12. 400 heads and 100 tails resulted from 500 tosses of a coin. Find the limits for expected frequency of head.

13. What do you understand by 'Statistical Quality Control' ? Discuss its aspects and advantages.

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M.I.B.-I Sem.

Roll No. R1709355877

NP-3223

M. I. B. Examination, Dec. 2017

BUSINESS STATISTICS

(MIB-106)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Questions)

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

1. Concept of probability in statistics.

2. Bayes theorem.

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3. Condition of simple sampling.

4. Statistical quality control.

5. Moving-Average Method.

Section-B

(Short Answer Questions)

Answer any *two* questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words. 7½×2=15

6. Find the most likely price in Delhi corresponding to the price of Rs. 70 at Agra from the following data :

	Agra	Delhi
Average Price (Rs.)	65	67
Standard Deviation	2.5	3.5

Coefficient of correlation between the prices of the two places + 0.8.

7. Calculate mode from the following frequency distribution :

Mid-Point :	1	2	3	4	5	6
Frequency :	2	4	10	5	5	3

8. "Average, dispersion, skewness and Kurtosis are complementary to one another in understanding a frequency distribution." Elucidate.

Section-C

(Detailed Answer Questions)

Answer any *three* questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. 15×3=45

9. Calculate arithmetic mean from the following data :

Marks (below) :	10	20	30	40	50	60	70	80	90
No. of students :	20	44	76	104	126	144	182	192	200

10. There are 5 doors in a room. Four persons enter the room. Find the probability of their entering through different doors.

11. Calculate coefficient of correlation between the marks obtained by 10 students in Accountancy and Statistics :

Students :	1	2	3	4	5	6	7	8	9	10
Accountancy :	45	70	65	30	90	40	50	75	85	60
Statistics :	35	90	70	40	95	40	60	80	80	50

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10. There are 4 Engineers and 3 Doctors in a firm. Three persons are put on duty at a time. What is the probability that there are 2 Engineers and 1 Doctor?

11. Calculate coefficient of correlation between the marks obtained by 10 students in Accountancy and statistics:

Students	Accountancy	Statistics
1	45	35
2	70	90
3	65	70
4	30	40
5	90	95
6	40	40
7	50	60
8	75	80
9	85	80
10	60	50

12. A coin is tossed 1,000 times and it falls towards the head 450 times. Is the coin not symmetrical? i.e. Is the coin biased?

13. What is statistical quality control? Explain its main techniques.

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M.I.B. -I Sem.

NP-3223

M.I.B. Examination, Dec.-2018

BUSINESS STATISTICS

(MIB-106)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from all sections as per instructions.

Section - A

(Very Short Answer Questions)

Note : Answer all the **five** questions. Each question carries 3 marks. Very short answer is required not exceeding 75 words.

3×5=15

1. Cyclical Fluctuations.
2. Conditional probability.
3. Sampling Distribution.
4. Central limit theorem.

5. Role of statistical quality control.

Section - B

(Short Answer Questions)

Note : Answer any **two** questions out of the following **three** questions. Each question carries 7½ marks. Short answer is required. 7½×2=15

6. Explain the meaning of correlation and regression and their utility in economic analysis.

7. The distribution of wages in a factory is as follows. Calculate the mode.

Wages (in Rs.)	No. of workers
0-10	6
10-20	9
20-30	10
30-40	16
40-50	12
50-60	8
60-70	7

8. From the following data calculate coefficient of skewness:

Years	Price Index of wheat
1950	83
1951	87
1952	93
1953	104
1954	106
1955	109
1956	118
1957	124
1958	126
1959	130

Section - C

(Detailed Answer Questions)

Note : Answer any **three** questions out of the following **five** questions. Each question carries 15 marks. Answer is required in detail. 15×3=45

9. Find out the missing marks from the following:

Marks	No. of students
10	3
15	6
20	8
x	10
30	7
40	6

(Given : $\bar{X} = 24.5$)

12. Calculate Mean and Median from the following data :

Wages (Rs)	No. of workers	Wages (Rs)	No. of workers
Less than 8	5	32-40	8
Less than 16	12	40 & Above	19
8-24	29	48 & Above	5
24 & Above	31		

13. Calculate Karl-Pearson's coefficient of correlation, taking deviations, from actual mean 52 and 44 of the following data :-

X :	44	46	46	48	52	54	?	56	60	60
Y :	36	40	42	40	?	44	46	48	50	52

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M.I.B. - I Sem.

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NP-3223

M.I.B. Examination, November–2019

BUSINESS STATISTICS

(MIB-106)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from all Sections as per instructions.

Section–A
(Very Short Answer Questions)

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

1. Explain what is meant by 'Central Tendency'.
2. Standard deviation can be negative.
3. Distinguish between dispersion and skewness.
4. Explain Positive and Negative correlation with suitable example.

5. In a batch of 15 students 5 students failed in a test. The marks of 10 students who passed were :-

9 6 7 8 8 9 6 5 4 7

What was the Median of the marks of all the 15 students ?

Section–B
(Short Answer Questions)

Note : Answer any two questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words. 2×7½=15

6. Calculate Karl Pearson's coefficient of skewness of the following data :

Marks (more than) :	0	10	20	30	40	50	60	70
No. of students :	100	90	75	50	20	10	5	0

7. From the data given below, compute the correlation coefficient by the method of concurrent deviations :-

Year :	1995	1996	1997	1998	1999	2000	2001
Supply :	150	154	160	172	160	165	180
Price :	200	180	170	160	190	180	172

8. What do you mean by time series ? Discuss its components and utility in economics.

Section–C
(Detailed Answer Questions)

Note : Answer any three questions out of the following five questions. Each question carries 15 marks. Answer is required in detail. 3×15=45

9. "Statistical quality control is 10 Percent statistics and 90 Percent engineering." Explain it.

10. Distinguish between one-way and two-way analysis of variance.

11. There are 3 bags. Bag I contains 3 white and 5 black balls. Bag II has 5 white and 7 black balls while bag III contains 9 white and 6 black balls. One white ball is drawn from one of the bags. Find the Probability that it is drawn from (i) Bag I, (ii) Bag II and (iii) Bag III.

11. There are 3 bags. Bag I contains 3 white and 5 black balls. Bag II has 5 white and 7 black balls while bag III contains 9 white and 6 black balls. One white ball is drawn from one of the bags. Find the probability that it is drawn from

(i) Bag I (ii) Bag II and (iii) Bag III.

12. Calculate Mean and Median from the following data:-

Wages (Rs)	No. of workers	Wages (Rs)	No. of workers
Less than 8	5	32-40	8
Less than 16	12	40 & above	19
8-24	29	48 & above	5
24 and Above	31		

13. Calculate Karl-Pearson's coefficient of correlation, taking deviations, from Actual mean 52 and 44 of the following data:

x :	44	46	46	48	52	54	?	56	60	60
y :	36	40	42	40	?	44	46	48	50	52

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Roll No. R200935200011

M.I.B.-I Sem.

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NP-3223

M.I.B. Examination, Dec.-2020

BUSINESS STATISTICS

(MIB-106)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from all sections as per instructions.

Section - A

(Very Short Answer Questions)

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

1. Explain what is meant by 'Central Tendency'.
2. Standard deviation can be negative.
3. Distinguish between dispersion and skewness.

4. Explain Positive and Negative correlation with suitable example.

5. In a batch of 15 students 5 students failed in a test. The marks of 10 students who passed were:

   9 6 7 8 8 9 6 5 4 7

   What was the median of the marks of all the 15 students?

Section - B

(Short Answer Questions)

Note : Answer any **two** questions out of the following three questions. Each question carries 7½ marks. Short answer is required not exceeding 200 words. 7½×2=15

6. Calculate Karl Pearson's coefficient of skewness of the following data:

Marks (More than)	No. of student
0	100
10	90
20	75
30	50
40	20
50	10
60	5
70	0

7. From the data give below, compute the correlation coefficient by the method of concurrent deviations:

Year	: 1995	1996	1997	1998	1999	2000	2001
Supply	: 150	154	160	172	160	165	180
Price	: 200	180	170	160	190	180	172

8. What do you mean by time series? Discuss its componets and utility in economics.

Section - C

(Detailed Answer Questions)

Note : Answer any **three** questions of the following five questions. Each question carries 15 marks. Answer is required in detail. 15×3=45

9. "Statistical quality control is 10 percent statistics and 90 percent engineering." Explain its.

10. Distinguish between one-way and two-way analysis of variance.

12. What is Promotion. Explain the importance of promotion in marketing. Explain various factors affecting promotion.

13. "Sound Marketing organisation is the backbone of effective management". Explain this statement?

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Roll No. .....

NP-3222 (CV-III)

M.I.B. Examination, Dec.-2021

Marketing Management

CODE (MIB-105)

Time : 1½ Hours] *[Maximum Marks : 75*

Note : Attempt **all** sections as per given directions.

Section-A

(Very Short Answer Type Questions)

Note : Attempt any **two** questions. Each question carries **7.5** marks. Very short answer is requried not more than 75 words. 2×7.5=15

1. Explain Consumer Markets.

2. Discuss Target Marketing.

3. Why new products fail or succeed?

4. Define Sales Promotion?

5. What is Product Mix in marketing?

Section-B

(Short Answer Type Questions)

Note : Attempt any **one** question out of the following **3** questions. Each question carries **15** marks. Short answer is required not more than 200 words.

$1 \times 15 = 15$

6. Explain the various factors which effect Marketing Environment?

7. Explain the process of New Product Development?

8. Describe different types of channels of distributions.

Section-C

(Detailed Answer Type Questions)

Note : Attempt any **two** questions out of the following 5 questions. Each question carries 22.5 marks. Answer is required in detail.

$2 \times 22.5 = 45$

9. What is the concept of Marketing. Briefly explain the importance of marketing in the Emerging Economy of India?

10. What are the objectives of Market Segmentation? Describe the basis of Consumer Markets.

11. Define Brand and Trademark? Make distinction between Brand and Trademark. Is brand reasonable from the social point of view?