ANNAI VIOLET ARTS AND SCIENCE COLLEGE
DEPARTMENT OF MATHEMATICS

CONTINUOUS INTERNAL ASSESSMENT – II (ODD SEM.)
SUBJECT : STATISTICS-I

Class : I BA (Economics)   Date :

Max.Marks : 75   Sub. Code:AE21B

PART A (10 × 2 = 20 Marks)
Answer any TEN questions

1. Define Statistics.
2. Find mode for the following data 2,2,3,5,6,8,5,9,5.
3. Calculate for the following data 1490 , 692 , 777 , 582 , 488 , 753 , 384 , 407 , 672 , 522.
4. Write the relation between mean , median and mode?
5. Define event.
6. State addition theorem on probability.
7. What is the probability that a nonleap year selected at random will contain 53 Tuesdays?
8. Write the Statement of Baye's theorem
9. Write the types in Inferential Statistics
10. Define Standard Error
11. What is meant by Type-I
12. Write the Abbreviation of ANOVA

PART B – (5 × 5 = 25 Marks)
Answer any FIVE questions

13. Calculate Standard Deviation and Coefficient of variation for the data 1,5,4,2,3,8,6,2,8.
14. Difference between primary data and secondary data.
15. Calculate the mode

X	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
F	3	6	10	20	15	5	4	2

16. Find the probability of getting a total of more than 15 in one throw with 3 dice.

17. Write the procedure for testing of Hypothesis.
18. In 324 throws of a six-faced die, odd points appeared 181 times, would you say that the die is fair ?
19. A frequency distribution showed the following measures of location mean = 45 , median = 48 and coefficient of skewness= -0.4estimate its standard deviation .

PART C – (3 × 10 = 30 Marks)
Answer ANY THREE questions

20. From the data , find out mode using empirical formula

CI	3-4	4-5	5-6	6-7	7-8	8-9	9-10
Frequency	83	27	25	50	75	38	18

21. Calculate Bowley's coefficient of Skewness

Children	0	1	2	3	4	5	6
Family	7	10	16	25	18	11	8

22. A bag contains 8 red , 3 white and 9 blue balls . if 3 balls are drawn at random, determine the probability
   (a) All are red
   (b) All are white
   (c) 2 are and 1 is white
   (d) At least one is white
   (e) One of each color is drawn

23. Explain the types of Classification
24. From the following data find out which one is more stable

Product A	20	22	19	23	16
Product B	10	20	18	12	15

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