

[KO 801]

MARCH 2006

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PART – I

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

(2 x 15 = 30)

1. Effect of vestibular stimulations are to be studied on children with hyper activity and attention deficit disorder. Design and describe the research study.
2. 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 notes on:

(10 x 5 = 50)

1. Define and explain 'mean'.
2. Measures of Dispersion.
3. Median.
4. Graphs.
5. Hypothesis.
6. Positive correlation.
7. 't' test.
8. Inter-rater reliability.
9. Sampling technique.
10. Population.

[KQ 801]

FEBRUARY 2007

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PART – I

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

1. Describe how to formulate an assessment tool to measure ADL and how to critique assessment tools. **(20)**
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)**

II. Write notes on:

(10 x 5 = 50)

1. Threats to Validity.
2. Delphi Technique.
3. Measures of Variability.
4. Wilcoxon signed rank test.
5. Blind procedures.
6. Hawthorne effect.

[KR 801]

SEPTEMBER 2007

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PART – I

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

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. Write notes on:

(10 x 5 = 50)

1. Validity and types of validity.
2. Case-control study.
3. Methods of sampling.
4. Hypothesis testing.
5. Correlation.
6. Normal distribution.

[KS 801]

MARCH 2008

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 20 = 40)

1. Define Research Design. Write in detail about the various types of Research Designs.
2. Define data collection. Enlist various techniques of data collection in detail.

II. Write notes on:

(10 x 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.

[KT 801]

SEPTEMBER 2008

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 cerebrovascular accident.
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.

II. Write notes on:

(10 x 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.

[KU 801]

MARCH 2009

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 notes on:

(10 x 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.

[KV 801]

SEPTEMBER 2009

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 notes on:

(10 x 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.

[KW 801]

MARCH 2010

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 notes on:

(10 x 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.

[KX 801]

SEPTEMBER 2010

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 notes on:

(10 x 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.

[KY 801]

MAY 2011

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(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. Elaborate on:

(2 x 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 notes on:

(10 x 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.

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION**FIRST YEAR****(Common to All Branches)****PAPER I – RESEARCH METHODOLOGY*****Q.P. Code: 419101*****Time: Three Hours****Maximum: 100 marks****Answer ALL questions****Draw suitable diagrams where ever necessary****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
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- | | | | |
|--|----|---------|----|
| 1. Explain how will you conduct a survey in Tamil Nadu to find out what percentage of children going to mainstream schools have learning disability. | 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 |

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION**FIRST YEAR****(Common to All Branches)****PAPER I – RESEARCH METHODOLOGY*****Q.P. Code: 419101*****Time: Three Hours****Maximum: 100 marks****Answer ALL questions****Draw suitable diagrams where ever necessary****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. | 17 | 40 min. | 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 min. | 20 |

II. Write notes on:

- | | | | |
|---|---|---------|---|
| 1. Delphi technique. | 4 | 10 min. | 6 |
| 2. External validity. | 4 | 10 min. | 6 |
| 3. Extraneous variable. | 4 | 10 min. | 6 |
| 4. Honeymoon effect. | 4 | 10 min. | 6 |
| 5. Criterion related validity. | 4 | 10 min. | 6 |
| 6. Types of research design. | 4 | 10 min. | 6 |
| 7. What is measurement scale and explain about interval scale with example. | 4 | 10 min. | 6 |
| 8. Inter observer reliability. | 4 | 10 min. | 6 |
| 9. Multi-phase sampling. | 4 | 10 min. | 6 |
| 10. Measures of dispersion. | 4 | 10 min. | 6 |

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION**FIRST YEAR****(Common to All Branches)****PAPER I – RESEARCH METHODOLOGY*****Q.P. Code: 419101*****Time: Three Hours****Maximum: 100 marks****Answer ALL questions****Draw suitable diagrams where ever necessary****I. Elaborate on :**

Pages (Max.)	Time (Max.)	Marks (Max.)
-----------------	----------------	-----------------

- | | | | |
|---|----|---------|----|
| 1. Explain with an example the application and properties of normal distribution curve. Differentiate skewness and kurtosis and its significance in interpreting the results. | 17 | 40 min. | 20 |
| 2. Define Sampling and types of sampling designs. What are the advantages of sampling? Explain the different methods of random sampling. | 17 | 40 min. | 20 |

II. Write notes on:

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

[LC 801]

APRIL 2013

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

(2 x 20 = 40)

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

II. Write notes on:

(10 x 6 = 60)

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.

[LD 801]

OCTOBER 2013

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

(2 x 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 x 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.

[LE 801]

APRIL 2014

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

(2 x 20 = 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:

(10 x 6 = 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.

[LF 801]

OCTOBER 2014

Sub. Code: 9101

MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION

FIRST YEAR

(Common to All Branches)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum : 100 marks

Answer ALL questions

Draw suitable diagrams where ever necessary

I. Elaborate on:

(2 x 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 x 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.

[LG 801]

APRIL 2015

Sub. Code: 9101

**MASTER OF OCCUPATIONAL THERAPY (M.O.T.) DEGREE EXAMINATION
FIRST YEAR**

(Common to All Branches)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code: 419101

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

1. Explain Case Study, Cross Sectional Study, Cohort Study and Clinical Trials.
2. Explain the various types of Research design in detail.

II. Write notes on:

(10 x 6 = 60)

1. Pilot Study.
2. Likert Scale.
3. Characteristic of a good Report.
4. Probability.
5. Literature Survey.
6. Graphical Representation.
7. What is effect size?
8. Frequency Distribution.
9. Probability Sampling.
10. Bias in Research.

[LH 801]

OCTOBER 2015

Sub. Code: 9101

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 x 20 = 40)

1. Briefly explain about Difference between Parametric and Non-Parametric test.
Briefly explain about research process method.
2. Characteristics of good report writing and explain the method of preparing a report for a survey study.

II. Write notes on :

(10 x 6 = 60)

1. Cluster Sampling
2. Bland Altman's plotting.
3. Frequency Distribution.
4. Literature Review.
5. Fertility and Mortality.
6. Participant Observation.
7. Hypothesis Testing.
8. Advantage of pre test.
9. Cohort Study.
10. Scaling Techniques.

[LI 801]

APRIL 2016

Sub. Code:9101

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 x 20 = 40)

1. Explain the various steps involved in designing a Hand function tool for Paediatric population.
2. Explain in detail the types of Sampling Techniques.

II. Write notes on :

(10 x 6 = 60)

1. Indications for Regression analysis.
2. What is a Research Question? How to formulate a research question?
3. Type I and Type II error.
4. Measuring standardized tools or scales.
5. Types of graphs used in OT Research studies.
6. Describe the terminologies; effect size, odd's ratio.
7. Write down the inclusion and exclusion criteria for selecting clients for a study on “driving rehabilitation for persons with traumatic brain injury”.
8. What is the significance of mentioning confidence interval in tables during data analysis?
9. Properties of normal distribution.
10. Ethical issues in Research.

[LJ 801]

OCTOBER 2016

Sub. Code: 9101

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 x 20 = 40)

1. Explain the steps and procedures used to Standardize a Tool.
2. Suppose we have two different therapy and we want to find the combined effect of both the interventions, explain in detail what type of study design and Research Method is to be used?

II. Write notes on:

(10 x 6 = 60)

1. Types of random sampling.
2. Difference between evidence updates and systematic reviews.
3. Construction of questionnaire.
4. Indications for use of parametric tests. Explain with examples.
5. Hawthorne effect.
6. Chi-square test.
7. Three different types of Therapy are to be given to stroke clients. To find out which is most effective. Compare the three groups, name the statistical test to be used. State Null and alternative hypothesis.
8. What is a research design and types of research design?
9. What are measures of agreement?
10. What is washout? In which type of studies is it used?

[LK 801]

MAY 2017

Sub. Code:9101

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 x 20 = 40)**

1. Define Research. List the characteristics of true experimental designs and explain the various experimental designs with example.
2. Describe the ethical consideration in conducting Behavioral Research.

II. Write notes on: **(10 x 6 = 60)**

1. Scales of measurement.
2. Normal distribution.
3. “t” test.
4. Compare the difference between correlation and regression.
5. Pie diagram.
6. Control of extraneous variables.
7. Advantages and disadvantages of survey research.
8. Improvement of reliability.
9. Forced choice items and scales.
10. Rating scales and its weakness.

[LL 801]

OCTOBER 2017

Sub. Code:9101

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 x 20 = 40)

1. Describe Norm referenced and criterion referenced tests. Briefly differentiate the features of these tests.
2. The need for research design and explain the factors to be considered for choosing a research design.

II. Write notes on:

(10 x 6 = 60)

1. Prospective study.
2. Frequency distribution.
3. Review of literature.
4. Bias in research.
5. Scaling techniques.
6. Diagrammatic representation.
7. Type I and Type II error.
8. Measures of dispersion.
9. Construction of Questionnaire.
10. Cohort study.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LM 801]

MAY 2018

Sub. Code: 9101

**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 x 20 = 40)

1. What are the essential steps in conducting Randomized control 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 autism.
2. Define Sampling. Describe the types of sampling methods with illustrations.

II. Write notes on:

(10 x 6 = 60)

1. Importance and limitations of diagrams.
2. Types of tables.
3. Minimization of error variance.
4. Single subject experimental design.
5. Content validity.
6. Rating scales and its types.
7. Ridge regression.
8. Measures of dispersion.
9. Correlation coefficient.
10. Mortality rates.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LN 801]

OCTOBER 2018

Sub. Code: 9101

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 x 20 = 40)

1. Define review of Literature. Discuss its purpose, uses and methods of writing literature review.
2. a) Explain the following research designs, descriptive studies and causal studies.
b) Discuss in detail the essential components of a research proposal.

II. Write notes on:

(10 x 6 = 60)

1. Measures of central tendencies.
2. Types of variables.
3. Cluster sampling.
4. Construct validity.
5. Functions and characteristics of hypothesis.
6. Define tabulations and what are the rules for tabulations?
7. Importance and limitations of graphs.
8. What are secondary data and sources of secondary data?
9. Measures of morbidity.
10. Standard deviation.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LO 801]

MAY 2019

Sub. Code: 9101

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 x 20 = 40)

1. Identify the type of data collection and which one is best suited for today?
2. Enumerate on basic principles and methods of research designs.

II. Write notes on:

(10 x 6 = 60)

1. Ethical issues in research.
2. ANOVA.
3. Threats to internal validity.
4. Critique Occupational therapy study with example.
5. Conceptual framework.
6. Measurement scales.
7. Hypothesis.
8. Need of computers in research.
9. Relevance of literatures search.
10. Pilot study.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LP 801]

OCTOBER 2019

Sub. Code: 9101

**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 x 20 = 40)

1. Enumerate the principles, laid down by ICMR that is to be followed when using human beings for research. Give the details pertaining to Principles of Informed Consent and the Principles of Competence.
2. Define Research, list the characteristics of true experimental designs and explain the various experimental designs with examples.

II. Write notes on:

(10 x 6 = 60)

1. Tests of significance.
2. Type I and Type II errors.
3. APA style of Referencing.
4. Write in brief about: a) Mean b) Median and c) Mode.
5. Explain in brief about skewness and kurtosis.
6. Explain in brief about impact factor and citation index.
7. Focus groups.
8. Significance of theoretical frame work in research.
9. Steps of literature review.
10. Critiquing the research report.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LQ 801]

NOVEMBER 2020
(MAY 2020 SESSION)

Sub. Code: 9101

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 x 20 = 40)**

1. Discuss various diagrammatic and graphic forms of presenting data.
2. Discuss assessment tool with reference to sensitivity, specificity and reproducibility.

II. Write notes on: **(10 x 6 = 60)**

1. Confidence interval.
2. Likert scale.
3. Advantages of pre-test.
4. Types of non-experimental research.
5. Selections of samples.
6. Developing the instrument with Delphi technique.
7. Focus groups.
8. Presentation of study for discussion.
9. Survey study in research.
10. Uses of statistical methods in Occupational therapy.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MOT 0321]

**MARCH 2021
(OCTOBER 2020 SESSION)**

Sub. Code: 9101

M.O.T. DEGREE EXAMINATION

(Common to all Branches)

FIRST YEAR (INCLUDING ACADEMIC YEAR 2019-2020 REGISTERED CANDIDATES)

PAPER I – RESEARCH METHODOLOGY

Q.P. Code : 419101

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain the steps in formation of a tool for evaluation of social skills in occupational therapy. How will you standardize it?
2. You are interested in exploring the effect of a new splint for hemiplegic clients. Explain the appropriate research process in detail.

II. Write notes on:

(10 x 6 = 60)

1. Elements of report writing.
2. Data base
3. Review of literature
4. Measures of central tendency. Add a note on skewness.
5. Type I and type II errors.
6. Population, sample and sample size
7. Vital statistics
8. Errors in data collection
9. Statistical analysis tools
10. Indications for Non parametric tests

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MOT 0921]

**SEPTEMBER 2021
(MAY 2021 SESSION)**

Sub. Code: 9101

**M.O.T. DEGREE EXAMINATION
FIRST YEAR
PAPER I – RESEARCH METHODOLOGY
*Q.P. Code : 419101***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Discuss the terms reliability, validity in assessing a research project.
2. How do you frame a research study? Explain the various steps in preparing a scientific report.

II. Write notes on:

(10 x 6 = 60)

1. Effect size.
2. Scatter diagram.
3. Significance of screening tools.
4. Variables in a study.
5. Steps in hypothesis testing.
6. Writing styles of dissertation.
7. Calculation of central tendency.
8. Health statistics in the practice of Occupational Therapy.
9. How do you present data in appropriate tables.
10. Level of significance.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MOT 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 9101

**M.O.T. DEGREE EXAMINATION
FIRST YEAR
PAPER I – RESEARCH METHODOLOGY
*Q.P. Code : 419101***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain in detail with examples on what are parametric and non-parametric tests, indications and strength and weakness of parametric and non-parametric tests.
2. What is literature review? Explain the importance, types and components. Add a note on data base.

II. Write notes on:

(10 x 6 = 60)

1. Population, sample and sample size.
2. Correlation coefficient – explain with relevant examples.
3. Interview
4. Qualitative research design
5. Explain the referencing and bibliography writing styles
6. How will you critique a scale?
7. Types of scales
8. Pilot study
9. Non probability sampling
10. Statistical analysis tools.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MOT 0622]

**JUNE 2022
(MAY 2022 EXAM SESSION)**

Sub. Code: 9101

**M.O.T. DEGREE EXAMINATION
FIRST YEAR (Common to all branches)
PAPER I –RESEARCH METHODOLOGY
*Q.P. Code : 419101***

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What are the Steps in Protocol writing? Explain.
2. What do you mean by study design? Write in detail about study design.

II. Write notes on:

(10 x 6 = 60)

1. Define: Primary Data against Secondary Data.
2. Test of Significance.
3. Define Mean, mode and Median.
4. Informed consent.
5. Abstract writing.
6. Ethics in Research.
7. Sample size.
8. Confidence intervals and p values.
9. Focus group Discussion.
10. Chi square test.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[MOT 0523]

MAY 2023

Sub. Code: 9101

**M.O.T. DEGREE EXAMINATION
FIRST YEAR
PAPER I – RESEARCH METHODOLOGY**

Q.P. Code: 419101

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Types of Study Design. Explain the various Experimental Study design with examples.
2. Characteristics of Good Report Writing and Explain the method of preparing a report for Survey study.

II. Write notes on:

1. Write on Bias in clinical trial.
2. Cohort Study.
3. Pilot Study.
4. Uses of Statistical methods in Occupational Therapy.
5. Likert Scale.
6. Explain about the Impact Factor.
7. Steps of Literature review.
8. Measures of central tendencies.
9. Relative risk.
10. Informed consent.
