34 (2) RMBI 2·5

2021
(Held in 2022)

RESEARCH METHODOLOGY AND BIOSTATISTICS

Full Marks : 80

Time : Three hours

***The figures in the margin indicate
full marks for the questions.***

1. Short Answer Type Questions :

    2×10=20

    (a) Define research methodology.

    (b) What is quantitative research ?

    (c) What do you understand by sampling design ?

    (d) Define scaling.

    (e) What do you mean by sampling error ?

    (f) Name *two* processing operations.

    (g) What is Type I error ?

    Contd.

(h) What is biostatistics ?

(i) Name *two* probabilistic sampling technique.

(j) Write *one* application of computer in research.

2. Short Essay Type Questions : *(any eight)*
5×8=40

(i) Write a short note on 'need for research design'.

(ii) Describe the research design in case of hypothesis testing studies.

(iii) Write a note on 'schedule method' of data collection.

(iv) State the reasons why sampling is used in the context of research studies.

(v) What is hypothesis ? Explain.

(vi) What is ANCOVA technique ? Give example.

(vii) What is normal probability curve ? Describe briefly.

(viii) What are the different types of measurement scales ? Explain briefly.

(ix) What do you mean by measures of Central Tendency ? Define mean, median and mode.

(x) Calculate median from the following data :

Weight	:	10	20	30	40	50	60	70
Frequency	:	4	7	12	15	13	5	4

3. Essay Type Questions : *(any two)*
10×2=20

(i) What are the different types of research design ? Explain.

(ii) Write a note on 'types of analysis'.

(iii) Write down the different types of sampling techniques.

(iv) Explain briefly :

　(a) Cumulative frequency curve

　(b) Power of hypothesis test.

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