



# SNS COLLEGE OF NURSING

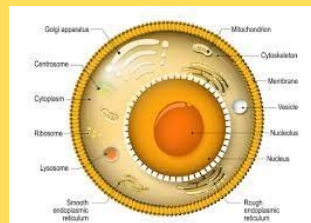
Coimbatore-35



## BIOCHEMISTRY

I YEAR I SEM

### UNIT 1 – Prokaryotic and Eukaryotic cell





## + TYPES OF CELLS: Prokaryotic VS Eukaryotic Cells

### Prokaryotic Cell

- Bacteria
- No nucleus
- Lacking many membrane bound organelles
- Very small
- Reproduce through fission, budding, fragmentation and regeneration.

### Eukaryotic Cell

- Contain DNA
- Contain ribosomes
- Has plasma membrane

- Plants and Animals
- Distinct nucleus
- Contains membrane bound organelles
- Much larger than prokaryotes
- Reproduction by mitosis or meiosis



## English to हिंदी / اردو Sentences

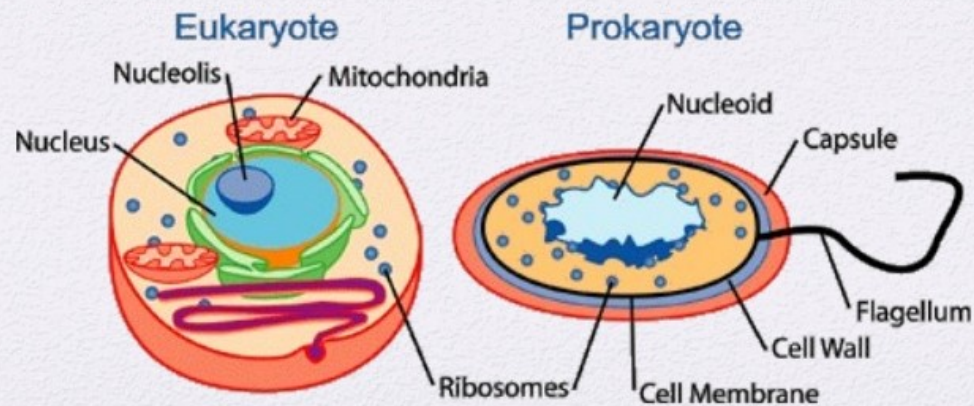
<p>सच कहूँ तो मैं बहुत खुश हूँ। sach kahun to main bahut khush hun To be honest, I am very happy.</p>	<p>ये आपकी मेहरबानी है। ye aapki meharbani hai It's very kind of you.</p>
<p>वो तो वहाँ जायेगा ही। vo to vaha jayega hi. He will obviously go there.</p>	<p>वो बेहोश हो गया है। vo behosh ho gaya hai. He has become unconscious.</p>
<p>अपनी घड़ी ठीक करवाओ। apani ghadi thik karavao Get your watch repaired.</p>	<p>उसने ही तो ये कहा था। Usne hi to ye kaha tha. It was he, who had said it.</p>
<p>वो तो तुम्हारा साथ देगा ही। vo to tumhara sath dega hi. He will obviously support you. He will obviously help you.</p>	<p>तुम्हारी शादी करीब आ रही है। tumhari shaadi karib aa rahi hai. Your marriage is drawing near.</p>



[www.grammareer.com](http://www.grammareer.com)



# Two types of Cells: Prokaryote and Eukaryote





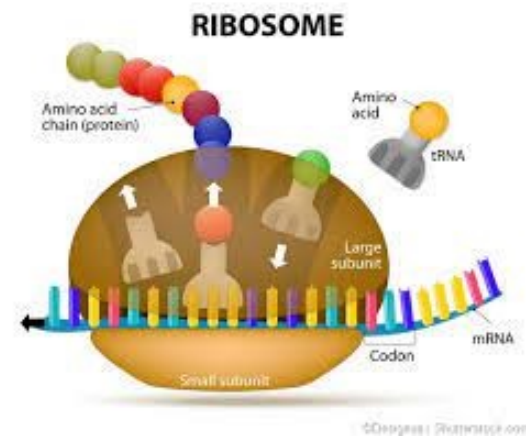
**1. What is the name of the region where double-stranded single circular DNA is found in the prokaryotic cell?**

- (a) Protonucleus
- (b) Nucleus
- (c) Nucleoid
- (d) Nucleoplasm



**2. In prokaryotic cells, ribosomes are**

- (a) 70 S
- (b) 80 S
- (c) 60S + 40S
- (d) 50S + 40S





**Table-1 Difference between Prokaryotic and Eukaryotic cell**

<b>Character</b>	<b>Prokaryotic cell</b>	<b>Eukaryotic cell</b>
Nuclear membrane	Absent	Well formed nuclear membrane
Nucleoplasm	Undifferentiated from cytoplasm	Denser and differentiated from cytoplasm by nuclear membrane
Hereditary material	Single naked strand of DNA / RNA Circular in shape. DNA not linked with Histone proteins	More than one strand of DNA & Histone protein inside nuclear membrane as chromosomes
Nucleolous	Absent	Present
Flagellum	Single, simple composed of protein flagellin No 9+2 fibrillar pattern	complex 9+2 fibrillar pattern composed of tubulin and other proteins
Cell division	Amitosis (Binary fission) spindle not formed	Mitosis or meiosis Spindle formed
Ribosomes	70S (30S+50S)	80 S (40S+60S)
Cytoplasmic movements	Rare or absent	Often occurs
Vacuoles	Absent	Present
Lysosome	Absent	Present
Growth	Can grow both under aerobic and anaerobic conditions	Can grow only under aerobic condition
Size	1-10 $\mu\text{m}$	10-100 $\mu\text{m}$









# References

1. <http://www.easybiologyclass.com/differences-between-prokaryotes-eukaryotes/>

*Thank You*