Vidya Vikas Mandal's

Shree Damodar College of Commerce & Economics, Margao-Goa

SY BBA, Term – VI Term End Assessment JANUARY 2024

Course Title: BBCB031 Business Statistics -I

Duration: 90 Mins **Maximum Marks: 25**

Instructions:

1) ***Start each question on a fresh page.***
2) ***Figures to the right indicate maximum marks.***
3) ***Use of non-scientific, non-programmable calculators is allowed.***
4) ***Graph papers will be provided on request.***

Q1. State and explain any three probability sampling methods. **(3 Marks)**

Q2. The following table shows November Car Sales Report of Chevrolet, Ford, Toyota and Honda. **(3 Marks)**

November Car Sales Report

	Chevrolet	Ford	Toyota	Honda
Trucks	34000	57000	18500	11900
SUV's	32500	30000	23200	29800
Sedans	45600	29100	48700	55500

Draw a multiple bar graph for the above information.

Q3. In 400 tosses of a coin, head appears 259 times. Can you say that statistically the coin is biased with probability of head being 0.7? Use 1% level of significance. **(3 Marks)**

Q4. Sunil's chance of hitting a target is $\frac{4}{5}$. If he fires 5 shots, predict the probability that he hits the target **(4 Marks)**

a) exactly twice
b) at least once.

Q5. In a factory which manufactures bolts, machine A, B and C manufacture respectively 25%, 35% and 40% of the bolts. Of their outputs, 5, 4, 2 percent are respectively defective bolts. A bolt is drawn at random from the product and is found to be defective. Estimate the probability that it is manufactured by machine B? **(4 Marks)**

Q6. The scores of 40 students in a test of 60 marks is represented by the following distribution. Calculate the mean deviation about the median for this data. **(4 Marks)**

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No of Students	6	8	14	16	4	2

Q7. A well-known cigarette manufacturing company conducted a survey of their own employees with respect to smoking. The results of the survey are tabulated below. Find the Harmonic mean for this data. **(4 Marks)**

Age group of the employees	20-30	30-40	40-50	50-60
Number of smokers	24	38	23	15

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