

A

Printed Pages : 4

(20623)

Roll No. ....

BBA -II Sem.

**18080**

**B. B. A. Examination, June-2023**

**QUANTITATIVE TECHNIQUES FOR  
BUSINESS**

**(BBA-201)**

**(New Course)**

*Time : 3 Hours]*

*[Maximum Marks : 75*

**Note :** Attempt questions from *all* sections as per instruction.

**Section-A**

**(Very Short Answer Questions)**

**Note :** Attempt all *five* questions. Each question carries 5×3 marks. Very short answer is required not exceeding 75 words. 5×3=15

1. What do you mean by correlation ? Explain types of correlation. What is the Karl Perason coefficient of correlation ?
2. The following table shows the age of the mother and the average number of children born per mother.

**18080**

**[P.T.O.]**

(2)

Find the missing value :

|                        |       |       |       |       |       |       |
|------------------------|-------|-------|-------|-------|-------|-------|
| Age of Mother (Years)  | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 |
| Age of Children (Born) | 07    | 2.1   | 3.5   | ?     | 5.7   | 5.8   |

3. Calculate missing frequency from the following.  
Median is 25.625

|       |      |       |       |       |       |
|-------|------|-------|-------|-------|-------|
| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
| f     | 4    | 7     | 16    | 10    | ?     |

4. Fit a straight Line Trand by the method of least squares of the following data :

|                   |      |      |      |      |      |      |      |
|-------------------|------|------|------|------|------|------|------|
| Year              | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| Production (000)8 | 80   | 90   | 92   | 83   | 94   | 99   | 92   |

5. In a game of cards what is the chance that a particular player get all the four kings.

### Section-B

#### ( Short Answer Questions)

Note : Attempt any *two* questions out of the following three questions. Each question carries  $7\frac{1}{2}$  marks.

$$2 \times 7\frac{1}{2} = 15$$

(3)

6. Calculate Trend value by the method of least square from the data given below :

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| Year  | 2001 | 2004 | 2006 | 2007 | 2009 | 2010 | 2012 |
| Value | 75   | 67   | 68   | 65   | 50   | 54   | 41   |

7. Find out coefficient of concurrent deviation from the following data :

|        |      |      |      |      |      |      |      |      |      |
|--------|------|------|------|------|------|------|------|------|------|
| Year   | 1990 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| Supply | 160  | 164  | 172  | 182  | 166  | 170  | 178  | 192  | 186  |
| Price  | 292  | 280  | 260  | 204  | 266  | 254  | 230  | 190  | 200  |

8. From the following data calculate the value of Log 656 by Lagrange method :

Log 654 2.8156                      Log 659 2.8189

Log 658 2.8182                      Log 661 2.8202

### Section-C

#### ( Detailed Answer Questions)

**Note :** Attempt any *three* questions out of the following five questions. Each question carries 15 marks.

$$3 \times 15 = 45$$

9. What are the other measures based on Standard deviation ? What is meant by Time Series ?

18080

[P.T.O.]

(4)

10. Three coins are tossed. simultaneously, What is the probability that there will be exacty two heads.
11. At an examination at which 600 candidate appeared, boy outnumbered girls by 16%, if all candidate number or passed candidate exceed the number of failed candidate by 310 boys failing in the examination numbered 88. Consider the two fold Association table and calculate the coefficient of association between male sex and success at the Examination.
12. Explain the meaning, classification and importance of Tabulation of statistical data. Discuss the different methods of classificaton.
13. The mean of the following frequency table is 25. Find the missing frequencis :

| Class | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | Total |
|-------|------|-------|-------|-------|-------|-------|
| F     | 17   | $F_1$ | 32    | $F_2$ | 19    | 160   |