MAHARSHI DAYANAND UNIVERSITY ROHTAK
(A State University established under Haryana Act No.XXV of 1975)
'A' Grade University Accredited by NAAC

M.PHIL (EDUCATION) w.e.f. 2016-17

Program Specific outcomes:
The students would be able to

PSO1   Familiarize with different types and methods of educational research, identifying the research problems, various sources of review of related literature, hypothesis, tools, techniques of collection of data, samples, population, types of sampling, writing of research report and evaluation of research report.

PSO2   Understand the general formalism of different types of data, Statistical Measures of central tendency dispersion and relative positions.

PSO3   Understand practical orientation involving selection of appropriate data analysis techniques. Also Understanding Uses of Non-Parametric test, Parametric test, normal probability curve and Factor Analysis.

PSO4   Understand fundamentals of computer, Net working, Internet, application software, multimedia, E-Book, Virtual library and concept of plagiarism. Also provide a deep Understanding of educational technology, communication & Teaching, models of teaching, programmed Instruction and different styles of programming.

PSO5   Get deep knowledge about teacher education, role of NCERT and NCTE, in-service teacher training programme and contribution of various agencies.

Programme Structure
The M. Phil. course shall comprise of two Semesters in which there shall be three compulsory theory papers in both the 1st and 2nd Semesters along with dissertation.

M. Phil (Education) 1st Semester (Scheme of Examinations)

Sr. No.	Paper Code	Nomenclature of the Paper	Theory	Internal Assessment	Max Marks	Time	Credit
1	17EDMP11C1	Paper-1 Research Methodology	80	20	100	3 Hrs	4
2	17EDMP11C2	Paper-II Statistics in Education	80	20	100	3 Hrs	4
3	17EDMP11C3	Paper-III Computer Applications	80	20	100	3 Hrs	4

Sr. No.								
		Submission of Synopsis						

Mphil (Education)2nd Semester (Scheme of Examinations)

Sr. No.		Nomenclature of the Paper	Theory	Internal Assessment	Max Marks	Time	Credit
4	17EDMP12C1	Paper- IV Information, Communication And Educational Technology	80	20	100	3 Hrs	4
5	17EDMP12C2	Paper- V Teacher Education	80	20	100	3 Hrs	4
6	17EDMP12C3	Dissertation	150 (Evaluation)	50 (Viva-Voce)	200		8

Grand Total= 700

INTERNAL ASSESSMENT

There shall be an internal assessment of 20 marks in each theory paper. Internal assessment in each paper will be based on two assignments and one seminar presented by each candidate and their participation. 65 percent attendance is compulsory.

DISSERTATION

Maximum Marks 200 (150 for evaluation of dissertation and 50 for Viva-voce.) The student will have to submit a dissertation in partial fulfilment of the degree. The topics for dissertation shall be approved by the Departmental Committee for which the students will have to submit a research proposal in the 1st Semester and make a power point presentation of the proposal.

The student will be required to write a dissertation on a selected topic in the second semester. The dissertation may include the results of original research empirical or documentary or a fresh interpretation of existing knowledge of data and such other forms as may be determined by the Departmental Committee. The student will also be required to submit an abstract of his/her research work in about 300 words along with the dissertation.

Plagiarism verification certificate issued by Central Library of MD University is essential at the time of submission of Dissertation.

VIVA-VOCE

The scholar will undergo a viva-voce examination on his/her dissertation. This will be conducted by the external examiner, Head of the Department and the Research Supervisor.

Syllabus of M. Phil. Education (First Semester) 2016-17
Paper Code (17EDMP11C1)

Time: 3 Hours   Max. Marks: 100
Credit: 4   Theory:80
                                              Internal Assessment: 20

Course Outcomes:

The students would be able to

CO1   Understand the concept of research, educational research and emerging trends in Educational Research. Define meaning, nature, scope, and purposes of Educational Research. Also Understand the Use of different tools and techniques in educational research

CO2   Understand the types and methods of educational research, Illustrate meaning, criteria and sources for identifying the research problems. Describe the writing of research report and evaluation of research report

CO3   Describe the importance and various sources of review of related literature and hypothesis; explain the types, tools and techniques of collection of data; Define concept of samples and population and steps and types of sampling

CO4   Use the library, Internet services and other sources of knowledge for educational research Purposes.
.

Note: Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.

- Q. No. 1 will be compulsory and will carry 16 marks. It will comprise of 4 short answer type notes of 4marks each to be selected from the entire syllabus.
- Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long answer questions will carry 16 marks each.

COURSE CONTENTS

Unit-1 Formulation of Research Problem
- Sources of identifying the problem
- Review of Related Literature : purpose and significance for a researcher
- Hypothesis – Importance, Characteristics and Formulation of Hypothesis, Forms of Hypotheses
- Hypotheses in various types of Research

Methods of Educational Research and where to Use these
- Philosophical Research
- Historical Research
- Descriptive Research
- Experimental Research

Unit-2 Nature and Scope of Educational Research

- Sources of Knowledge and Research
- Scientific Inquiry and Theory Development
- Nature and types of Educational Research
- Scope of Educational Research

Sampling

- The concept of Population
- Characteristics of a good Sample
- Methods of Sampling
- Choice of Sampling Method

Unit-3 Data Collection

- Characteristics of a Good Research Tool – Validity, Reliability, Usability
- Types of Tools and Techniques and their Uses:-
    i. Questionnaire
    ii. Interview
    iii. Rating Scale
    iv. Attitude Scale
    v. Tests- Intelligence, Aptitude, Creativity, Achievement
    vi. Projective Techniques
    vii. Observation
    viii. Socio-metric Techniques
    ix. Non-Projective Techniques

Unit-4

Qualitative Research

- Meaning, Characteristics and Themes of Qualitative Research
- Qualitative Research Strategies: Document or Content Analysis, Case Study, Ethnographic Studies
- Data Collection Techniques
- Data Analysis in Qualitative Research

Developing a research proposal
Reporting Research

- The Beginning

- The Main Body

- The End

- How to Evaluate a Research Report?

Selected Readings

- Ary. D., Lucy C. Jaeobs and A, Razavich (1972) Introduction to Research in Education, New York: Holt, Rinehart and Winston Inc

- Best, John W and Kahn, James V (2001), Research in Education, New Delhi: Prentice Hall of India.

- Buch, M.B (1991) Surveys Research in Education, New Delhi, NCERT

- Coffey, A and At Kinson, P (1996), Making Sense of Qualitative Research: Complementary Research Strategies, Thousand Oaks, CA: Sage

- Desai H.G. (1979) Style manual for dissertation thesis, Rajkot Saurashtar University.

- Denzin, N.K. and Lincoln, Y.S. (1994) Introduction: Entering the Field of Qualitative Research in N.K. Denzin and Y.S. Lincoln (Eds), Handbook of Qualitative Research Thousand Oaks, CA: Sage, 1-17

- Edward, A.L (1957) Techniques of Attitude Scale Construction, New York: Appleton Century Crofts Inc

- Festinger, U & Katz, Research Method in Behavioural Science, New York Bold Dryen

- Finchjanel (1986) Research and Policy the Use of qualitative methods in Social Education Research Falmer Press

- Fox, David J (1969) The Research Process in Education, New York: Holt, Rinchart and Winston Inc

- Good, Center V (1966) Essentials of Educational Research: Methodology and Design, New York: Applenton Century Crafts Inc

- Kerlinger, Fred N (1978) Foundation of Behavioural Research, New Delhi: Surneet Publication

- Koul, Lokesh (2007) Methodology of Educational Research, Vikas Publishing HoUse Pvt Ltd., Third Revised Edition

- Turabian, K. L (1973), A Manual for Writers of Term Papers, Theses and Dissertation, Chicago, University of Chicago Press.

PAPER-II: STATISTICS IN EDUCATION

Time: 3 Hours   Max. Marks: 100
Credit: 4   Theory:80
                                                     Internal Assessment: 20

Course Outcomes:

The students would be able to

CO1   Differentiate different types of data i.e. Quantitative data & Qualitative data, types of Statistical Measures and practical orientation involving selection of appropriate data analysis techniques.

CO2   Explain and illustrate the concept & application of measures of central tendency dispersion and relative positions, computation & Uses of Non-Parametric test i.e. Chi-square Test & Sign Test and Parametric test i.e. Z-Test & T-Test.

CO3   Illustrate the meaning & significance of normal probability curve.

CO4   Explain the concept of Factor Analysis.

Note: Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.

- Q. No. 1 will be compulsory and will carry 16 marks. It will comprise of 4 short answer type notes of 4 marks each to be selected from the entire syllabus.
- Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long answer questions will carry 16 marks each.

COURSE CONTENTS

Unit-I: Analysis of Data

- Types of Data
- Quantitative Data
   i) Tabulation of Quantitative Data
   ii) Analysis of Quantitative Data
      ➢ Graphical Representation
      ➢ Measures of Central Tendency
      ➢ Measures of Variability
      ➢ Measures of Relationship
   iii) Qualitative Data
      ➢ Analysis of Qualitative Data
      ➢ Criticism of Historical Data
      ➢ Content Analysis
      ➢ Inductive Analysis

Unit-2: Statistical Testing of Hypothesis-I

- Classification of Statistical Test: Parametric and Non-Parametric Tests
    - i) Parametric Test
        - ➢ Sampling Distribution of Means
            - a) Large Samples
            - b) Confidence Interval
            - c) Levels of Significance
            - d) Small Samples
            - e) Degree of Freedom

    - ii) Application of Parametric Test
        - a) Application of Z-Test
        - b) Application of T-Test

Unit-3: Statistical Testing of Hypothesis-II

- Application of F-test (One Way and Two Way ANOVA)
- Non-Parametric Tests and Application of Chi-Square Test
- Non-Parametric Tests
  a) When to Use Parametric and Non-Parametric Tests b)Chi-square
    - -Use of Chi-square as a Test of 'Goodness of Fit'
    - -Use of Chi-square
  c) Contingency Coefficient
  d) Sign Test
  e) Median Test

Unit-4:
- The Normal Curve and its Application
- Analysis of Covariance (One Way ANCOVA) Concept, Assumption and Uses
- Factor Analysis: Extraction of Centroid Factors and Orthogonal Rotation

Selected Readings

- Edwards, A.L.(1967) Statistical Methods for the Behavioural Sciences, New York: Holt, Rinehart and Winston

- Garrett, H.E (1979): Statistics in Psychology and Education, 9th Indian Reprint Bond bay, Vakils, Feffer and Simon.

- Guilford, J.P (1973) Fundamental Statistics in Psychology and Education, New York, McGraw Hill Book Company.

- Lindquist, E.F (1970) Statistical Analysis in Educational Research, New Delhi, Oxford and IBH

- Siegel, Sidney (1956), Non-Parametric Statistics for the Behavioural Sciences, International Student Edition, New York, McGraw Hill.

- Walker, H.M and J. Lev (1965) Statistical Inference, Calcutta, Oxford and IBH Publishing HoUse.

Syllabus of M. Phil. Education (First Semester)
Paper Code (17EDMP11C3)

PAPER-III: COMPUTER APPLICATIONS

Time: 3 Hours   Max. Marks: 100
Credit: 4   Theory:80
                                                              Internal Assessment: 20

Course Outcomes:

The students would be able to

CO1   Aware about fundamentals of computer hardware and software, Understand the basics & types of computer.

CO2   Understand and able to Use of different types of application software i.e. MS-word, MS-Excel etc.

CO3   Understand the meaning, Scope, tools and Use of multimedia.

CO4   Develop Understanding about Net working, Internet, E-Book and Virtual library.

CO5   Analyze the concept of plagiarism.

> *Note:* Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.

- Q. No. 1 will be compulsory and will carry 16 marks. It will comprise of 4 short answer type notes of 4 marks each to be selected from the entire syllabus.
- Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long answer questions will carry 16 marks each.

COURSE CONTENTS

Unit-I: Computer Basics
- History of Computers: Types of Computer, Flow Diagram of Computer and its components
- Operating system: Meaning, Need Types and Functions
- Artificial Intelligence and Education.

Unit-II: Net working and Internet
- Computer Networking and Education, Internet, Internet tools, E-mail, Evaluating Internet Resources
- Browser (Basics)
- Visiting Web sites

Unit-III: Application Oriented Information

- MS- Word-Introduction of word processor, creating & saving documents.
- MS-Excel-Introduction to excel, need of spreadsheet, creating, opening &

saving workbook, editing worksheet, using links, applying different views, Types of functions.
- MS-Power Point – Introduction of slides, speaker notes, media clips, graphs, Picture, web pages, adding different kind of slides, working with Power Point, inserting text objects, formatting Text.

Unit-IV: Educational Multimedia

- Multimedia-Meaning, Scope, Tools and Use of Multimedia in Education
- E-books and virtual library
- What is Plagiarism and how to avoid it?

Selected Readings

- Cox, J. And Urban, P. "Quick Course in Microsoft Office. Galgotia Publications, New Delhi, 1990.

- Jain, Satish: "Introduction to Computer Science and basic Programming." BPB Publications, New Delhi, 1990.

- Rajaraman, V., "Fundamental of Computers", Prentice Hall of India, New Delhi, 1996.

- Saxena, S., "A First Coursein Computers", Vikas Publishing HoUse Pvt. Ltd., New Delhi, 1998.

- Sinha, P.K. "Computer Fundamentals: BPB Publications, New Delhi, 1990. Taneenbaum, A.S. "Computer Networks", Prentice Hall of India, New Delhi, 1998.

Syllabus of M.Phil. Education (Second Semester)

PAPER-IV: INFORMATION, COMMUNICATIONAND EDUCATIONAL TECHNOLOGY
Paper Code (17EDMP12C1)

Time: 3 Hours   Max. Marks: 100
Credit: 4   Theory:80
                                                  Internal Assessment: 20

Course Outcomes:

The students would be able to

CO1   Students are acquaint with the basics of computer system and their functions

CO2   Explain the meaning, types and need of educational technology, concept of communication & Teaching, different approaches and models of teaching.

CO3   Explain the modalities of teaching.

CO4   Describe origin, principles and characteristics of programmed Instruction and different styles of programming.

Note: Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.

- Q. No. 1 will be compulsory and will carry 16 marks. It will comprise of 4 short answer type notes of 4 marks each to be selected from the entire syllabus.
- Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long answer questions will carry 16 marks each.

COURSE CONTENTS

Unit –I Concept of Educational Technology and ICT

- Meaning, Concept, Origin, Types, Need and Importance of Educational Technology
- Meaning, Concept, Origin, Need and Importance of ICT in Education

Unit-II
- **Communication & Teaching**
  - Components of Communication Process
  - Barriers of Communication, Principles of Effective Communication, Different Communication Channels
- **Modalities of Teaching**
  - Teaching as different from: Indoctrination, Instruction, Conditioning and Training
  - Organizing Teaching and Learning at different levels: Memory, Understanding and Reflective
  - Constructivist approach
  - Jurisprudence approach

Unit-III
- Programmed Instruction: Origin, Principles and Characteristics
  i) Styles of Programming:
    - Linear,
    - Branching
    - Mathetics, Computers Assisted Instruction (CAI)
  ii) Development of Programmed Instructional Material
  iii) Web based Learning
  iv) Mobile Learning
  v) U-Learning

Unit-IV

- **Models of Teaching**

  i) Models of Teaching (Information Processing, Personal, Social and Behavioural Models)

    a) Inquiry Training Model
    b) Ausubel's Model
    c) Non-directive Teaching Model
    d) Mastery Learning Model
    e) Role Playing

ii)   E-Learning Concept, Features, Advantages, Disadvantages
iii)   E-Resources
iv)   Importance of E-Leaning in Teaching Education
v)   MOOCS

Selected Readings

- Dececco, J.P. (1988). The Psychology of Learning and Instruction, New Delhi, Prentice Hall.

- Joyce, B and Weil, M (1972). Models of Teaching. Englewood Cliffs, New Jersey: Prentice Hall.
- Kulkarni, S.S (1986). Introduction to Educational Technology, New Delhi: Oxford & IBH Publishing Company.
- Kumar, K.L. (1996). Educational Technology, New Delhi: New Age International Publishers.
- Locatis, C.N. and Atkinson, F.D. (1984). Media and Technology for Education and Training" London: Charles E. Publishing Co.
- Mavi, N.S. (1984) Programmed Learning: An Empirical Approach, Kurukshetra, Vishal Publishers.
- Pandey, K.P. (1980). A First Course in Instructional Technology, Delhi: Amitash Parkashan.
- Pandey, S.K. (1997). Teaching Communication, New Delhi: Commonwealth Publishers.
- Sharma, H.L. (2014). Innovative Inputs in ICT, Amit Prakashan, Jalandhar.

- Skinner, B.F. (1968) "The Technology of Teaching", New York; Appleton Century Crofts.

Syllabus of M. Phil Education (Second Semester)
Paper Code (17EDMP12C2)

PAPER - V: TEACHER EDUCATION

Time: 3 Hours   Max. Marks: 100
Credit: 4   Theory:80
                                   Internal Assessment: 20

Course Outcomes:

The students would be able to

CO1   Describe the need, concept, aim and scope of teacher education and historical development

CO2   Understand the role of NCERT and NCTE in teacher education.

CO3   Understand the agencies of in-service teacher training programme and design in-service teacher professional development program/activities based on the needs of teachers.

CO4   Understand research in various areas of teacher education and the problems faced in the areas of teacher education.

CO5   Critically examine the role and contribution of various agencies and regulating bodies in enhancing the quality of teacher education.

Note: Paper setters will set 9 questions in all, out of which students will be required to attempt 5 questions.
- Q. No. 1 will be compulsory and will carry 16 marks. It will comprise of 4 short answer type notes of 4 marks each to be selected from the entire syllabus.
- Two long answer type questions will be set from each of the four units, out of which the students will be required to attempt one question from each unit. Long answer questions will carry 16 marks each.

COURSE CONTENTS

Unit –I

- Teacher Education: Concept, Historical Perspectives, Recommendations of Various Committees and Commissions on Teacher Education with special emphasis on Kothari Commission and NPE 1986 and 1992 , NCFTE 2009
- Role of NCERT and NCTE in Teacher Education
- Aims and Objectives of Teacher Education at : Elementary level, Secondary level, College level

Unit-II

- Teaching As a Profession: Faculty Improvement Programmes, Performance Appraisal of Teachers
- Internship in Teacher Education
- Pre-service and In-service Teacher Education

Unit-III

- Distance Education and Teacher Education: Orientation and Refresher Courses
- Modern System of Teacher Education: Evaluation of the Effectiveness of Teacher Education Programmes
- Various Agencies of Teacher Education: Preparing Teachers for Special Schools

Unit-IV

- Instructional Strategies in Teacher Education:
  - Lecture strategy
  - Discussion
  - Seminar
  - Symposium
  - Brain Storming
  - Supervised Study
  - Individualized Study
  - Action Research
- Areas of Research in Teacher Education with special emphasis on:
  - Teacher Effectiveness

- Criteria of Admission
- Modification of Teacher Behaviour
- School Effectiveness

Selected Readings

- CABE, 1992, Report of the CABE Committee on Policy Perspective Govt. of India, MHRD, New Delhi.
- Deghton, Lee C. The Encyclopaedia of Education Vol. I & II, Mac Millan & Co. & Free Press, New York.
- Delors, J. (1996). Learning: The Treasure Within. UNESCO Publishing.
- Dunkin, J. Micheal (1987) The International Encyclopaedia of Teaching and Teacher Education, Pergamon Press, New York.
- HUsen, Torsten & Postlethwaite (Eds.) (1994), The International Encyclopaedia of Education Pergamon Press New York.
- Mangla, Sheela (2000). Teacher Education: Trends & Strategies, Radha Publishing, New Delhi.
- Ministry of Education 1964-66, Education and National Development Report of Indian Education Commission, Govt. of India, New Delhi
- NCTE (1988) Curriculum Framework for Quality Teacher Education, NCTE, Publications, New Delhi
- Oberoi, M.K. (1995), Professional Competencies in Higher Education, UGC Publications, New Delhi
- Sukula, J. (Ed.) (1985) Handbook of Research on Teacher Education, New York Mac Millan Publishing.
- MHRD (1990) Towards an Enlightened and Human Society; (Rama Murti Committee Report), Department of Education, Govt. of India, New Delhi.

Paper- Dissertation
Paper Code (17EDMP12C3)

Time: -----   Max. Marks: 200
Credit: 8   Theory:150
                                               Internal Assessment: 50

Course Outcomes:

The students would be able to

CO1   Understand deep Understanding of research.

CO2   Orient with the effective Use of psychological tool and test

CO3   Develop the better Understanding the sampling and data analysis.

CO4   Understand the applicability of research in daily life.

CO5   Write synopsis, research report and thesis.

DISSERTATION

Maximum Marks 200 (150 for evaluation of dissertation and 50 for Viva-voce.) The student will have to submit a dissertation in partial fulfilment of the degree. The topics for dissertation shall be approved by the Departmental Committee for which the students will have to submit a research proposal in the 1st Semester and make a power point presentation of the proposal.

The student will be required to write a dissertation on a selected topic in the second semester. The dissertation may include the results of original research empirical or documentary or a fresh interpretation of existing knowledge of data and such other forms as may be determined by the Departmental Committee. The student will also be required to submit an abstract of his/her research work in about 300 words along with the dissertation.

Plagiarism verification certificate issued by Central Library of MD University is essential at the time of submission of Dissertation.

VIVA-VOCE

The scholar will undergo a viva-voce examination on his/her dissertation. This will be conducted by the external examiner, Head of the Department and the Research Supervisor.