

RAVI-I: (2008 & 2009 COURSE) April-May 2012
SUBJECT : RESEARCH METHODOLOGY AND MEDICAL STATISTICS

Day : Friday
Date : 01-06-2012

Time : 10:00 A.M. To 1:00 P.M.
Max. Marks : 100.

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Use **SEPARATE** answer sheet for each section. *Res.*
- 4) Use of statistical table and calculator is allowed **WHEREVER** necessary.

SECTION-I

- Q.1** Give method of preparation of bibliography card and writing bibliography? (15)
- Q.2** What is research? Describe in detail the principles and method of clinical research in Ayurveda. (15)
- Q.3** Write short notes on any **FOUR** of the following: (20)
- a) Scientific research should be systematic and controlled
 - b) Animal experiments
 - c) Ethical principles in medical research
 - d) Randomized controlled trails
 - e) Drug research.

SECTION-II

- Q.4** Enumerate various methods of sampling. (15)
- Q.5** a) The IQ scores and daily intake (in gm) of proteins of 10 students is as below: (10)
IQ : 100, 110, 120, 130, 90, 60, 70, 80, 90, 90.
Protein: 50, 60, 50, 40, 30, 60, 80, 90, 70, 50.
Calculate correlation coefficients.
- b) The mean difference in systolic blood pressure of 100 patients was 30 mm of Hg. before and after treatment. Standard deviation of difference was 10 mm of Hg. Prove statistically if the treatment was effective. (10)
- Q.6** Write short notes on any **THREE** of the following: (15)
- a) Application of Z-test
 - b) Pie diagram
 - c) Mean
 - d) Uses of vital statistics.

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MD - June - 15

RAVI (2012 COURSE) (COMMON FOR ALL BRANCHES): SUMMER - 2015
SUBJECT: PAPER -I: RESEARCH METHODOLOGY & BIO/ MEDICAL STATISTICS

Day: **Monday**
Date: **08-06-2015**

Time: **10.00 A.M. TO 1.00 P.M.**
Max. Marks: 100

N.B.:

- 1) Use **SEPARATE** answer sheets for each section.
- 2) Draw neat diagrams **WHEREVER** necessary.

SECTION-A

Long Answer Questions (LAQ) 2 × 15 = 30 Marks.

Write any **TWO** long questions out of **THREE**:

- Q.1** Define Research and Anusandhan and describe the classical methods of (15) Research.
- Q.2** Write importance of clinical trial and describe the types of RCTs (Randomized (15) controlled trials) in detail.
- Q.3** Write importance and methods of ethical aspects of Animal Experimentation. (15)

Short notes 6 × 5 = 30 Marks.

- Q.4** Write any **SIX** short notes out of **SEVEN**: (30)
 - a) Extra mural research (EMR) of AYUSH
 - b) Fundamental research on Rasa, Veerya and Vipaka
 - c) Importance of Pharmacovigilance of ASU drugs
 - d) Characteristics of a good research Question
 - e) Errors and bias in research
 - f) Bibliography
 - g) Importance of literature search

SECTION-B

Long Answer Questions (LAQ) 2 × 15 = 30 Marks.

Write any **TWO** long questions out of **THREE**:

- Q.5** Explain parametric tests and describe chi-square test in detail. (15)
- Q.6** Describe the importance of basic principle of Medical statistics in Ayurvedic (15) research.
- Q.7** A pregnant lady is weighted during each of her pre-natal doctor appointments. (15) Use the chart of her weight to answer the following questions:

6 Weeks	10 Weeks	14 Weeks	18 Weeks	20 Weeks	24 Weeks	28 Weeks	32 Weeks	34 Weeks	36 Weeks	37 Weeks	38 Weeks
135	136	138	140	145	150	152	156	156	158	159	160

What is her median weight? Also calculate the mean of this set of weights and identify the mode in this data set.

Short notes 6 × 5 = 30 Marks.

- Q.8** Write any **TWO** short notes out of **THREE**: (10)

