

always takes place in $5' \rightarrow 3'$
hence the strand which has
the polarity $3' \rightarrow 5'$ acts as
Template means Template
strand and the other strand
of DNA does not participate
hence $5' \rightarrow 3'$ is known as
coding strand but this strand
is displaced during transcripti.

$3' - \text{ATGCATGCATGCATGCATGC} - 5'$

$5' - \text{TACGTACGTACGTACGTACGTACG} - 3'$

The base sequence of RNA trans-
cribed will be complementary
to the template strand hence

$5' - \text{UACGUACGUACGUACGUACGUAC} - 3'$

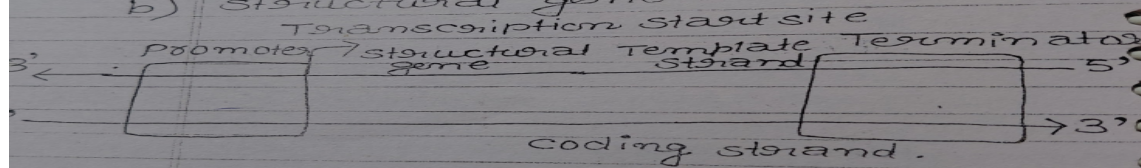
c) Terminator:-

Terminator is present at the
end of structural gene towards
the $3'$ end with respect to the
the coding strand. Terminator
is at the opposite end of promoter

the binding site for RNA polymerase enzyme. The presence of promoter defines the template and coding strand of structural genes.

By switching its position with the terminator, the definition of template and coding strand is reversed.

b) Structural gene :-



The only one strand of DNA is used in the process transcription. The structural gene is defined by both the strands of DNA. Both the strands are opposite in polarity means if one is in 5' → 3' then another is 3' → 5'. The polymerisation

Galaxy A36 5G

write short notes on transcription unit.

→ Transcription unit of DNA is consisted of three parts known as :-

- Promoter (P)
- Structural gene (S)
- Terminator (T)

a) Promoter :-

Among the three regions the structural gene is present in the center while the promoter and terminator are present at the two ends of structural gene.

Promoter is present at the beginning towards the 5' end means upstream of the structural gene. It is a DNA sequence which provides

Galaxy A36 5G