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 <u>Research Methodology & Biostatistics</u> OP Code – 1111

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

LONG ESSAY 10 X 10 = 100 Marks

- 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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Time: 3 Hrs. Pre. Ph.D. Examinations September-2016 [Max. Marks: 100]

Allied Health Sciences
Paper – II
Area of Specialization
O.P Code: 5302

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

 $\underline{LONG ESSAY}$ 10 X 10 = 100 Marks

- 1. Discuss the classification of hypertension in pregnancy with a brief note on the risk factors.
- 2. Discuss in detail the pathophysiology of preeclampsia.
- 3. Describe the signs, symptoms and complication of preeclampsia.
- 4. Describe the role of placental exosomes as a potential markers of abnormal placentation.
- 5. What are exosomes? Write their source and describe how they are isolated and purified.
- 6. What is DNA sequencing? Name the different methods of DNA sequencing with a note on sanger's technique.
- 7. Write the principle and applications of electrophoresis. Explain PAGE in detail.
- 8. Explain the principle and application of western blot technique.
- 9. Explain RFLP and write about its applications.
- 10. Give a detailed account of DNA extraction and purification.

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