

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

Time : 3 Hrs.

Pre- Ph.D Examination September-2016

[Max. Marks : 100]

Paper – I

Research Methodology & Biostatistics

QP Code – 1111

*Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.*

LONG ESSAY

10 X 10 = 100 Marks

1. Describe the procedure of performing electronic literature search (Pubmed, EMBASE, Indmed ,
Cochrane)
2. Write a brief note on Pilot study – conduct and utility.
3. Describe different types of sampling procedures.
4. Correlation and regression.
5. Describe the structure of scientific paper, abstract, title, introduction, methods, results, discussion
(IMARD) and conclusion.
6. Write brief note on: a) Plagiarism
b) Authorship guidelines.
7. Write brief note on : a) ANOVA
b) Post hoc test
8. Write brief note on: a) Blinding
b) Randomization
9. Write brief note on : a) Systematic review
b) Meta analysis
10. Discuss protocol writing.

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Allied Health Sciences

Paper – II

Area of Specialization

Q.P Code: 5302

*Your answers should be specific to the questions asked.**Draw neat labelled diagrams wherever necessary.***LONG ESSAY****10 X 10 = 100 Marks**

1. Define phytochemicals? Write about the factors that influence the formation of plant secondary metabolites?
2. Discuss about the applications of phytochemicals with reference to industry and healthcare?
3. Describe the principle and applications of HPTLC and HPLC in purification of phytochemicals.
4. What are the anticancerous properties of flavonoids and their mode of action on cell lines.
5. Elaborate the techniques used for purification and in vitro analysis of phytochemicals.
6. Explain the techniques used for extraction, separation and purification and in vitro analysis of phytochemicals.
7. Define phytochemicals. Explain in detail different types of phytochemicals.
8. Elaborate the shikimic acid pathway in the production of secondary metabolites.
9. Explain the molecular mechanism of flavonoids as anti diabetic agents.
10. Describe the principle and applications of UV-IR spectroscopy for structural elucidation of phytochemicals.

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