

**AURCET-2017 SYLLABUS  
COMMON TO ALL ENGINEERING AND PHARMACY SUBJECTS  
PART – I**

20 Multiple Questions Nos 1 to 20

**20 Marks**

***Research Preparation and Planning***

Objectives of research – Understanding research and its goals. Critical thinking. Techniques for generating research topics. Topic selection and justification. Techniques involved in designing a questionnaire - Methods of scientific enquiry – formulation of hypotheses and testing of the same - Development of a research proposal – Theoretical and Experimental Process.

***Research Resources***

Sources of information. Literature search. World Wide Web, Online data bases – search tools. Citation indices – Principles underlying impact factor – literature review – Case studies, review articles and Meta analysis – record of research review – Role of the librarian. Ethical and Moral Issues in Research, Plagiarism, tools to avoid plagiarism – intellectual Property Rights – Copy right laws – Patent rights.

***Academic Writing & Presentation***

Proposal submission for funding agencies, Elements of Style. Organization of proposals, Basic knowledge of funding agencies, Research report writing, Communication skills, Tailoring the presentation to the target audience – Oral presentations, Poster preparations, Submission of research articles for Publication to Reputed journals, Thesis writing, and Research report writing. Elements of excellent presentation: Preparation, Visual and Delivery. Oral Communication skills and Oral defence.

***Information and Communication Technology (ICT)***

ICT : meaning, advantages, disadvantages and uses; General abbreviations and terminology; Basics of internet and e-mailing.