing that the speed of replication in the euokaryotes less than the prokaryotes bcz it has a repair mechanism with high fidelity.

Slide # 57 the euokaryotes have a multiple (Ori) at the same time to save the time to accelarate the process of replication and bcz the DNA is very large.

Slide#59 + 60 مهم نحفظ صفات كل وحده

Slide#61 the Pol Y : replication of the mitochondrial DNA .

The pol € : DNA replication and repair.

Slide#64 the ligase joins okazaki fragment together.

Slide#66 the problem in the replication of the telomeres is in the lagging strand bcz it cant put the primase + the telomerase have the RNA -Dependet DNA polymerase"reverse transcriptase" and its function is to add a randome repeating of TTAGGG .

The function of the telomeres is to protect the end of chromosome and it works like a clock biologic.

Slide# 67 the 5' end is always shorter bcz the 3' overhang at the end of each DNA strand.

Slide#70 +71 AATAAA sequence of : poly (A) tail + the ribosomal RNA the most abundant in the human than other RNA.

Slide #77 the main RNA polymerase in the prokaryotes is RNA pol III + which one of the RNA pol in the euokarytes produce the small RNA the answer is : RNA pol III.+ انه جاب سوال ناسي شو كان بالزبط بس بعتمد على RNA polymerase in the prokaryotes dependent on the sigma factors to know the promoter بعكس euokarytes which the RNA polymerase directly know the promoter without any factors need.

Slide#85 consensus sequences of promoter . نعرف

Slide # 92 بعكس replication w transcription accure at the same time in prokaryotes مهم انه نعرف انه
euokarytes the replication happen in the nucleaus and the transcription in the cytoplasm so not at the
same time .

Slide#97 + 101 مهم نعرف mRNA splicing w alternative splicing + spliceosome protein
which carries out splicing of intrones . و اختصاراتهم حفظ هذول اللي جابهم . " snRNPs+ snurps"