Subject Code: Bc/BS-603 Booklet	No. A 172
Data Stan	~~
Bc/BS-603	
2. (a)o Fromnether-followings data, ecalculated 9 median mark <b>2.202</b> m henry 9	
( 6th Semester )  COMMERCE	ed in by the
Paper: BS-603  (Business Statistics)	Com / BBA / BCA er End Term
Full Marks: 70 Pass Marks: 45%	2025
Time: 3 hours 2 82 X	1×10=10
( PART : B—DESCRIPTIVE )  ( Marks : 45 )	princery
The figures in the margin indicate full marks  for the questions	
1. (a) Define statistics. Explain the nature and importance of statistics. 2+7=9	УРЕ
samplify and some of the sample of the sampl	
(b) What do you mean by diagrammatic presentation? Discuss the different types of diagram. 2+7=9	nature of gilator(s)

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2. (a) From the following data, calculate median marks:

Marks	6th Se
10-25	6
25-40	20
40-55	44
55-70	26
70-85	3
85-100	1

( Business Tatistics )

(b) Calculate Spearman's rank coefficient of correlation from the following data:

X	53	98	95	81	75	61	59	55
Y	47	25	32	37	30	40	39	45

3. (a) What do you mean by index number?

Explain the uses of index number. 2+7=9

The figures in the margin indicate full marks

(b) Construct quantity index for 2007 with 2005 as base year from the following data using Fisher's ideal method:

Commodities	2005		2007		
Commodutes	Quantity	Price	Quantity	Price	
Wheat	byEdia	ou onear	rat Alo y	14	
Milk	uss 4the	15 9	oite4 isse	16	
Rice	6	12	7	18	
Fish	2	20	3	25	
Sugar	3	10	4	12	

**4.** (a) Discuss the various measurements of trend in a time series.

Or

(b) Find the trend value for the following time series by using three-yearly moving averages:

Year	Production (in '000)
1980	12
1981	11
1982	16
1983	15
1984	17
1985	28
1986	18
1987	23

5. (a) Define census method. Distinguish between census method and sample method. 2+7=9

Or

(b) An urn contains 8 white and 3 red balls. If two balls are drawn at random, then find the probability that (i) both are white, (ii) both are red and (iii) 1 is red and another 1 is white.

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numerical data and forms the initial stage of analysis and (stage of the stage) and (stage of the stage of th

## (ii) numbers COMMERCE Toitsludat (i)

Paper: BS-603

( Business Statistics )

( PART : A—OBJECTIVE )

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The figures in the margin indicate full marks for the questions

- Choose the correct answer and place its code in the brackets provided : 1×10=10
  - (a) The quickest method of collecting primary data is
    - (i) mailed questionnaire 11900 nonsismo (b)
    - (ii) telephone interview
    - (iii) enumerators
    - (iv) information from correspondents

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(b) The final stage of collection and compilation of numerical data and forms, the initial stage of analysis and interpretation is
(i) tabulation (i) tabulation
(ii) classification
(iii) frequency
(iv) distribution [ ]
(PART: A GBJECTIVE)
(c) Square of standard deviation is called
i) mean deviation when nigrous and his security and
(ii) quartile deviation
1. Choose the correct answer and place its code in the brackets provided:
(iv) None of the above
data is
(d) Correlation coefficient lies between
(ii) telephone interview 1 bns 0 (i)
(iii) -1 and 1
(iii) -1 and 2 germon mort noitemation (iii)
(iv) 0 and 2

(e) The index numbers a	re expressed in
(i) alphabets	(i) cyclic variation
(ii) numbers	(ii) seasonal variation
	(ii) irregular variation
(iv) None of the abov	e e above above e
	called positional averages.
(f) The index number wh	nich gives downward bias is
(i) Paasche's index	
(ii) Laspeyres' index	number
(iii) Fisher's index r	number kely to be
(iv) Bowley's index r	number [ (iii)
(g) The sum of season model is equal to	nal indices using additive
(i) zero	(F) Independent event
(ii) one	(ii) dependent event
(iii) two	bedtem eusens in census method.
(iv) three	(iv) composite event

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(h) A business cycle is an example of	(e) The inde
vulation (i) cyclic variation	
(ii) seasonal variation	
(iii) irregular variation	
(iv) All of the above	noN[(ui)]
(i) The Central Statistical Organization established in	
sche's index number  (i) 1951	
(ii) 1952	
(iii) 1953	
(iv) 1954	(iv) Bor
(j) An event that can split into two or mo	ore events is
(i) independent event	(i) zer
(ii) dependent event	no (ii)
(iii) exhaustive event	(iii) tw

- 2. State whether the following statements are True (T) or False (F) by putting a Tick (I) mark: 1×5=5
  - (a) Primary data are original in nature.

(T/F)

(b) Median and mode are called positional averages.

(T/F)

(c) The longer the period of moving average, the smoother is the trend line likely to be.

(T/F)

(d) Fisher's ideal index formula satisfies circular test.

(T/F)

(e) Sampling errors are present in census method.

(T/F)

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(iv) composite event

(iv) three

3. Write short notes on any five the following:  $2\times5=10$ or False (F) by putting a Tick (4) mark :

(a) Primary data

(b) Median and mode are called positional averages.

(e) Sampling errors are present in census method.

(b) Classification

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(c) Objectives of dispersion noise means (d) Scatter diagram improve as redman reball (e)

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(e) Index number as economic barometers

f) Base shifting a market shifting shif

(g) Seasonal variation (h) Trial and events

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