

FIRST QUARTERLY TEST AUGUST 2024

CLASS : I PUC

SUBJECT : STATISTICS (31)

Max. Marks : 40

TIME : 1 Hr. 30 Mins.

Instructions :

- 1) Statistical tables and graph sheets will be provided on request.
- 2) Scientific calculators are allowed.
- 3) All working steps should be clearly shown.
- 4) Only the first written answers will be considered for Section-A

SECTION-A

I Choose the correct answer from the choices given :

$$3 \times 1 = 3$$

- 1) Statistics is defined as "the science of averages" by
 - a) R. A. Fisher
 - b) Boddington
 - c) A. L. Bowley
 - d) Croxton and Cowden
- 2) The person who conducts the statistical enquiry is called
 - a) Enumerator
 - b) Respondents
 - c) Informants
 - d) Investigator
- 3) Classification of data on the basis of attribute is
 - a) Chronological classification
 - b) Qualitative classification
 - c) Geographical classification
 - d) Quantitative classification

II Match the following :

$$3 \times 1 = 3$$

A

B

- | | |
|--|-----------------------------------|
| 4) A population with countable number of units | a) Actual value - Estimated value |
| 5) Absolute error | b) Median |
| 6) Ogive | c) Finite population |
| | d) Mode |

III Fill in the blanks by choosing the appropriate word from those given in the brackets:
(Schedule, Statista, Statistik) 2x1=2

$$2 \times 1 = 2$$

- 7) Statistik is the German word for Statistics.
- 8) Open ended questions is a list of questions where the facts will be supplied by informants and recorded by enumerators.

IV Answer the following questions:

$$3 \times 1 = 3$$

- 9) Mention a scale of measurement of qualitative data.
- 10) Define pilot survey.
- 11) Give one example for one-dimensional diagram.

SECTION-B

V Answer any TWO of the following questions :

$$2 \times 2 = 4$$

- 12) Mention two main branches of Statistics.
- 13) Define sampling. Mention a method of sampling.
- 14) Write any two objectives of classification.

SECTION-C

VI Answer any TWO of the following questions :

$$2 \times 5 = 10$$

- 15) Mention the functions of Statistics.
- 16) What are the guidelines for the construction of a questionnaire ?

(P.T.O)

- 17) Distinguish between census enumeration and sample survey.
- 18) Draw a blank table to show the strength of students of a college according to :
- i) Faculty : Arts, Commerce, Science.
- ii) Sex : Male, Female
- iii) Class : I PUC, II PUC.

VII Answer any ONE of the following questions :

1x5=5

- 19) Following are the marks obtained by the students in a certain test. Prepare a frequency distribution with class interval width of 10 each using exclusive class intervals.

37	49	54	51	37	15	12	33	23	25	18	35	33
55	69	63	46	29	18	37	46	59	29	35	27	45

- 20) The amount allocated in 12th Five-year plan in thousand crores of rupees is as follows :

Heads	Transport	Agriculture	Education	Irrigation	Industry
Central Govt.	400	200	250	300	50
State Govt.	50	150	300	250	100

Request the data by multiple bar diagram.

SECTION-D

VIII Answer any ONE of the following questions :

1x10=10

- 21) Below are the ages of husbands and wives. Prepare a bivariate frequency distribution.

Sl. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Age of husband (in years)	24	42	29	37	35	41	33	36	29	38	27	30	26	41	25	38	31	35	29	47
Age of wife (in years)	28	37	25	47	23	39	23	32	24	38	23	40	25	35	21	34	20	29	25	34

- 22) a) For the following data regarding the income of the government from different sources, draw a pie chart.

Source	Customs	Excise	Income Tax	Corporate tax	Miscellaneous	Total
Revenue (in million ₹)	80	190	160	75	35	540

- b) Draw a histogram for the following data. Hence find the value of mode.

Class Interval	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	5	12	20	15	10	8