

VEER KUNWAR SINGH UNIVERSITY - ARA

B.Sc.

ZOOLOGY (HONOURS) -

PART - III

PAPER - VI

FROM

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15/5  
20/20

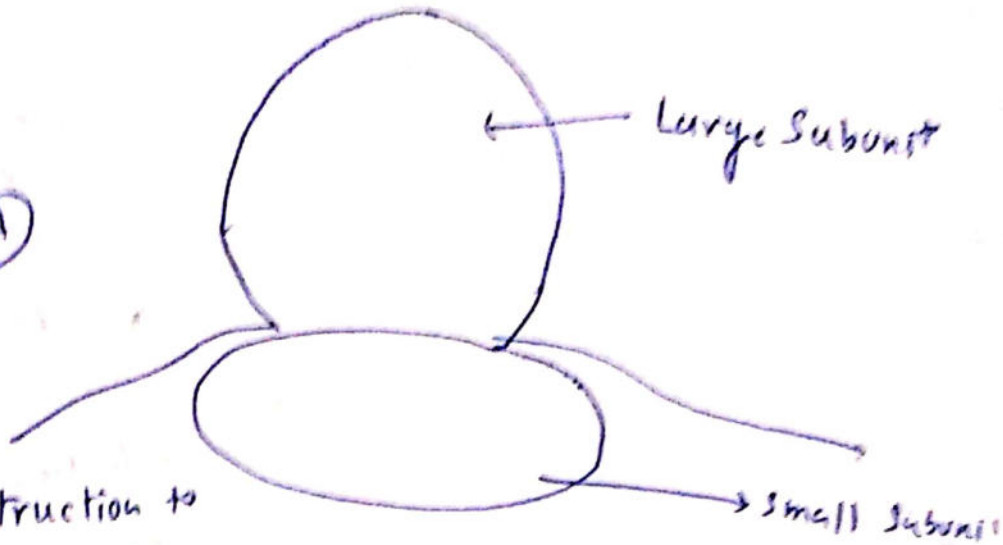
①

B, SC - PART - III

PAPER - V

RIBOSOME

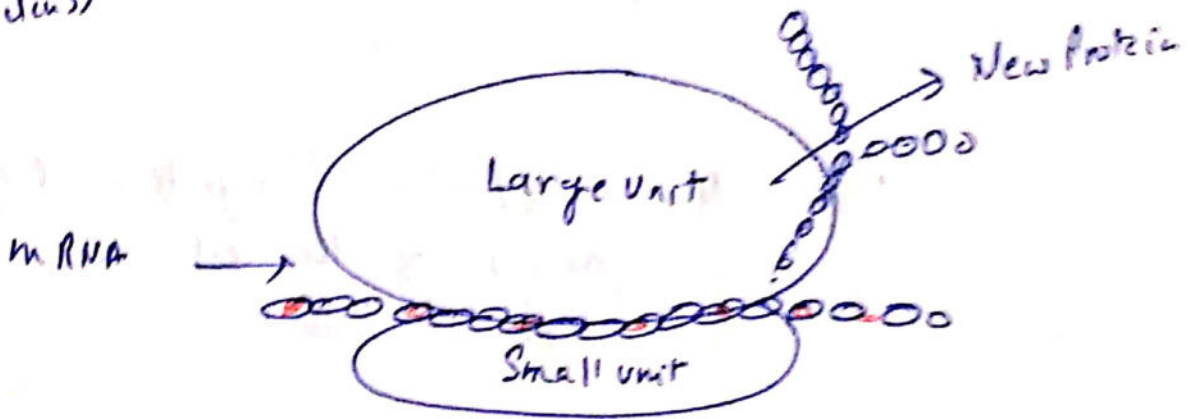
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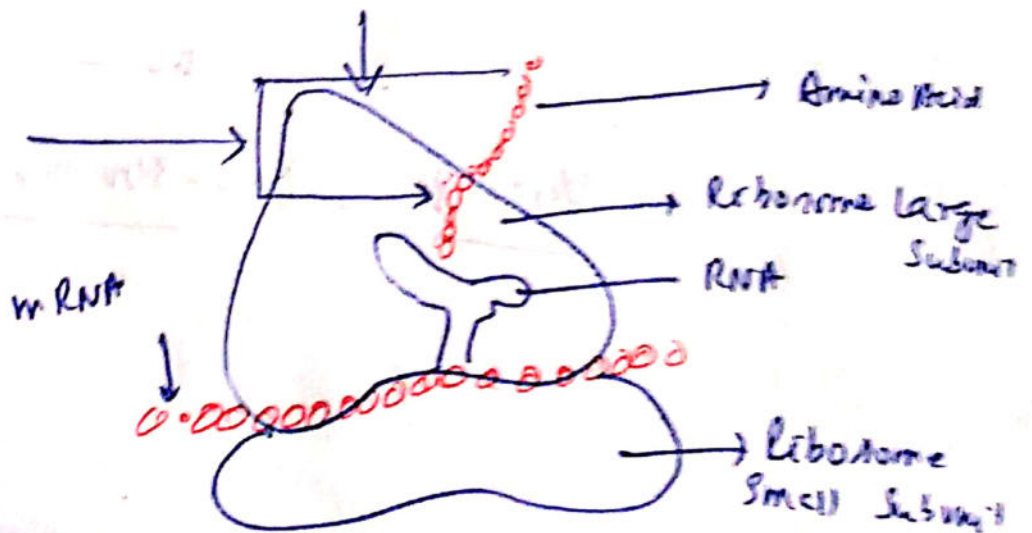
Instruction to  
make a protein  
(written on a mRNA  
molecule - in the  
nucleus)

①  
Ribosome

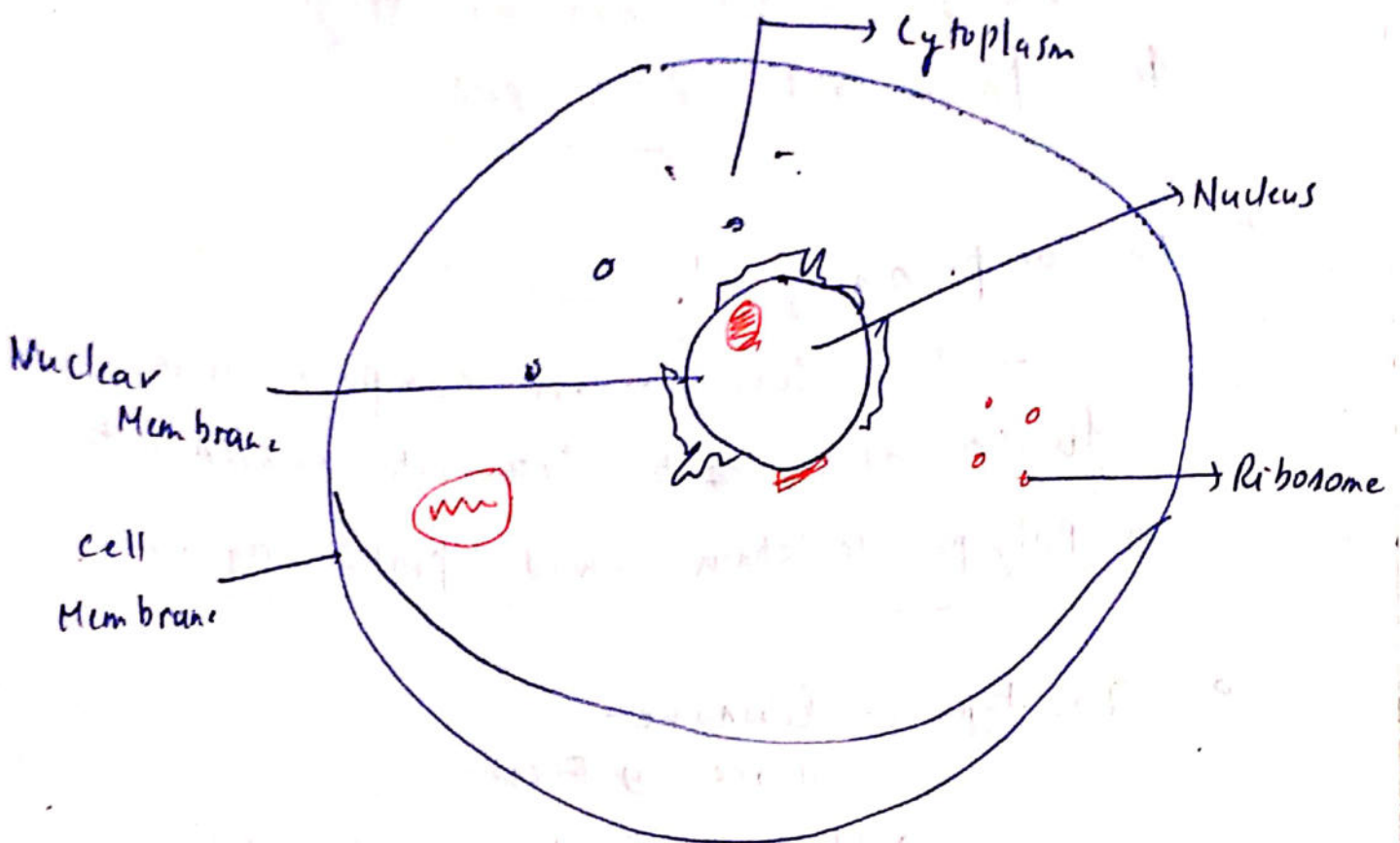
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Growing  
Peptide  
chain



(2)



- o It's a complex molecule - made of ribosomal RNA molecule and protein
- o Forms - Factory for Protein synthesis in cells.
  - Discovered by - George E. Palade
- o Found - In the cytoplasm or bound to - E-R, to Rough E-R.
  - In Mammalian cell - there can be 10 million ribosomes
- o Made of - ribosomal protein and ribosomal RNA

In prokaryotes - ribosomes are roughly -  
40% protein and 60% rRNA

It's composed of two subunits -

- These subunits - are composed and function as one to translate mRNA into a polypeptide chain amid protein synthesis.

Two type of - Ribosome -

① Free ② Fixed.

→ Identical in structure, but differ in location within the cell -

Free Ribosome - located in - cytosol & able to move through out the cell -

Fixed Ribosome - are attached to - rER.

Next Day - DNA.