

STA M -2303
B.Sc (Honours) U.G Examinations-30 April 2024

SEMESTER-II (REGULAR)

(Admitted Batch 2023-24 Only)

DESCRIPTIVE STATISTICS & PROBABILITY

Max Marks:60

TIME: 3 Hrs

Section-A

Answer any five of the following questions.

5x4=20M

1. Explain the sources of secondary data.
2. Write a short note on measurement scales.
3. Explain features of good average.
4. Write merits and demerits of mode.
5. Explain sheppard's corrections.
6. Explain about kurtosis.
7. Define i. Outcome ii. Sample space iii. Event.
8. Define Axioms of probability.
9. Explain about the independence of event.
10. State and prove multiplication theorem of probability for 2 events.

Section-B

Answer all of the following questions.

5x8=40M

11. Explain various methods of collecting primary data.

(Or)

12. Draw a pie diagram for the following data.

Item	Food	Clothes	Fuel	Rent	Education	Other
Family	1700	800	400	400	200	100

13. Define arithmetic mean and explain its methods and properties.

(Or)

14. Calculate the mean and mode of the following data.

15

Wage(Rs)	0-20	20-40	40-60	60-80	80-100
workers	10	15	40	25	10

15. Explain various measures of dispersion.

(Or)

16. Find quartile deviation to the following data.

C.I	0-20	20-40	40-60	60-80	80-100
F	10	25	40	15	10

17. State and prove addition theorem of probability for n events.

(Or)

18. State and prove Boole's inequalities.

19. State and prove Baye's theorem.

(Or)

20. The composition of balls in three Urns are as follows

	white	Black
Urn-I	7	3
Urn-II	4	6
Urn-III	2	8

One Urn selected at random and two balls are drawn from it. If both the balls are white, find the probability that they came from the third Urn.
