BUSINESS STATISTICS

TIME: 15 MINUTES

DGK-22

OBJECTIVE

MARKS: 10

NOTE: You have four choices for each objective type question as A , B , C and D . The choice which you think is correct , fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

QUESTION NO. 1

Sr. No	QUESTIONS	(A)	(B)	(C)	(D)
1	Statistics are always	Qualitative	Continuous	Fictitious	Aggregate of numerical facts
2	Data classified by attributes is called	Quantitative	Qualitative	Discrete	Continuous
3	Column caption are also called	Box-head	Title	Body	Stub
4	Histogram is the graph of	Time series	Parabola	Frequency distribution	Straight line
5	The mode of 2 , 3 , 5 , 2 , 3 , 2 , 6 is	2	3	5	6
6	The A.M of 5 values is 10 , then sum will be	2	$\frac{5}{10}$	50	6
7	In chain base method , the base period will be	Fixed	Constant	Base	Changed
8	Base year quantities are used as base	Fisher's index	Chain index	Laspeyre's index	Paasche's index
9	If A is a sure event. Then P(A) is	0	1	-1	1.5
10	Probability of getting an even number when a die is rooled	$\frac{1}{6}$	$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{2}$

Dt 10-22

QUESTION NO. 2   Write short answers any Six (6) parts of the following   6x2= 12

i	Give two sources of primary data
ii	Differentiate between population and sample
iii	Define attribute by giving examples
iv	What is descriptive statistics
v	The sum of deviations of 15 values from 20 is 45 . Find Arithmetic Mean
vi	Give two demerits of median
vii	If $\ell = 28$, $f_m = 25$, $f_1 = 20$, $f_2 = 18$, $h = 7$. Compute Mode
viii	Define Average
ix	For a moderately skewed distribution Mode = 60 and Mean = 30 . Find Median

QUESTION NO. 3   Write short answers any Six (6) parts of the following   6x2=12

i	What is geographical classification ?
ii	Differentiate between box head and stub
iii	Define relative frequency
iv	Define simple index number
v	If Laspeyre's Index = 112 , Paasche's Index = 105 Calculate Fisher's Index
vi	Define price relatives
vii	What is sample space ? Give example
viii	Define not mutually exclusive events
ix	If we throw a single die , what is probability of getting even number

SECTION-II

Note: Attempt any TWO questions from this section   8x2=16

Q.4-(A) In an experiment measuring the percent shrinkage on dyeing , 20 plastic clay test specimens gave the following results

19.3   19.5   15.2   16.8   16.1   17.1   13.9   17.8   18.2   16.5   18.4   16.3   18.5
16.9   15.5   19.4   13.5   18.6   14.6   17.5

Make a frequency distribution taking 1.00 as the size of class interval e.g . 13.5−14.4 , 14.5−15.4 etc.

(B) Draw a histogram for the following distribution

Classes	25 − 29	30 − 34	35 − 39	40 − 44	45 − 49	50 − 54	55 − 59
Frequency	3	15	23	35	21	21	15

Q.5-(A) Calculate Mean by coding method

Marks	10 − 19	20 − 29	30 − 39	40 − 49	50 − 59
f	5	25	40	20	10

(B) Calculate Median from the following data of heights of 100 athletes taking part in a competition

Heights	60 − 62	63 − 65	66 − 68	69 − 71	72 − 74
No. of Athletes	05	18	42	27	08

Q.6.(A) Calculate Fisher's Price Index number for 2005 taking 2004 as base year

Commodity	2004		2005	
	Price	Quantity	Price	Quantity
A	2	50	10	40
B	3	10	8	50
C	4	60	4	80

(B) Two fair dice are thrown. What is the probability of getting ?
(i) The sum of faces is 5   (ii) The sum of faces is 8 or more