

**RAYAT SHIKSHAN SANSTHA'S
MAHATMA PHULE ARTS, SCIENCE AND COMMERCE
COLLEGE, PANVEL, DIST-RAIGAD
DEPARTMENT OF CHEMISTRY**

**LIST OF NEW PRACTICES TO BE CONDUCTED UNDER
DBT STAR COLLEGE SCHEME**

CLASS: FYBSC

Academic Year (2022-23)	Academic Year (2023-24)	Academic Year (2024-25)
1. Rapid Detection of Chemical Adulterants of Milk	1. Rapid Detection of Chemical Adulterants of Milk	1. Rapid Detection of Chemical Adulterants of Milk
2. Physico-chemical study of water sample of nearby water bodies	2. Physico-chemical study of water sample of nearby water bodies	2. Physico-chemical study of water sample of nearby water bodies
-	3. Preparation of buffer of desired pH and molarity and measurement of pH.	3. Preparation of buffer of desired pH and molarity and measurement of pH.
-	-	4. Measurement of pKa of amino acids.

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**LIST OF NEW PRACTICES TO BE CONDUCTED UNDER
DBT STAR COLLEGE SCHEME**

CLASS: SYBSC

Academic Year (2022-23)	Academic Year (2023-24)	Academic Year (2024-25)
1. Green synthesis of Diversely Functionalized oxindole	1. Green synthesis of Diversely Functionalized oxindole	1. Green synthesis of Diversely Functionalized oxindole
Analysis of micronutrients of soil samples	2. Analysis of micronutrients of soil samples	2. Analysis of micronutrients of soil samples
Preparation of Sanitizer, Soap, Handwash and Perfumes.	3. Preparation of Sanitizer, Soap, Handwash and Perfumes.	3. Preparation of Sanitizer, Soap, Handwash and Perfumes.
-	4. Estimation of sugar by Folin-wu method.	4. Estimation of sugar by Folin-wu method.
-	-	5. pH metry: Acid base titration curves

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DBT STAR COLLEGE SCHEME
CLASS: TYBSC**

Academic Year (2022-23)	Academic Year (2023-24)	Academic Year (2024-25)
1. Synthesis & characterization of ZnO nanomaterial	1. Synthesis & characterization of ZnO nanomaterial	1. Synthesis & characterization of ZnO nanomaterial
2. Heavy metal analysis of industrial waste water Cr(VI)	2. Heavy metal analysis of industrial waste water Cr(VI)	2. Heavy metal analysis of industrial waste water Cr(VI)
3. Synthesis of mixed ligand complex & determination of its Magnetic Susceptibility	3. Synthesis of mixed ligand complex & determination of its Magnetic Susceptibility	3. Synthesis of mixed ligand complex & determination of its Magnetic Susceptibility
4. Extraction of Organic compounds from plants present in college campus	4. Extraction of Organic compounds from plants present in college campus	4. Extraction of Organic compounds from plants present in college campus
5. Estimation of protein by Biuret method.	5. Estimation of protein by Biuret method.	5. Estimation of protein by Biuret method.
-	6. Estimation of sugar by DNSA method	6. Estimation of sugar by DNSA method
-	-	7. Estimation of amino acid by Ninhydrin method.