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No.AC.2(S)/378/2020-21

Vishwavidyanilaya Karyasoudha, Crawford Hall, Mysore-570 005. Dated: 19.08.2020

NOTIFICATION

Sub: Minor changes in the syllabus of M.Sc. Microbiology & Ph.D. program from the Academic Year 2020-21.

- Ref: 1. Decision of Board of Studies in Microbiology (PG) meeting held on 20.12.2019.
 - Decision of the Faculty of Science & Technology Meeting held on 18.02,2020.
 - 3. Decision of the Academic Council meeting held on 18.06.2020.

The Board of Studies in Microbiology (PG) which met on 20.12.2019 has recommended to make minor changes in the existing syllabus of M.Sc. Microbiology program & Ph.D. program from the Academic Year 2020-21.

The Faculty of Science and Technology and Academic Council meeting held on 18.02.2020 and 18.06.2020 respectively have approved the above said proposal and the same is hereby notified.

The modified syllabus of M.Sc. Microbiology & Ph.D. program is annexed. The contents may be downloaded from the University Website i.e., www.uni-mysore.ac.in.

Draft approved by the Registrar

Deputy Registrar (Academic),
Deputy Registrar (Academic)
University of Mysore

Mysoce-570 005

To:

- The Registrar (Evaluation), University of Mysore, Mysore.
- 2. The Dean, Faculty of Science & Technology, DoS in Psychology, Manasagangotri, Mysore.
- 3. The Chairperson, BoS in Microbiology, DoS in Microbiology, Manasagangotri, Mysore.
- 4. The Chairperson, Department of Studies in Microbiology, Manasagangotri, Mysore.
- 5. The Director, College Development Council, Moulya Bhavan, Manasagangotri, Mysore.
- 6. The Deputy/Assistant Registrar/Superintendent, AB and EB, UOM, Mysore.
- 7. The P.A. to the Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysore.
- 8. Office file.

AMENDMENT OF SYLLABUS FOR Ph.D. COURSE WORK MICROBIOLOGY

Unit:2

Unit:2

Biomolecules and Analytical Methods: isolation, purification and characterization of biomolecules, gel filtration, adsorption chromatography ion exchange chromatography, affinity chromatography. GLC, HPLC. Electrophoretic techniques, two dimensional electrophoresis. UV/ visible spectrophotometry, fluorescence spectrophotometry, NMR spectroscopy, Xray diffraction, mass scpectrometry. Centrifugation. ELISA, immunoprecipitation, and immunofluorescence. FISH, flow cytometry.

EXISTING

Biomolecules and Analytical Methods: isolation, purification and characterization of biomolecules, gel filtration, adsorption chromatography, ion chromatography, exchange affinity chromatography. GLC, HPLC. Electrophoretic techniques, two dimensional gel electrophoresis. visible spectrophotometry, fluorescence UV/ spectrophotometry, NMR spectroscopy, X-ray diffraction. scpectrometry.Centrifugation. mass ELISA. immunoprecipitation and immunofluorescence.FISH. flow cytometry. MALDI-TOF, MS, 2D electrophoresis, ICP-MS, Biosensors, surface plasma resonance.

AMENDED

Unit:5

Scientific Writing and development of Research projects: Scientific document maintenance of laboratory data book. Organization and writing of a research paper, short communications, review articles, monographs, technical and survey reports authored books and edited books, dissertation and PhD Thesis, Preparing and delivering of oral and poster presentations, avoiding plagiarism, impact factor and citation index.

Funding agencies: National and international funding agencies for R & D projects. Preparation of R & D projects for funding: Organization of research project, identification of gap areas in the subject aims and objectives of the projects, possible outcome of the project, funds requirement and justifications. Biosafety and ethical issues. IPR

Unit:5

Scientific Writing and development of Research projects: Scientific document maintenance of laboratory data book. Organization and writing of a research paper, short communications, review articles, monographs, technical and survey reports authored books and edited books, dissertation and PhD Thesis, Preparing and delivering of oral and poster presentations, avoiding plagiarism, impact factor and citation index.

Funding agencies: National and international funding agencies for R & D projects. Preparation of R & D projects for funding: Organization of research project, identification of gap areas in the subject aims and objectives of the projects, possible outcome of the project, funds requirement and justifications. Biosafety and ethical issues. Bioethics, animal ethics and institutional ethical committee.

Introduction to IPR: Kinds of IPR: Patents, copyright, design, trademark, geographical indicators, industrial design and trade secrets.Patent Office and appellate board. India's new National IP policy- Govt. of India steps to promote IPR, career opportunities in IP.