

B.sc DEGREE(C.B.C.S) EXAMINATION 2018

SECOND SEMESTER

PROBABILITY AND STATISTICS

(For B.Sc IT)

PART- A

Each question carries 2 marks

- 1.what is sample?**
- 2.what is conditional probability?**
- 3.What is cluster sampling?**
- 4.Define sampling?**
- 5.Find the mode from the data? 28,35,28,42,62,53,35,28,42,35,23,42,35**
- 6.What are the measures of dispersion?**
- 7.What is primary data?**
- 8.Define regression?**
- 9.Definesmple space?**
- 10.What is median?**
- 11.What are the merits of standard deviation?**
- 12.Define questionnaire method?**

PART-B

Answer any 6 questions

Each question carries 5 marks

- 13.Calculate the median from the following data**

Marks- 10-20 20-30 30-40 40-50 50-60 60-70

Frequency-10 20 10 7 2 1

14.Explain census method and sampling?

15.Explain types of regression?

16.Draw a frequency polygon representing the data

Marks- 0-10 10-20 20-30 30-40 40-50 50-60

No.of students- 5 8 15 20 12 7

17.what are the different approaches in probability?

18.Find the mean deviation about mean from the following data

No.children- 0 1 2 3 4 5 6

No.families- 171 82 50 25 13 7 2

19.Three unbiased coins are tossed what is the probability of obtaining (1) All heads (2) Two heads (3)One head (4) atleast one head (5)at least two heads (6)all tails

20.Explain the different types of correlation?

21.Explain the different sampling techniques?

PART-C

Answer any two

Each carries 15marks

22.Find the Karl Pearsons coefficient of correlation from the from the following data

x- 8 10 15 17 20 22 24 25

Y- 25 30 32 35 37 40 42 45

23.Obtain the line of regression x on y for the following data

Income-35 55 40 60 22 75 45 86 77 110

Expenditure- 32 12 18 20 67 32 67 54 33 90

25 .(1)State and prove Bayes theorem

(2)what is independence of events?

24.Calculate the S.D and coefficient of variation from the following data Age- 20-30 30-40
40-50 50-60 60-70 70-80 80-90

No of families -3 12 45 65 23 61 55.