

Preliminary M.D./M.S. Ayurveda (2012)/(2017) Examination, Winter 2018 RESEARCH METHODOLOGY AND MEDICAL STATISTICS - I

Total Duration : Section A + B = 3 Hours

Total Marks: 100

SECTION - A and SECTION - B

- Instructions: 1) Use blue/black ball point pen only.
 - 2) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.
 - 3) All questions are compulsory.
 - 4) The number to the right indicates full marks.
 - 5) Draw diagrams wherever necessary.
 - 6) Distribution of syllabus in Question Paper is only meant to cover entire syllabus within the stipulated frame. The Question paper pattern is a mere guideline. Questions can be asked from any paper's syllabus into any question paper. Students cannot claim that the Question is out of syllabus. As it is only for the placement sake, the distribution has been done.
 - 7) Use separate answerbooks for all Sections.
 - 8) Use of simple calculator and significant test chart is permitted.

SECTION - A (60 Marks)

1. दीर्घोत्तरी प्रश्न (तीनपैकी कोणतेही दोन) :

(2×15=30)

Long answer questions (any two out of three):

- a) अनुसंधानाची व्याख्या, व्याप्ति, गरज व महत्व स्पष्ट करून अनुसंधानातील विविध टप्पे लिहा. Define Research and write scope, need and importance of Research and elaborate steps involved in research.
- b) तंत्रयुक्ती व प्रत्यक्षादी प्रमाणांचे संशोधनातील महत्व विशद करून आयुर्वेदीय ग्रंथामध्ये वर्णित विविध अनुसंधान पद्धतींचे सोदाहरण स्पष्टिकरण करा.
 - Write the importance of Tantrayukti and Pratyakshadi pramana in research and highlight the various research methodologies in Ayurveda with example.
 - c) Bioinformatics बद्दल सविस्तर माहीती लिह्न संगणकाचे संशोधनातील महत्व लिहा. Write in details about Bioinformatics and role of computers in research.



2. लघुत्तरी प्रश्न (सातपैकी कोणतेही सहा):

 $(6 \times 5 = 30)$

Short answer questions (any six out of seven):

a) संदर्भ लिहीण्याच्या विविध पद्धतीबद्दल माहीती लिहा. Write in short about various referencing methods.

कोहोर्ट स्टडीज् बद्दल माहीती लिहा.

Write note on Cohort studies.

gy IEC – रचना व कार्ये लिहा.

Write IEC - Constitution and functions.

প) Pharmacovigilance बदल माहीती लिहा. Write note on Pharmacovigilance.

e) IMRAD बद्दल माहीती लिहा. Write note on IMRAD.

> f) Cross sectional studies बद्दल माहीती लिहा. Write about Cross sectional studies.

g) Bias in research बदल माहीती लिहा Write note on Bias in research.

SECTION - B (40 Marks)

3. दीर्घोत्तरी प्रश्न (दोनपैकी कोणतेही एक) :

(1×15=15)

Long answer question (any one out of two):

a) आधार सामुग्री सादरीकरणच्या विविध प्रकारांचे सविस्तर वर्णन करा व आयुर्वेद संशोधनामध्ये सांख्यिकीची उपयोगिता विशद करा.

Describe various methods of presentation of data in detail. Explain applications of statistics in research in Ayurveda.

by न्यादर्श चयन पद्धती (sampling) चे सविस्तर वर्णन करा व अचूकता विशद करा.

Describe sampling in detail and explain precision.



4. लघुत्तरी प्रश्न (सहापैकी कोणतेही पाच):

 $(5 \times 5 = 25)$

Short answer question (any five out of six):

- a) काय वर्ग परीक्षा. Chi square test.
- b) आधारसामग्रीचे भेद. Types of data.
- ्र) गणीती माध्य. Arithmetic mean.
- d) प्रमाप विचलन. Standard deviation.
- e) संभावनाचे गुणाकाराचे नियम. Multiplication law of probability.
 - f) सहसंबंधचे भेद लिहा. Write types of correlation.