# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 26-Dec-2023

Time: 90 minutes Max. Marks: 50

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Anusandhana and write its synonyms. Discuss the scope and importance of research in Ayurveda

SHORT ESSAYS  $6 \times 5 = 30 \text{ Marks}$ 

- 2. Discuss steps of research process with one example
- 3. Write about importance of ethics in research
- 4. What is applied research? Explain with example
- 5. What is Data? Write methods of data presentations
- 6. Explain measures of central tendency with suitable example
- 7. Write about variability and its measures

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. Mention what are research tools
- 9. Interventional research
- 10. Population
- 11. Define probability
- 12. Percentile

## Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.A.M.S Degree Examination - MARCH 2018

Time: 90 minutes Max. Marks: 50 Marks

## Research Methodology and Medical Statistics (Revised Scheme 4) Q.P. CODE: 3030

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS

5+5+5 = 15 Marks

1. Define Research and Research Methodology. Explain types of Research. Explain basic and applied research with suitable example.

SHORT ESSAYS 5 x 5 = 25 Marks

- 2. What are Parametric and Non Parametric tests? Explain 'Z' test.
- 3. Define Bioinformatics. Explain its importance.
- 4. Define Data. Discuss Presentation of Data.
- 5. Define Central Tendency. Discuss measures of Central Tendency.
- 6. Define Anusandhana. Explain evidences of Research in Ayurveda.

SHORT ANSWERS 5 x 2 = 10 Marks

- 7. Percentile
- 8. Role of Ethics in Research
- 9. Importance of Research portals
- 10. Statistics in Ayurveda
- 11. Measurement of Variables

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## Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.A.M.S Degree Examination - MARCH 2019

Time: 90 minutes Max. Marks: 50 Marks

## Research Methodology and Medical Statistics (Revised Scheme 4) Q.P. CODE: 3030

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

LONG ESSAYS

5+5+5 = 15 Marks

1. Define Research, its types. Explain Qualitative and Quantitative Research with suitable examples.

SHORT ESSAYS

 $5 \times 5 = 25 \text{ Marks}$ 

- 2. Define Bioinformatics. Explain scope and importance in Research.
- 3. What do mean by DHARA? List few Research Portals with their significance.
- 4. Explain Statistics in Ayurveda with suitable examples.
- 5. Define Probability. Explain Tests of Significance.
- 6. Define Variability. Explain Range and Standard Deviation.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 7. Student's 't' test
- 8. Sample size
- 9. PubMed
- 10. Hypothesis
- 11. Evidences of Research in Ayurveda

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 06-Mar-2020

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Research Methodology, Classify, Discuss Quantitative and Qualitative Research with relevant example.

SHORT ESSAYS  $6 \times 5 = 30 \text{ Marks}$ 

- 2. Normal distribution.
- 3. Discuss research protocol with example.
- 4. Explain the importance of ethics in clinical research.
- 5. Concept of probability.
- 6. Parametric and non-parametric tests.
- 7. Explain the role of yukti pramana in research with example.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. Evidence of research in Ayurveda.
- 9. Graphical presentation of data.
- 10. Sample and population.
- 11. Explain mean.
- 12. Anusandhana.

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 04-Aug-2021

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Describe steps of research process in detail.

SHORT ESSAYS 6 x 5 = 30 Marks

- 2. Commonly used softwares in statistics.
- 3. Tests of significance.
- 4. Discuss historical background of Research in Ayurveda with example.
- 5. Define Research, explain quantitative research.
- 6. Presentation of data.
- 7. Discuss about observational and interventional studies.

SHORT ANSWERS 5 x 2 = 10 Marks

- 8. Median.
- 9. Pure and applied research.
- 10. DHARA.
- 11. Mode.
- 12. Research tools in Ayurveda.

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 19-Aug-2023

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Define research. Classify and discuss importance of research and need of research in Ayurveda.

SHORT ESSAYS  $6 \times 5 = 30 \text{ Marks}$ 

- 2. Explain statistics in Ayurveda with example.
- 3. Discuss measures of central tendency.
- 4. Applied Research.
- 5. Classification of Data.
- 6. Scientific Writing (IMRAD).
- 7. Discuss variability and its measurement.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. DHARA.
- 9. Name four parametric tests.
- 10. Pie chart.
- 11. Paryaya of Anusandhana.
- 12. Qualitative research.

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 30-Jun-2022

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Explain measures of central tendency and variability.

SHORT ESSAYS 6 x 5 = 30 Marks

- 2. Explain different Pramanas and their utility in Ayurveda research.
- 3. Discuss Evidence based medicine with example.
- 4. Differentiate qualitative and quantitative research.
- 5. Define Anusandhana, its synonyms, explain historical background of Research in Ayurveda.
- 6. Collection of data.
- 7. Explain about the scope and importance of medical statistics.

SHORT ANSWERS 5 x 2 = 10 Marks

- 8. Bioinformatics.
- 9. Types of variable.
- 10. Steps of Research.
- 11. IMRAD format of scientific writing.
- 12. Non-parametric tests.

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 01-Dec-2021

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Research (Anusandhana) and Research methodology. Discuss Research process in detail. Give an example.

SHORT ESSAYS 6 x 5 = 30 Marks

- 2. Explain the role of Anumana pramana in Research.
- 3. Explain about the Collection and Presentation of Data.
- 4. Emphasize the importance of Ethics in Research.
- 5. Write a note on (a) Average, (b) Percentile, (c) Mean, (d) Median, (e) Mode.
- 6. Explain about the Historical background of Research in Ayurveda with suitable examples.
- 7. What are parametric and non-parametric tests? Discuss any one parametric test with example.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. Standard error
- 9. Range
- 10. Sampling
- 11. Pie chart
- 12. Types of data

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 06-Nov-2020

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Research (Anusandhana). Mention its types and synonyms. Discuss Qualitative and Quantitative Research with example.

SHORT ESSAYS 6 x 5 = 30 Marks

- 2. Define Probability. Explain Tests of Significance.
- 3. Define Data mining. Explain its importance.
- 4. Define Data, types. Discuss Presentation of Data.
- 5. Discuss Scientific Research Article Writing.
- 6. Define Variability. Explain Standard Deviation and Standard Error.
- 7. Emphasize the importance of Ethics in Research.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. Chaturvidha Pramana in Research
- 9. Population and Sampling
- 10. Evidences of Research in Ayurveda
- 11. Student's 't' test
- 12. Arithmetic mean

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 22-Oct-2022

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHODOLOGY AND MEDICAL STATISTICS (RS-4) Q.P. CODE: 3030

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

LONG ESSAYS 1 x 10 = 10 Marks

1. Briefly describe difference between null hypothesis and alternate hypothesis, enumerate in detail about applied research and literary research with suitable example.

SHORT ESSAYS 6 x 5 = 30 Marks

- 2. Importance of ethics in research.
- 3. Standard error and Range.
- 4. Discuss statistics in Ayurveda.
- 5. Concept of evidence-based medicine.
- 6. Collection and Presentation of data.
- 7. Write a brief note on pure and applied research with suitable example.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 8. Median.
- 9. Sample.
- 10. Qualitative data.
- 11. Pub Med.
- 12. Scope of research in Ayurveda.

## Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.A.M.S Degree Examination - SEPT-2018

Time: 90 minutes Max. Marks: 50 Marks

## Research Methodology and Medical Statistics (Revised Scheme 4) Q.P. CODE: 3030

Your answers should be specific to the questions asked.

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS

5+5+5 = 15 Marks

1. Define Anusandhana. Explain its scope and need in Ayurveda. Explain the importance and utility of Research in Ayurveda.

SHORT ESSAYS 5 x 5 = 25 Marks

- 2. Explain Parametric and Non Parametric tests.
- 3. Explain about importance of Literature review in Research.
- 4. Narrate Role of Pratyaksha pramana in research with one example.
- 5. Define Medical Statistics and explain methods of Collection of Data.
- 6. Emphasize importance of Evidence based medicine in Ayurveda.

SHORT ANSWERS  $5 \times 2 = 10 \text{ Marks}$ 

- 7. Standard deviation
- 8. Statistical softwares
- 9. Mode
- 10. Normal distribution
- 11. Percentile calculation

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 26-Dec-2023

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Scope, need and importance of Research Methodology in Ayurveda

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Bioinformatics
- 3. Role of pramanas in research
- 4. Historical background of research in Ayurveda
- 5. Definition, scope and importance of Biostatistics
- 6. Explain measures of central tendency with examples
- 7. Tests of significance

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Standard deviation
- 9. Normal distribution
- 10. Ayush Research Portal
- 11. Ethics related to animals
- 12. Sample

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 04-Aug-2021

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Explain historical background or research in Ayurveda

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Types of research
- 3. Aims and objects
- 4. Research tools
- 5. Scientific writing
- 6. Ayush research portal
- 7. Definition of statistics

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Data
- 9. Average
- 10. Mode
- 11. Pubmed
- 12. Evidence based medicine

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 19-Aug-2023

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Anusandhana and write its synonyms. Discuss the scope and need of research in Ayurveda

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Discuss steps of research process
- 3. Importance of ethics in research
- 4. Explain the concept of evidence based medicine and scientific writing
- 5. What is sampling? Discuss sampling methods
- 6. Measures of Central tendency and write its importance
- 7. Write difference between parametric and non parametric tests

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Applied research
- 9. DHARA
- 10. Percentile
- 11. Range
- 12. Null Hypothesis

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 06-Aug-2024

Time: 90 minutes Max. Marks: 50

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Elaborate scope, need and importance of research in Ayurveda

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Quantitative research method
- 3. Objectives of research
- 4. Variable
- 5. Write short essay on data
- 6. Standard deviation
- 7. Normal distribution

 $5 \times 2 = 10 \text{ Marks}$ 

#### **SHORT ANSWERS**

- 8. What is DHARA?
- 9. Define mixed method research
- 10. Define Median
- 11. Define percentile
- 12. Define data mining

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 30-Jun-2022

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Explain Pramanas as research tools

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Anveshana
- 3. Selection of topics for research
- 4. Interventional research
- 5. Observational research
- 6. Evidence based medicine
- 7. Research management informatics system

 $5 \times 2 = 10 \text{ Marks}$ 

#### **SHORT ANSWERS**

- 8. Importance of medical statistics
- 9. Tabular presentation
- 10. Graphical presentation
- 11. Standard deviation
- 12. Statistical softwares

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 27-Mar-2025

Time: 90 minutes Max. Marks: 50 Marks

## RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS-5 & RS-6) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Describe the steps involved in Research Process

 $6 \times 5 = 30 \text{ Marks}$ 

#### **SHORT ESSAYS**

- 2. Write about presentation of data.
- 3. Describe the properties of a normal curve
- 4. Briefly describe the analytical observational study designs
- 5. Write about variability and its measurements.
- 6. Describe the measures of location used in medical research
- 7. What are non-parametric tests?

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Define mean with its advantages
- 9. Nuremberg Code
- 10. AYUSH portal
- 11. Institutional Animal Ethics Committee (IAEC)
- 12. Panchavayava Vakya

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 01-Dec-2021

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. Define Research. Explain synonyms of Anusandhana. Discuss scope and importance of research in Ayurveda

 $6 \times 5 = 30 \text{ Marks}$ 

#### SHORT ESSAYS

- 2. Discuss pure and applied research with example
- 3. Discuss research tools and their importance in clinical research
- 4. Define variability and explain its measures
- 5. Discuss research process
- 6. Presentation of Data
- 7. Discuss Parametric and Non-Parametric tests

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Median
- 9. Standard deviation
- 10. Pub Med
- 11. Percentile
- 12. Define Hypothesis

# Rajiv Gandhi University of Health Sciences, Karnataka IV Year B.A.M.S Degree Examination - 22-Oct-2022

Time: 90 minutes Max. Marks: 50 Marks

### RESEARCH METHADOLOGY AND MEDICAL STATISTICS (RS - 5) Q.P. CODE: 3098

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

LONG ESSAYS 1 x 10 = 10 Marks

1. What are Observational Study designs used in medical research? Describe them stating their major advantages and disadvantages

 $6 \times 5 = 30 \text{ Marks}$ 

#### SHORT ESSAYS

- 2. What are the different types of articles found in scientific journals? Describe IMRAD format?
- 3. Describe the principles of Ethics that Governs Medical Research
- 4. What are the important measures of Dispersion? Describe Standard Deviation
- 5. What are the Graphical methods of representation of Medical data?
- 6. What are the steps in Testing of Hypothesis?
- 7. What are the sampling methods used in medical research?

 $5 \times 2 = 10 \text{ Marks}$ 

#### SHORT ANSWERS

- 8. Define Anumana with its use in Ayurvedic research
- 9. Databases used in Ayurvedic research
- 10. Define Anusandhana
- 11. Constitution of Institutional Ethics Committee (IEC)
- 12. What is Bias?