

**M. D./ M.S. AYURVED PRELIMINARY (2017 COURSE): SUMMER-2020**  
**SUBJECT: PAPER-I: RESEARCH METHODOLOGY AND**  
**BIO/MEDICAL STATISTICS**

Day: **Monday**  
Date: **14-09-2020**

Time: **2:00 P.M. TO 5:00 P.M.**  
Max. Marks: **100**

**S-2020-17984**

**N.B.:**

- 1) Figures to the right indicate **FULL** marks.
- 3) Use of statistical table and **CALCULATOR** is allowed **WHEREVER** necessary.
- 4) Answers to both the sections should be written in the **SEPARATE** answer books.

**SECTION-I**

Write **ANY TWO** long answer questions out of three.

- Q.1** Write in details about observational research and clinical trials. **(15)**
- Q.2** Write in details about ethical aspects in research involving human participants. **(15)**
- Q.3** Write in details about methods and importance of literature search. **(15)**
- Q.4** Write **ANY SIX** short notes out of seven: **(30)**
- a) Literary research in Ayurveda
  - b) Ethics in animal experiments
  - c) Application of anumana praman in research
  - d) Patents
  - e) Ayurvedic pharmacopoeia of India
  - f) Peer reviewed journals
  - g) IMR and EMR schemes

**SECTION-II**

- Q.5** Explain sampling and census method of sampling. Write down advantages of sampling over census. **(15)**
- Q.6** The following are the hemoglobin values (g/100ml) of 12 children receiving treatment for hemolytic anemia. **(10)**

7.3	9.1	8.3	10	9.9	11.4	9.4	6.9	12.4	7.5	9.8	6.7
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Compute the mean and variance.

- Q.7** Write **ANY THREE** short notes out of four: **(15)**
- a) Histogram
  - b) Pie diagram
  - c) Tests of significance
  - d) Probability

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