



**B. Sc. (MICROBIOLOGY) SEMESTER-I  
Paper-I  
(Fundamentals of Microbiology)**

**UNIT-I**

Discovery of Microbes

<https://youtu.be/-Yl0v2HmmMs?si=0WM0yd0n5vHXZdqT>

Theory of biogenesis and abiogenesis

<https://youtu.be/tcyESFngVPk?si=vHUOGOtyBS2Gt38P>

Contribution of Scientists in Microbiology

[https://www.youtube.com/live/WshveB3LRDA?si=M1\\_co-4u2pKIUMN9](https://www.youtube.com/live/WshveB3LRDA?si=M1_co-4u2pKIUMN9)

Branches of Microbiology

<https://youtu.be/cpmePPCZhuU?si=CiSdnfXOx6xrTrLn>

**UNIT-II**

Prokaryotes and Eukaryotes

[https://youtu.be/lc3pDbNmmiI?si=W0Bkdw8v194U\\_nMI](https://youtu.be/lc3pDbNmmiI?si=W0Bkdw8v194U_nMI)

Bacterial cell sizes, shapes and arrangements

<https://youtu.be/L6f3QiTTXNc?si=YgHdy2r4tWg45zH6>

Typical Bacterial Structure

[https://youtu.be/MqIylL-njAI?si=pRdXJ\\_4FF7mCdIBY](https://youtu.be/MqIylL-njAI?si=pRdXJ_4FF7mCdIBY)

Fluid Mosaic Model of Plasma Membrane

<https://youtu.be/qVIL8Drn7fs?si=4XbEmufFztsciJLN>

Endospore Formation and Germination

[https://youtu.be/Y\\_RsKCzCkV8?si=4Z3uNAIbFRA39jsK](https://youtu.be/Y_RsKCzCkV8?si=4Z3uNAIbFRA39jsK)

Significance of Dormancy

<https://youtu.be/62LBMHnRuyY?si=6uvm2gAOTQqX76h3>



### **UNIT-III**

Nutritional types of bacteria

[https://youtu.be/3A9w\\_PUGd8Q?si=6BIAdflq2aogXT06](https://youtu.be/3A9w_PUGd8Q?si=6BIAdflq2aogXT06)

Basic Nutritional Requirements

[https://youtu.be/m9wJKnkYYL8?si=RUDKGsc70aCyK\\_MZ](https://youtu.be/m9wJKnkYYL8?si=RUDKGsc70aCyK_MZ)

Types of Culture Media

<https://youtu.be/9cy9VqVUODo?si=3aN5eq7OSImcvBhj>

Media for Isolation of Fungi

<https://youtu.be/fp-V4XFg1b4?si=MZxk4pWNzec8QiDS>

### **UNIT-IV**

Bacterial Reproduction

<https://youtu.be/mV7-jVtjpvS?si=vzhY170qhF3Czq5m>

Axenic Culture

[https://youtu.be/k1BCU0aw1V0?si=mz\\_9Lw8KYzNTvFkI](https://youtu.be/k1BCU0aw1V0?si=mz_9Lw8KYzNTvFkI)

Bacterial Growth curve

<https://youtu.be/xRfs7s2fo6Y?si=AaSCRVb6fsAQ8-PR>

Continuous Culture

<https://youtu.be/iKiYauJ8yq4?si=m5Sniis-HT8iwecI>

Synchronous Culture

<https://youtu.be/C3rObwLuuDI?si=wY3l7Ah0JuZbDC65>

Diauxic Culture

<https://youtu.be/rf3SVzNyfS8?si=Cq0yWrRKRcO76R1>

Factors Affecting Microbial Growth

<https://youtu.be/eNVn6S3oI7Y?si=FpifFQshxLNELSF6>