



BALUCHISTAN PUBLIC SERVICE COMMISSION

Samungli Road, Quetta Cantt.

Syllabus for the post of Lecturer Biotechnology (B-17)
(Women's Section) in the Collegiate Branch, Colleges
Higher and Technical Education Department.

Mode of Exam: MCQs

Course outline

1. Introduction to Biotechnology
2. Ecology, Biodiversity & Evolution
3. Microbiology
4. Biomathematics
5. Physical Chemistry
6. Genetics
7. Probability and Biostatistics
8. Analytical Chemistry and Instrumentation
9. Dairy and Food Biotechnology
10. Genomics and Proteomics
11. Industrial Biotechnology
12. Biosafety and Bioethics
13. Marine Biotechnology
14. Radiobiology
15. Hospital Waste Management
16. Fungal Biotechnology
17. Pharmaceutical Biotechnology

18. Molecular Diagnostics
19. Cell and Tissue Culture
20. Fermentation Biotechnology
21. Microbial Biotechnology
22. Classical Genetics
23. Molecular Biology
24. Environmental Biotechnology
25. Bioinformatics
26. Methods in Molecular Biology
27. Health Biotechnology
28. Nanobiotechnology
29. Biofuels and Biorefineries

Recommended Books

- Daugherty E, 2012. Biotechnology: Science for the New Millennium. 1 st Edition, Revised; Paradigm Publication.
- Glick BR et al., 2009. Molecular Biotechnology: Principles and Applications of Recombinant DNA. 4 th Edition; ASM Press.
- Snustad DP and Simmons MJ, 2008. Principals of Genetics. 5 th Edition; John Willy & Sons, New York.
- Nelson D and Cox MM, 2009. Lehninger Principles of Biochemistry. 5 th Edition; WH Freeman, New York.
- Fluker MH, 2010. Environmental Biotechnology. CRC Press.
- Claverie JM and Notredame C, 2006. Bioinformatics for Dummies. 2 nd Edition; Wiley Publishing
- Ausubel FM, 2005. Short Protocols in Molecular Biology (2 volume set). 5 th Edition; John Wiley and Son.
- . Pongracz J. and Keen M. 2009. Medical Biotechnology. 1 st Edition; Elsevier Health Sciences

- Gazit E, 2007. Plenty of Room for Biology at the Bottom: An Introduction to Bionanotechnology. 1 st Edition; Imperial College Press.
- Kamm et al., 2006. Biorefinery-Industrial Processes and Products Status Quo and Future Directions. Wiley-VCH