

# **BHARATI VIDYAPEETH**

(Deemed to be University), Pune (India)

**School of Distance Education** 

Yashwantrao Mohite College of Arts, Science and Commerce, Pune-38

DEPARTMENT OF MATHEMATICS & STATISTICS Semester – I (2018-19)

Subject-: Business Mathematics and Business Statistics-I

Assignment No-: 1 & 2.

Name of the Student :

Class :- F.Y.B.Com.

Roll No.:

Mobile No.:

**E-mail ID:** 

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Yashwantrao Mohite College of

### Arts, Science and Commerce, Pune-38 Subject-: Business Mathematics and Business Statistics-I

### Assignment No-: 1

#### Q.1. Attempt all of the following

- a) Write note on importance of statistical methods
- b) What is scope of statistics in the field of medical sciences and economics
- c) Write note on simple random sampling
- d) Write note on stratified random sampling
- e) Following data indicate spelling mistakes committed by 25 students when words were dictated

0,1,1,3,5,0,0,1,1,3,2,3,1,1,0,0,1,1,0,1,2,3,1,0,5.

Prepare frequency distribution of the above data.

#### Q.2. Attempt all of the following.

- a) i) Find LCM of 11, 121 and 1331
  - ii) Find HCF of 630, 945, 1449.
  - iii) Find 30% of 480.
  - iv) Find HCF and LCM of 105 and 135
  - v) Express  $\frac{3}{4}$  as percentage.
- b) Find x if

i) 6: 15: : 2 : x	ii) 15: 27: : x: 45
iii) x: 15: : 1: 3	iv) 5: x : : 7: 28

- c) i) If 30 articles cost Rs. 316/-, find the cost of 78 articles.
  - ii) Find mean proportional to 49 and 64.
  - iii) If 30 men can do a job in 80 days how many more men would be required to do it in 50 days ?
- d) X,Y and Z started a business by investing Rs. 25,000/-, Rs. 20,000/- and Rs. 35,000/- respectively. At the end of the year there was a profit of Rs. 19,200/-. Find the share of each of them in a profit.
- e) Define ratio and proportion.

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### Yashwantrao Mohite College of Arts, Science and Commerce, Pune-38 Subject-: Business Mathematics and Business Statistics-I Assignment No-: 2

#### Q.1. Attempt all of the followings.

a) Draw histogram for the following frequency distribution.

Class	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	14	13	15	28	16	10

b) Draw the ogive curve for the following frequency distribution .

Weight in kg.	30-40	40-50	50-60	60-70	70-80
No. of Students	3	5	12	20	10

- c) Define Class limits, Mid point of the class and Width of a class
- d) The table below shows a frequency distribution of the I.Q. of 90 school children.

I.Q.	50-59	60-69	70-79	80-89	90-99	100-109
Number of Children	3	10	18	25	24	10

With reference to this table determines.

- i) mid point of second class.
- ii) width of any class.
- iii) state the type of classification.
- iv) frequency of  $3^{rd}$  class
- v) frequency density of  $5^{th}$  class.
- vi) relative frequency of  $2^{nd}$  class.
- vii) class boundaries of 3<sup>rd</sup> class.
- viii) how many children getting IQ less than 79.5.

#### Q.2. Attempt all of the followings.

- a) A sold a car to B at 15% profit, B sold the car to C at 5% profit for Rs. 89,985/-. Find the price at which A had purchased the car.
- b) The population of a city according to 1971 census was 94,500 and it rose to 1,21,200 in 1981. Find the percentage increase in the population.
- c) Monthly salaries of Ramesh and Rahul are in the ratio 4:5. The company offer them an increment of Rs. 1500/- each. The ratio of new salaries 11:13. Find the salary of each one.
- d) i) A scooter purchased for Rs. 12,000/- was sold for Rs. 13,800/- . Find the percentage profit.
  - ii) By selling two motor cars for Rs. 1,45,000/- each trader gain 10% on one and on the other he loss 10%. What was the total gain or loss in the total transaction?