



## FACULTY: SDT

**PROGRAM: B. PHARM**

**Course Code:** PT-319

**Course Name:** Pharmaceutical Microbiology

### **Suggested Books for the Course (with links):**

| Sl. No. | Book Name, Ed., Vol                   | Authors                   | Weblink(s)                      |
|---------|---------------------------------------|---------------------------|---------------------------------|
| 1.      | Microbiology                          | M.J.Pelczar & Chan &Krieg | <a href="#">Click this link</a> |
| 2.      | Pharmaceutical Microbiology           | Ashutosh Kar              | <a href="#">Click this link</a> |
| 3.      | The Desk Encyclopedia of Microbiology | M.Schaechter              | <a href="#">Click this link</a> |
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*(add more rows if needed)*

**Supplementary Materials for Reference and Self Study:** *(add more rows if needed)*



| Date       | Module (as per Lesson Plan) | Topic   | Live Recording Link   | Powerpoint Presentation Link | Supplementary Notes / Resources   | Remarks, if any |
|------------|-----------------------------|---|---|------------------------------|---|-----------------|
| 21-07-2020 | Unit-I                      | Introduction, History of Microbiology   | <a href="https://youtu.be/HkvPtKHAVNQ">https://youtu.be/HkvPtKHAVNQ</a> | <a href="#">PPT 1</a>        |   |                 |
| 24-07-2020 | Unit-I                      | Scope and Importance of Microbiology  | <a href="https://youtu.be/E52NWYwNc4Y">https://youtu.be/E52NWYwNc4Y</a> | <a href="#">PPT 2</a>        |   |                 |
| 28-07-2020 | Unit-1                      | Introduction of Prokaryotes and Eukaryotes  | <a href="https://youtu.be/TzQ7c3hgtis">https://youtu.be/TzQ7c3hgtis</a> | <a href="#">PPT 3</a>        |   |                 |
| 31-07-2020 | Unit-5                      | Introduction of Animal cell culture   | <a href="https://youtu.be/XBfvDT-ugfc">https://youtu.be/XBfvDT-ugfc</a> | <a href="#">PPT 4</a>        | <a href="#">Animal cell culture notes</a>   |                 |
| 04-08-2020 | Unit-5                      | Growth of animal cells in culture, Application of cell cultures in pharmaceutical industry and research | <a href="https://youtu.be/trhdU2INszo">https://youtu.be/trhdU2INszo</a> | <a href="#">PPT 5</a>        | <a href="https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing">https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing</a> |                 |



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| 07-08-2020 | Unit-5 | general procedure for cell culture,  | <a href="https://youtu.be/EC4LsWnFw5s">https://youtu.be/EC4LsWnFw5s</a> | <a href="#">PPT 6</a>  | <a href="https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing">https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing</a> |  |
| 14-08-2020 | Unit-5 | Transformed cell line and flow charts for different procedures                       | <a href="https://youtu.be/9uEG99945rM">https://youtu.be/9uEG99945rM</a> | <a href="#">PPT 7</a>  | <a href="https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing">https://drive.google.com/file/d/1iwu9Rqp3adRxDwxSw4jLNhLVjfWe9HZK/view?usp=sharing</a> |  |
| 18.08.2020 | Unit-5 | Microbial spoilage   | <a href="https://youtu.be/jd0XkSAdBUU">https://youtu.be/jd0XkSAdBUU</a> | <a href="#">PPT8</a>   |   |  |
| 21.08.2020 | Unit-5 | Sources of microbial contamination & Preservation of pharmaceutical products         | <a href="https://youtu.be/NJG0vVi26Wg">https://youtu.be/NJG0vVi26Wg</a> | <a href="#">PPT 9</a>  |   |  |
| 25.08.2020 | Unit-5 | Ideal characteristics of anti microbial agents and evaluation of microbial stability | <a href="https://youtu.be/SoQPncCW4gA">https://youtu.be/SoQPncCW4gA</a> | <a href="#">PPT 10</a> | <a href="#">PDF</a>   |  |



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| 28.08.2020 | Unit-6  | Pharmaceutical ingredients subjected to microbial attack and observable effects of microbial attack in pharmaceutical products | <a href="https://youtu.be/FZzdN6JquD0">https://youtu.be/FZzdN6JquD0</a> | <a href="#">PPT11</a>  | <a href="https://drive.google.com/file/d/1tydbUof0JhuSe6qe6QaY6IIP6X_u9Bid/view?usp=sharing">https://drive.google.com/file/d/1tydbUof0JhuSe6qe6QaY6IIP6X_u9Bid/view?usp=sharing</a> |  |
| 01.09.2020 | Unit-5  | Cell quantification  | <a href="https://youtu.be/ekEzIzrhWQ8">https://youtu.be/ekEzIzrhWQ8</a> | <a href="#">PPT 12</a> |   |  |
| 04.09.2020 | Unit-5  | Tissue culture mathematics   | <a href="https://youtu.be/XYsi9svute4">https://youtu.be/XYsi9svute4</a> | <a href="#">PPT 13</a> |   |  |
| 08.09.2020 | Unit-5  | LAL TEST   | <a href="https://youtu.be/Aq3d8leRF5Q">https://youtu.be/Aq3d8leRF5Q</a> | <a href="#">PPT 14</a> |   |  |
| 11.09.2020 | Unit-5  | REVISION   | <a href="https://youtu.be/54wGK8VNbqg">https://youtu.be/54wGK8VNbqg</a> | NIL                    |   |  |
| 15.09.2020 | Unit-5  | Trypsinization   | <a href="https://youtu.be/3tn0R3zFk3M">https://youtu.be/3tn0R3zFk3M</a> | <a href="#">PPT 15</a> |   |  |
| 22.09.2020 | Unit -5 | Microbial contamination  | <a href="https://youtu.be/4ishkswssl8">https://youtu.be/4ishkswssl8</a> | <a href="#">PPT 16</a> |   |  |
| 01.12.2020 | Unit-5  | Growth kinetics of Animal cells  | <a href="https://youtu.be/igpJSyJE_9E">https://youtu.be/igpJSyJE_9E</a> | <a href="#">PPT 17</a> | <a href="#">Growth kinetics</a>   |  |
| 05.12.2020 | Unit-5  | Growth kinetics of Animal cells & Cryopreservation   | <a href="https://youtu.be/Wm-exyWskS4">https://youtu.be/Wm-exyWskS4</a> | <a href="#">PPT18</a>  | <a href="#">Growth kinetics and Cryopreservation</a>  |  |



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| 08.12.2020 | Unit-5 | Cryopreservation and Resuscitation of cells | <a href="https://www.youtube.com/watch?v=qpL6djWqjRA">https://www.youtube.com/watch?v=qpL6djWqjRA</a> | <a href="#">PPT19</a>  | <a href="#">Cryopreservation &amp; Resuscitation of cells</a> |  |
| 11.12.2020 | Unit-5 | HOT AIR OVEN                                | <a href="https://youtu.be/BSmgEeNP21Q">https://youtu.be/BSmgEeNP21Q</a>                               | <a href="#">PPT 20</a> | <a href="#">PCA1</a>  |  |
| 15.12.2020 | Unit-5 | AUTOCLAVE                                   | <a href="https://youtu.be/RvXOjDX04JI">https://youtu.be/RvXOjDX04JI</a>                               | -do-                   |   |  |
| 18.12.2020 | Unit 5 | BOD INCUBATOR                               | <a href="#">B.PHARM IInd YEAR 2nd half</a>  | -do-                   |   |  |



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| 16.01.2021 | Practical | Preparation of culture media | <a href="https://youtu.be/laJ2RtQetxo">https://youtu.be/laJ2RtQetxo</a>   | <a href="#">ppt 21</a> | <a href="#">PCA2</a>   |  |
| 27.01.2021 | Practical | Isolation of pure culture    | <a href="https://drive.google.com/file/d/1QPegC-JUj2tXzKsaG5TuWjbRAYR2rizM/view?usp=sharing">https://drive.google.com/file/d/1QPegC-JUj2tXzKsaG5TuWjbRAYR2rizM/view?usp=sharing</a> | <a href="#">PPT 22</a> | <a href="#">PCA3</a>   |  |
| 29.01.2021 | PRACTICAL | Gram staining                | <a href="#">Gram staining practical video</a>   | <a href="#">PPT 23</a> | <a href="#">Gram staining PDF</a><br><a href="#">PROCEDURE</a> |  |



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| 04.02.2021 | practical | Colony forming Unit per ml | <a href="#">CFU /ML PRACTICAL VIDEO</a> |                        |   |  |
| 04.03.21   | Theory    | Fungi & Virus              |   | <a href="#">PPT 24</a> | <a href="#">Fungi</a><br><a href="#">Virus</a>                            |  |
|            |           |                            |   |                        | <a href="#">Aseptic area</a><br><br><a href="#">Microbiological Assay</a> |  |