#### **MARCH 2006**

[KO 801]

Sub. Code: 9101

M.O.T. DEGREE EXAMINATIONS.

(Common to all Branches)

Part I

Paper I - RESEARCH METHODOLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary

I. Essay:

 $(2 \times 15 = 30)$ 

- Effect of vestibular stimulations are to be studied on children with hyper activity and attention deficit disorder. Design and describe the research study.
- Inter rater reliability of one instrument is to be studies on C.P children to assess speed and dexterity. Discuss the research design.

II. Write short notes:

 $(10 \times 5 = 50)$ 

- (a) Define and explain 'mean'
- (b) Measures of dispersion
- (c) Median
- (d) Graphs
- (e) Hypothesis
- (f) Positive correlation
- (g) 't' test
- (h) Inter-rater reliability
- (i) Sampling technique
- (j) Population.

2

#### **FEBRUARY 2007**

[KQ 801]

Sub. Code: 9101

(a) Threats to Validity

П.

 $(6 \times 5 = 30)$ 

#### M.O.T. DEGREE EXAMINATION.

(Common to all Branches)

#### Part I

Paper I — RESEARCH METHODOLOGY

Time: Three hours Maximum: 100 marks

Theory: Two hours and Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

- I. Essay questions :
- Describe how to formulate an assessment tool to measure ADL and how to critique assessment tools.
- (2) Outline and discuss the six major steps in the hypothesis-testing. (15)
- (3) Discuss the research design and describe the research study for finding the effect of muscle tone on balance in children with cerebral palsy. (15)

(b) Delphi Technique

Short notes:

- (c) Measures of Variability
- (d) Wilcoxson signed rank test
- (e) Blind procedures
- (f) Hawthorne effect.

#### SEPTEMBER 2007

## [KR 801]

**Sub. Code: 9101** 

#### M.O.T DEGREE EXAMINATION.

(Common to all Branches)

#### Part I

#### Paper I — RESEARCH METHODOLOGY

Time: Three hours

Maximum: 100 marks

Theory: Two hours and

Theory: 80 marks

forty minutes

M.C.Q.: Twenty minutes

M.C.Q.: 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

# I. Essay questions:

- (1) Describe the steps involved in designing an evaluation instrument for prevocational assessment.(20)
- (2) Discuss how you would critique a quantitative study in Occupational Therapy. (15)
- (3) Discuss the process of establishing normative data for an Indian population for a standardized Hand function test. (15)

#### II. Short notes:

 $(6 \times 5 = 30)$ 

- (a) Validity and types of validity.
- (b) Case-Control study.
- (c) Methods of sampling.
- (d) Hypothesis testing.
- (e) Correlation.
- (f) Normal distribution.

#### **MARCH 2008**

[KS 801]

Sub. Code: 9101

M.O.T. DEGREE EXAMINATION.

(Common to all Branches)

Part I

Paper I - RESEARCH METHODOLOGY

Q.P.Code: 419101

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions:

 $(2 \times 20 = 40)$ 

- 1. Define Research Design. Write in detail about the various types of Research Designs. (20)
- 2. Define data collection. Enlist various techniques of data collection in detail. (20)
- II. Short notes:

 $(10 \times 6 = 60)$ 

- 1. Split half method.
- 2. Median and Mode.
- 3. Review of literature.

- 4. Hawthorne effect.
- 5. Visual Analogue Scale.
- 6. Content validity.
- 7. Double blind method.
- 8. Cohort study.
- 9. Sensitivity and specificity.
- 10. Chi-square test.

#### **SEPTEMBER 2008**

[KT 801]

Sub. Code: 9101

M.O.T. DEGREE EXAMINATION.

(Common to all Branches)

Part I

Paper I — RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions:

 $(2 \times 20 = 40)$ 

- 1. What are the essential steps in conducting a randomized controlled trial? Discuss the difficulties you would encounter in designing a randomized control trial to find the effectiveness of a treatment technique in occupational therapy for patients with cerebro vascular accident. (20)
- 2. How will you use the Delphi technique to develop a questionnaire for assessing life satisfaction in patients with spinal cord injury who have been rehabilitated in the community? (20)

II. Short notes:

 $(10\times 6=60)$ 

- 1. Survey research.
- 2. Scales of measurement.
- 3. Reliability.
- 4. Null hypothesis.
- 5. Type I, Type II error.
- 6. Delphi technique.
- 7. Population.
- 8. 't' test.
- 9. Graphs.
- 10. Inter-rates reliability.

#### March 2009

[KU 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

(Common to all Branches)

#### Part I

#### Paper I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three hours Maximum: 100 marks

## **Answer All questions**

#### Draw suitable diagrams where ever necessary

## I. Essay Questions:

 $(2 \times 20 = 40)$ 

- 1. Explain briefly the different steps involved in research process.
- 2. Discuss the research design and explain the research study for finding the effect of muscle tone on balance among children with spinal muscular atrophy.

#### **II. Write Short Notes:**

 $(10 \times 6 = 60)$ 

- 1. Dependent and independent variable.
- 2. Double blind method.
- 3. Hawthorne effect.
- 4. Chi-square test.
- 5. Median and mode.
- 6. Cohort study.
- 7. Regression.
- 8. Probability.
- 9. Mortality rates.
- 10. Projective technique.

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# September 2009

[KV 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

(Common to all Branches)

#### Part I

#### **Paper I – RESEARCH METHODOLOGY**

Q.P. Code: 419101

Time: Three hours Maximum: 100 marks

# **Answer All questions**

# Draw suitable diagrams where ever necessary

#### I. Essay Questions:

 $(2 \times 20 = 40)$ 

- 1. Define sample and sampling. Enumerate various types of sampling techniques in detail.
- 2. Effect of vestibular stimulation to be studied on children with autism. Develop the design and describe the research study.

#### **II. Write Short Notes:**

 $(10 \times 6 = 60)$ 

- 1. Qualitative and Quantitative data.
- 2. Pilot study.
- 3. Diagrams.
- 4. Standard deviation.
- 5. Population.
- 6. Inter rater reliability.
- 7. Type I, Type II error.
- 8. Delphi technique.
- 9. Level of significance.
- 10. Median.

\*\*\*\*

#### March 2010

[KW 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

(Common to all Branches)

#### Part I

#### Paper I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three hours Maximum: 100 marks

#### **Answer All questions**

#### Draw suitable diagrams where ever necessary

#### I. Essay Questions:

 $(2 \times 20 = 40)$ 

- 1. Define research design. Briefly explain about the various types of research designs and the factors influencing the research design.
- 2. Define review of literature.

  Discuss its purposes, uses and methods of writing a literature review.

#### **II. Write Short Notes:**

 $(10 \times 6 = 60)$ 

- 1. Population and sample.
- 2. 't' test paired and independent.
- 3. Measures of central tendency.
- 4. Types of correlation.
- 5. Normal distribution.
- 6. Graphs.
- 7. Co-variation.
- 8. Correlation.
- 9. Double blind method.
- 10. Chi-square test.

\*\*\*\*

# September 2010

[KX 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

# (Common to all Branches)

#### FIRST YEAR

#### Part I

# Paper I – RESEARCH METHODOLOGY

O.P. Code: 419101

Time: Three hours Maximum: 100 marks

#### **Answer All questions**

#### Draw suitable diagrams where ever necessary

# I. Essay Questions:

 $(2 \times 20 = 40)$ 

- 1. Describe Norm Referenced and Criterion referenced tests. Briefly differentiate the features of these tests.
- 2. Inter rates reliability of one instrument meant to assess the cognitive function among school going children. Discuss the research design to be used.

#### **II. Write Short Notes:**

 $(10 \times 6 = 60)$ 

- 1. Cohort study.
- 2. Type I and Type II error.
- 3. Types of validity.
- 4. Steps in Hypothesis testing.
- 5. Frequency distribution.
- 6. Review of literature.
- 7. Reliability.
- 8. Qualitative and quantitative data.
- 9. Stratified sampling.
- 10. Measures of dispersion.

#### **APRIL 2011**

[KY 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

# (Common to all Branches) FIRST YEAR

#### Part I

#### PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three hours Maximum: 100 marks

**Answer All questions** 

Draw suitable diagrams where ever necessary

I. Essay Questions:  $(2 \times 20 = 40)$ 

- 1. Briefly explain about different phases in tool construction and elaborate handwriting tool construction procedure for Tamil Nadu population.
- 2. Briefly explain about Difference between Parametric and Non- Parametric test. Briefly explain about research process method.

#### **II. Write Short Notes:**

 $(10 \times 6 = 60)$ 

- 1.Concurrent validity.
- 2. Split-half reliability.
- 3. Factors influencing internal validity.
- 4. Cross over research design.
- 5. Random sampling procedure.
- 6. Non-Probability sampling.
- 7. Hypothesis testing.
- 8. Mean deviation.
- 9. Types of qualitative research.
- 10. Quasi experimental design.

#### October 2011

[KZ 801] Sub. Code: 9101

#### M.O.T. DEGREE EXAMINATION

(Common to all Branches)

# FIRST YEAR PART I

# PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: 3 hours Maximum: 100 marks (180 Min)

Answer ALL questions in the same order.

I. Elaborate on :	Pages (Max.)		rks ax.)
<ol> <li>Explain how will you conduct a survey in Tamil Nadu to find out what percentage of children going to mainstream schools have learning disability.</li> </ol>	17	40 min.	20
2. Explain in detail various types of scoring.	17	40 min.	20
II. Write notes on :			
1. Factorial design.	4	10 min.	6
2. Regression analysis.	4	10 min.	6
3. List of six considerations for sample size determination.	4	10 min.	6
4. Chi – square Test.	4	10 min.	6
5. Research Proposal.	4	10 min.	6
6. Discuss if Hand Dynamometer is a reliable tool to measure grip strength in Hemiplegics.	4	10 min.	6
7. Bibliography writing as per American Psychiatry Association style.	4	10 min.	6
8 .Give two examples of point scales used in Occupational Therapy and explain its disadvantages.	4	10 min.	6
9. Explain the types of measurement scales.	4	10 min.	6
10. Pilot study.	4	10 min.	6

[LA 801]

# MAY 2012 Sub. Code: 9101 M.O.T. DEGREE EXAMINATION (Common to all Branches)

# mmon to all Branches) FIRST YEAR PART I

# PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: 3 hours (180 Min)	Maxin	Maximum: 100 marks					
Answer ALL questions in the same order.							
I. Elaborate on:	Pages (Max.)	Time (Max.)	Marks (Max.)				
1. What is methodological research? Briefly explain about procedures involved in different phases of construction of visual perception assessment tool for paediatric population.	nt 17	40	20				
2. Briefly explain about Difference between descriptive statistics and inferential statistics Describe the steps involved in testing for statistical difference between sample mean and parameter mean with example.	. 17	40	20				
II. Write notes on:							
1. Delphi technique.	4	10	6				
2. External validity.	4	10	6				
3. Extraneous variable.	4	10	6				
4. Honeymoon effect.	4	10	6				
5. Criterion related validity.	4	10	6				
6. Types of research design.	4	10	6				
7. What is measurement scale and explain about it	nterval						
scale with example.	4	10	6				
8. Inter observer reliability.	4	10	6				
9. Multi –phase sampling.	4	10	6				
10. Measures of dispersion.	4	10	6				

[LB 801]

# OCTOBER 2012 M.O.T. DEGREE EXAMS (Common to all Branches)

# FIRST YEAR PAPER I – RESEARCH METHODOLOGY

**Sub. Code: 9101** 

Q.P. Code: 419101

Time: 3 hours	Maximum: 100 marks
(180 Min)	

Answer ALL questions in the same order.				
I. Elaborate on :	<b>Pages</b>	Time	Marks	
	(Max.)	(Max.)	(Max.)	
1. Explain with an example the application and propert	ies			

	of nor	nal d	listribu	ition cur	ve. Dif	ferent	iate skewnes	s 17	40	20
			s and i	its signifi	icance	in inte	erpreting the			
	results	•								
_	D ('	<b>a</b>		•	C					

2.	Define Sampling and types of sampling designs.			
	What are the advantages of sampling? Explain the	17	40	20
	different methods of random sampling.			

#### II. Write notes on:

1.	Assumptions of application of two independent			
	sample 't' test.	4	10	6
2.	Sensitivity of an instrument.	4	10	6
3.	Threats to internal validity.	4	10	6
4.	Indication of use of directional and non-directional			
	hypothesis.	4	10	6
5.	Confidence interval.	4	10	6
6.	Types of reliability.	4	10	6
7.	Compare and contrast experimental and			
	quasi-experimental research designs.	4	10	6
8.	Characteristic of qualitative research.	4	10	6
9.	Internal consistency.	4	10	6
10.	Levels of measurement.	4	10	6

## [LC 801]

#### **APRIL 2013**

# M.O.T. DEGREE EXAMINATION

## (Common to all Branches) FIRST YEAR

#### PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: 3 hours Maximum: 100 marks

I. Elaborate on: (2x20=40)

- 1. Explain how would standardize collage as an assessment tool for Schizophrenics.
- 2. Methods of data collection.

#### II. Write notes on:

(10x6=60)

**Sub. Code: 9101** 

- 1. Differentiate between experimental and survey studies.
- 2. What is tabulation and explain general principles of tabulation?
- 3. Skewness and its use for selecting statistical method.
- 4. Explain time series analysis with specific emphasis relating to Occupational Therapy studies.
- 5. Two way Anova.
- 6. Spearman's Rank Correlation.
- 7. Focus group Research.
- 8. Types of sample design.
- 9. Projective techniques used as method of data collection.
- 10. Guidelines for constructing questionnaire or schedule.

# M.O.T. DEGREE EXAMINATIONS (Common to All Branches)

#### **FIRST YEAR**

#### PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours Maximum: 100 marks

# Answer ALL questions in the same order

I. Elaborate on:  $(2 \times 20 = 40)$ 

- 1. Critique the use of FIM'S scale and Barthel's Index as valid tools to measure A.D.L in spinal cord injury.
- 2. Differentiate between Parametric and non parametric tests.

  Explain the types of non-parametric tests used in Occupational Therapy.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Significance of screening tools
- 2. Pilot study
- 3. Study designs
- 4. Focus groups
- 5. Bell curve
- 6. MANOVA & ANOVA
- 7. Steps in research proposal
- 8. Correlation studies.
- 9. How to detect the sample population for a survey study
- 10. Mean, Median, Mode.

# M.O.T. DEGREE EXAMINATION (Common to all Branches) FIRST YEAR PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: 3 hours Maximum: 100 marks

I. Elaborate on: (2x20=40)

- 1. Briefly explain about qualitative research. Explain about various types of qualitative research.
- 2. Explain about procedures in various phases of construction of visual motor integration assessment tool among Indian population.

II. Write notes on: (10x6=60)

- 1. Stratified random sampling
- 2. Non-parametric test
- 3. Retrospective design
- 4. Normal distribution
- 5. Standard normal variate(Z)
- 6. Criterion referenced tests
- 7. Attitude scale
- 8. Explain about descriptive statistics
- 9. Types of validity
- 10. Hypothesis testing

# M.O.T. DEGREE EXAMINATION (Common to all Branches) FIRST YEAR PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three hours Maximum: 100 marks

I. Elaborate on :  $(2 \times 20 = 40)$ 

1. Explain the methods used to critique an Occupational therapy research article.

2. What do you understand by validity and reliability? Describe the various types of validity and reliability required to do in a experimental study design.

II. Write notes on:  $(10 \times 6 = 60)$ 

- 1. Data Base
- 2. Indications for use of non parametric tests. Explain with examples.
- 3. Scatter diagram
- 4. Mention types of randomized control design
- 5. Variables in a study
- 6. Basic principles of experimental design
- 7. How is a hypothesis framed?
- 8. What is a cross sectional study design?
- 9. Indications for repeated Measures ANOVA
- 10. Types of blinded studies