

**Prof. Brijmohan Mishra Institute of Medical and Technical sciences .**

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**Affiliated to DAVV.**

**Paper 2nd – Cell Biology & Metabolism .**

**Class – Bsc 2nd sem biotechnology .**

**Max marks – 85**

**Note – Each question carries 17 marks.**

Q) Long answer type questions :-

Q1.) Difference between a) Prokaryotic and Eukaryotic cell.

b) Gram's positive & Gram's negative cells .

OR

Explain about size , shape & arrangement of Bacterial cells ?

Q2.) Explain Mitosis with different stages diagrammatically ?

OR

Write note on :- a) cell differentiation.

b) cell senescence & death .

c) cell – cell interactions .

Q3.) Explain in detail structure of organelles of Bacterial cell with bacterial cell with labelled diagram ?

OR

Explain structure of organelles of Eukaryotic cell ?

a) Mitochondria b) Chloroplast .

Q4.) Explain Glycolysis cycle with sequence reactions ?

OR

Explain Electron transport chain ( ETC ) ?

Q5) Explain Amino acids breakdown ?

a) Transamination b) Urea cycle .