

ಮಂಗಳೂರು
MANGALORE



ವಿಶ್ವವಿದ್ಯಾನಿಲಯ
UNIVERSITY

(Accredited by NAAC with 'A' Grade)

ಸಂಖ್ಯೆ/ No. : MU/ACC/CR.46/2014-15/A2

ಕುಲಸಚಿವರ ಕಛೇರಿ

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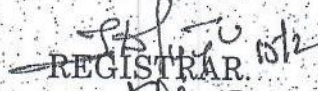
NOTIFICATION

Sub : Revised syllabus for Ph.D. Course work in Education

Ref: Academic Council decision No.: 3:22(2015-16), dated 25.01.2016.

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The revised Syllabus for Ph.D Coursework in Education which approved by the Academic Council at its meeting held on 25.01.2016 is hereby notified for implementation with effect from the academic year 2015-16.

  
REGISTRAR.

To:

- 1) The Chairmen of P.G. Departments/ Co-ordinators of P.G. Courses/ Principals of the Recognised Colleges/ Directors of Recognised Institutions of Mangalore University.
- 2) The Chairman, Board of Studies in subject concerned.
- 3) The Superintendent (ACC), O/o the Registrar, Mangalore University.
- 4) Guard File.

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MANGALORE UNIVERSITY

SCHEME OF EXAMINATION FOR Ph.D. COURSE WORK IN EDUCATION

| Papers  | Particulars          | Hours of Instruction per week | Duration of Exam (hrs) | Marks |        |       |         |
|---------|----------------------|-------------------------------|------------------------|-------|--------|-------|---------|
|         |                      |                               |                        | IA    | Theory | Total | Credits |
| Paper 1 | Research Methodology | 4                             | 3                      | 30    | 70     | 100   | 4       |
| Paper 2 | Review of Literature |                               |                        |       |        |       |         |
|         | Review Report        | 16                            | -                      | -     | -      | 150   | 8       |
|         | Viva                 | -                             | -                      | -     | -      | 50    | 2       |
|         |                      |                               |                        |       |        |       | 14      |

## Pre Ph.D. Course Work Syllabus in Education

### Paper I : Research Methodology

#### Objectives :

After going through the research student will be able to

- identify a good research problem.
- identify the related literature from different sources through different media.
- apply the appropriate sampling method based on the objectives of the study.
- frame correct hypotheses based on the objectives of the study.
- write a good research proposal.
- select an appropriate method and prepare a design to study the selected problem.
- construct appropriate tools and establish validity and reliability.
- apply suitable statistical techniques for the analysis of data and interpret the results.
- develop the skills of writing the research report and synopsis.

#### Unit 1 : Basics of Educational Research :

- 1.1 Research – meaning and characteristics ; types – qualitative and quantitative research ; Population and sample – concepts; methods of sampling, steps in the sampling process; essentials of good sampling; Probability/random sampling methods: meaning, procedure, merits ; Non-probability/non-random sampling methods – meaning, types, procedure, merits and demerits ; Criteria for Sampling – criteria of sample design; sampling and non-sampling errors, systematic and random errors, control of errors; appropriateness of sampling technique; advantages and defects in sampling.
- 1.2 Review of literature – purpose and need at different stages of research ; steps in identification of related literature, sources of information – primary and secondary ; organising related literature.
- 1.3 Research problem – sources and factors in problem identification and selection, criteria of good research problems, evaluation of a research problem ; Research variables – meaning, types: independent, dependent, moderator, controller, intervening; selection criteria; operational definitions of variables: meaning, need and illustrations; methods of controlling variables.
- 1.4 Research hypothesis – meaning, characteristics, sources and importance; different forms of hypotheses; Research Proposal – Meaning, Characteristics and format ; Method of writing the research proposal; characteristics and steps of a good research design.

#### Unit 2 : Methods of Educational Research :

- 2.1 Historical Method – Nature, Values, Types – Bibliographic, Legal, Studying history of ideas, institution and organisation, Steps, Sources of data – primary and secondary, utility in education.
- 2.2 Descriptive method – nature, values, types – Survey studies, Interrelationship studies, Developmental studies, steps in descriptive research, utility in education.

- 2.3 Experimental method – nature and value; characteristics: control, manipulation, observation, replication; methods of control and manipulation; source of invalidation of experiments; steps in experimental research; types of experimental designs: post test only, equivalent group design, pretest-posttest equivalent-groups design, Solomon four-group design, Factorial design with two factors.
- 2.4 Qualitative Research – Characteristics, structure and steps in the qualitative research process ; methods of qualitative research - Case Study and Grounded Theory, Methods of Data Collection and analysis.

### **Unit 3 : Educational Research Tools :**

- 3.1 Scales of measurement – nominal scale, ordinal scale, interval scale and ratio scale: meaning, properties and use.
- 3.2 Tools of research – Observation Schedule – Questionnaire, Interview - Meaning, Characteristics, Types, Procedure of Construction, Merits and Demerits
- 3.3 Appraisal tests – Check list, Rating scale, Attitude scale – Meaning, Characteristics, Illustrations, Procedure of Construction, Advantages and Limitations. Achievement tests: Meaning, Definitions, Importance, Procedure of Construction.
- 3.4 Establishing validity and reliability – Item analysis ; Validity : Nature ; Methods of estimating validity : Content, Construct, Predictive, Concurrent ; Factors influencing Validity ; Internal Vs External Validity ; Measure to increase the validity of research findings; Reliability – Nature, Methods of estimating reliability : Test-Retest, Split half, Equivalent forms, Kuder-Richardson, Factors influencing reliability.

### **Unit 4 : Statistical Analysis of data and report writing :**

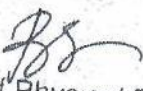
- 4.1 Descriptive statistics : Measures of central tendency, measures of dispersion, measures of relationships, measures of relative positions, standard scores, Z and T scores – meaning, characteristics and computation; graphical representation of data.
- 4.2 Normal/non-normal distribution – concept, NPC characteristics and applications (computation)
- 4.3 Inferential statistics : procedure of testing the hypothesis, Type I and Type II error, one tail, two tail tests, regression and predication – meaning and analysis.
  - a) Parametric test : 't' test, ANOVA – one way – meaning, assumptions, computation and application.
  - b) Non Parametric test : chi square test – meaning, assumption and computation.
- 4.4 Report writing – significance, Synopsis, style of writing report – language, presentation of tables, figures, quotation and bibliography and criteria and evaluating research report.

# BOOKS FOR STUDY AND REFERENCE

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