RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR SCREENING TEST FOR THE POST OF
BOTANIST (BOTANY)
(AYURVEDA DEPARTMENT)

1. Classification, Thallus organization, structure, reproduction and life cycle of important groups of algae (protochlotophyta, charophyta, xanthophyta, Bascillariophyta, Phaeophyta and Rhodophyta). Economic importance of algae.


3. Classification, morphology, structure, reproduction and life history of important groups (Marchantiales, Jungermaniales, Anthocerotales, Sphagnales, Funarials and Polytrichales). Economic and ecological importance of Bryophytes.


change. Biodiversity in ecosystem stability. Principles and strategies of conservation, National parks, sanctuaries and biosphere reserve.


13. Isolation, purification and quantification of nucleic acids and proteins. One and two dimensional gel electrophoresis. Isoelectric focussing. Methods of protein and DNA sequencing. PCR and RT-PCR. Detection of molecules using ELISA, RIA, Western blot, Immunoprecipitation. FISH and GISH. Principles and application of UV/visible spectrophotometer, NMR and ESR.

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**Pattern of Question Papers:**

1. Objective Type Paper
2. Maximum Marks : 100
3. Number of Questions : 100
4. Duration of Paper : Two Hours
5. All Questions carry equal marks
6. There will be Negative Marking

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