

COLLEGE, AT POST NALWADI, DIST. WARDHA (M.S.) Accredited 'B' by NAAC Approved by government of Maharashtra

> Affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

> > Recognised by U.G.C New Delhi under section 2 (f) & 12 (b) of UGC act 1956

Department of Microbiology

B.Sc. Semester III

PAPER 1

- Q.1) Give the classification of carbohydrates? 10 M.
- Q.2) Write in detail classification of lipids? 10M
- Q.3) Give the detail account on classification of amino acids? 10 M
- Q.4) Give account on organizational lavels of proteins ? 10M.
- Q.5) Write in deatail MM equation? 10M.
- Q.6) Write about enzymes inhibition and their types? 10M.
- Q.7) Structure of DNA? 10 M.
- Q. 8) Write the classification of vitamins? 10M.
- Q.9) write about triglycerides? 5M.
- Q. 10) write about titration curve? 5)
- Q. 11) Give account on membrane bound ezzymes? 5M
- Q.12) Give the account on functions of vitamins? 5M.
- Q. 13) what is turn over numbers? 1M
- Q.14)Draw the structure of cellulose? 1M.
- Q.15)What is allosteric site? 1M.



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Subject :Microbiology

3rdSEM

PAPER II

- Q. 1) write detail account on fermentation design ? 10 M.
- Q. 2) Write in detail on sterilization of fermentors? 10 M.
- Q,3) Concept of good manufacturing practices? 10 M.
- Q.4) Production of citric acid? !0 M.
- Q. 5) discuss types of fermenters? 5M
- Q, 6) Write factors affecting the fermentation process ? 5 M.
- Q.7) Give the outline of downstream processing? 5M.
- Q. 8) Write about single cell proteins ? 5m.
- Q 9) Discuss harvesting of biomass? 5M.
- Q. 10) what is SCP ? 1. M
- Q,11) what is USP ? 1 M.
- Q. 13) Write about spirullina? 1M.
- Q.14) What is agitation ? 1M
- q. 15) Give any one type of fermenter? 1 M



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Subject :Microbiology

IV SEM

PAPER 1

- Q.1) Write EMP pathway ? 10 M
- Q. 2) Give the detail account on B oxidation? 10 M
- Q. 3) write about prokaryotic translation ? 10 M.
- Q. 4) Write about oxidative phosphorylation and ATP generation ? 10 M.
- Q.5) Give the pentose phosphate pathway ? 5 m
- Q. 6) Write rolling circle model ? 5 M
- Q. 7) Discuss about genetic code? 5 M
- Q. 8) write about high energy molecules? 5 M
- Q.9) write one enzyme used in TCA cycle ? 1 M
- Q, 10) Name any five amino acid name? 1M
- Q. 11) what is cyclic photophosphorylation? 1M
- Q.12) What is transcription ? 1M
- Q.13)What is glucogenicamoino acid? 1M
- Q. 14) Write about high energy molecules? 1M
- Q.15) what is PK pathway? 1M



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Subject ;Microbiology

IV SEM 2018 2019

PAPER II

- Q.1) Discuss about Rapid sand filter? 10 m
- Q. 2) Discuss about primary treatment? 10 M
- Q. 3) Explain in detailo symbiotic nitrogen fixing bacteria? 10 M
- Q. 4) Write in detail concept of bioremediation ? 10 M
- Q. 5) What is chlorination ?discuss types of chlorination? 5M
- Q. 6) What is MFT ? 5 M
- Q. 7) Fungi as biopesticides? 5 M.
- Q.8) Discuss the microbial leaching ? 5M
- Q.9) what is fresh water? 1M
- Q.10) What is long form of BOD? 1M
- Q.11) What is Bioaccumulation? 1M
- Q. 12) Give one advantage of bioleaching? 1M.

