

**Instructions:** 1) This paper contains seven questions.

2) Attempt any five questions.

3) All questions carry equal marks.

**Date:**11/05/2022

**Subject Name:** Foundation of Statistics - I (FoS – I)

**Marks:** 50

**Q:1** What are the types of sampling techniques? Explain them in detail. 10

**Q:2** What are the different types of data and explain them with examples? 10

**Q:3** Find out the standard deviation from the data given below: 10

Class	Frequency
0-10	3
10-20	9
20-30	15
30-40	20
40-50	12
50-60	3

P.T.O

N 243-2

- Q:4 Establish whether there is any relationship between sales and section and interpret the degree of correlation between them. 10

<b>Sales</b>	24	33	38	45	52	68
<b>Sections</b>	3	7	6	12	13	15

- Q:5 Given  $\lambda = 4.2$ , for a Poisson distribution, find 10

- $P(x \leq 2)$
- $P(x \geq 5)$
- $P(x = 8)$

- Q:6 Find out the mean, median, mode from the data given below: 10

<b>Class</b>	<b>Frequency</b>
0-10	3
10-20	9
20-30	15
30-40	5
40-50	2

- Q:7 For a binomial distribution with  $n = 7$  and  $p = 0.2$ , find 10

- $P(x = 5)$
- $P(x > 2)$
- $P(x < 8)$
- $P(x \geq 4)$

N 243-38

APPENDIX TABLE 4(a) VALUES OF  $e^{-\lambda}$  FOR COMPUTING POISSON PROBABILITIES

$\lambda$	$e^{-\lambda}$	$\lambda$	$e^{-\lambda}$	$\lambda$	$e^{-\lambda}$	$\lambda$	$e^{-\lambda}$
0.1	0.90484	2.6	0.07427	5.1	0.00610	7.6	0.00050
0.2	0.81873	2.7	0.06721	5.2	0.00552	7.7	0.00045
0.3	0.74082	2.8	0.06081	5.3	0.00499	7.8	0.00041
0.4	0.67032	2.9	0.05502	5.4	0.00452	7.9	0.00037
0.5	0.60653	3.0	0.04979	5.5	0.00409	8.0	0.00034
0.6	0.54881	3.1	0.04505	5.6	0.00370	8.1	0.00030
0.7	0.49659	3.2	0.04076	5.7	0.00335	8.2	0.00027
0.8	0.44933	3.3	0.03688	5.8	0.00303	8.3	0.00025
0.9	0.40657	3.4	0.03337	5.9	0.00274	8.4	0.00022
1.0	0.36788	3.5	0.03020	6.0	0.00248	8.5	0.00020
1.1	0.33287	3.6	0.02732	6.1	0.00224	8.6	0.00018
1.2	0.30119	3.7	0.02472	6.2	0.00203	8.7	0.00017
1.3	0.27253	3.8	0.02237	6.3	0.00184	8.8	0.00015
1.4	0.24660	3.9	0.02024	6.4	0.00166	8.9	0.00014
1.5	0.22313	4.0	0.01832	6.5	0.00150	9.0	0.00012
1.6	0.20190	4.1	0.01657	6.6	0.00136	9.1	0.00011
1.7	0.18268	4.2	0.01500	6.7	0.00123	9.2	0.00010
1.8	0.16530	4.3	0.01357	6.8	0.00111	9.3	0.00009
1.9	0.14957	4.4	0.01228	6.9	0.00101	9.4	0.00008
2.0	0.13534	4.5	0.01111	7.0	0.00091	9.5	0.00007
2.1	0.12246	4.6	0.01005	7.1	0.00083	9.6	0.00007
2.2	0.11080	4.7	0.00910	7.2	0.00075	9.7	0.00006
2.3	0.10026	4.8	0.00823	7.3	0.00068	9.8	0.00006
2.4	0.09072	4.9	0.00745	7.4	0.00061	9.9	0.00005
2.5	0.08208	5.0	0.00674	7.5	0.00055	10.0	0.00005

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1105N244

Candidate's Seat No : \_\_\_\_\_

IMBA-1 Sem.-2 IMBA (PHM) Examination

Growth Structure of Industries

Time : 2-00 Hours]

May 2022

[Max. Marks : 50

**Instructions: 1) This paper contains seven questions.**

**2) Attempt any five questions.**

**3) All questions carry equal marks.**

<b>Q:1</b>	Define Industrialization and discuss its significance in detail	<b>10</b>
<b>Q:2</b>	Discuss dynamics of Location in detail.	<b>10</b>
<b>Q:3</b>	Discuss problems of Public Sector Unit in Indian Economy.	<b>10</b>
<b>Q:4</b>	Define Small Scale Industry and discuss various problems faced by SSI's	<b>10</b>
<b>Q:5</b>	Write a detailed note on Industrial Policy 1991.	<b>10</b>
<b>Q:6</b>	Define Industrial Sickness and discuss various measures taken by Government to remove Industrial Sickness in Indian Industries.	<b>10</b>
<b>Q:7</b>	Write a note on SIDBI	<b>10</b>

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1105N245

Candidate's Seat No : \_\_\_\_\_

MBA-1 Sem.-2 MBA (BEPF)/MBA (DM)/MBA (EM)/MBA (PPM) Examination

EPF-203/DM-203/EM-203/PP-203

Marketing Management

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

- Instructions** : (1) This paper contains **FIVE** questions.  
(2) All questions are compulsory.  
(3) Question No.2, 3, 4 have internal options.  
(4) Figures in the right side in parenthesis indicate marks.

- Q:1** Discuss Core Marketing Concepts in brief. **10**
- Q:2** Explain in brief The Value Delivery Process and The Value Chain with its Diagram. **10**
- OR**
- Q:2** Write the Marketing Research Process including chart in suitable stages with Example. **10**
- Q:3** Explain The Customer Buying Decision Process with its diagram. **10**
- OR**
- Q:3** Make a note on any Two from the following: **10**  
(1) Brand Equity  
(2) Product Life Cycle  
(3) Competitive Forces under competition  
(4) Meta Market with suitable Example
- Q:4** What is Market Targeting? Discuss its Different Patterns and figures along with Effective Segmentation Criteria. **10**
- OR**
- Q:4** What is Product-Line Length? How to Stretch the Line Length? Explain Product Mix Pricing also. **10**
- Q:5** Attempt any Ten from the Following: **10**
- (1) \_\_\_\_\_ is the father of Modern Marketing.  
a) Abraham Maslow  
b) Lester Wunderman  
c) Peter Drucker

d) Philip Kotler

2) Marketers often use the term \_\_\_\_\_ to cover various groupings of customers.

- a) Buying power
- b) Demographic segment
- c) Market
- d) People

(3) Buying goods and services for further processing or for use in the production process refers to \_\_\_\_\_.

- a) Consumer markets
- b) Government markets
- c) Business markets
- d) International markets

(4) The buying process starts from which one of the following stages in which the buyer recognizes a problem or need.

- a) Need recognition
- b) Information search
- c) Evaluation of alternative
- d) Purchase decision

(5) A firm has decided to localize its products and services to meet local market demands. Which one of the following approaches is a good approach for this segmentation?

- a) Geographic
- b) Demographic
- c) Psychographics
- d) Behavioral

(6) \_\_\_\_\_ marketing means serving a small market not Served by competitions.

- a) Niche
- b) Mega
- c) Meta
- d) None of these

(7) The stage is the product life cycle that focuses on expanding market and creating product awareness and trial is the:

- a) Decline stage

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- b) Introduction stage
  - c) Growth stage
  - d) Maturity stage
- (8) Typically, profit is negative in which stage of the product life cycle?
- a) Growth
  - b) Maturity
  - c) Introduction
  - d) Decline
- (9) Segmentation is the process of:
- a) Dividing the market into homogenous groups
  - b) Selecting one group of consumers among several other groups
  - c) Creating a unique space in the minds of the target consumer
  - d) None of these
- (10) Groups that have a direct or indirect influence on a person's attitudes or behavior is known as \_\_\_\_\_
- a) Reference groups
  - b) Family
  - c) Roles
  - d) Status
- (11) Augmented product contains \_\_\_\_\_.
- a) Basic needs
  - b) Functional characteristics
  - c) Additional benefits
  - d) Expected features
- (12) Demographic segmentation refers to.
- a) The description of the people and the place in society
  - b) The description of the people's purchasing behavior
  - c) The location where people live
  - d) Geographic regions
- (13) \_\_\_\_\_ is the marketing and financial value associated with a brand's strength in a market.
- a) Brand equity
  - b) Brand loyalty
  - c) Branding
  - d) None of these

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(14) \_\_\_\_\_ is the process of creating an image for a product in the minds of targeted customers.

- a) Segmentation
- b) Target marketing
- c) Positioning
- d) None of these

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1105N246

Candidate's Seat No : \_\_\_\_\_

MBA-1 Sem.-2 MBA (DM) Examination

Financial Management

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

- Instructions :**(1) This paper contains **FIVE** questions.  
(2) All questions are compulsory.  
(3) Question No. **2, 3, 4** have internal options.  
(4) Figures in the right side in parenthesis indicate marks.

Q:1 What is Financial Management and explain its objectives? 10

Q:2 What is the meaning of capital structure of a company. Explain Net Income approach under Capital Structure Relevance Theory. 10

OR

Q:2 The following details are provided by the GSP Limited

Equity share capital.	65,00,000
12% Preference Share Capital.	12,00,000
15% Redeemable Debentures.	20,00,000
10% Convertible Debentures.	8,00,000

P.T.O

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The cost of equity capital for the company is 16.30 % and tax rate for the company is 30%.

You are required to calculate the WACC of the company. 10

OR

Q:3 The company issued 5,000 20 % debentures of Rs 100 each at a premium of 10% on 1.4.2010 to be matured on 1.4.2020. The debentures will be redeemed on maturity. Compute the cost of debentures assuming 35% as tax rate. 10

OR

Q:3 The production estimated for next year is 50,000 units. Each unit consume 4 kg of raw material and price of raw material is Rs 10per kg. Management estimate to keep 3 months inventory in stock. Calculate the amount of raw material inventory requirements of the company. 10

Q:4 What are the determinants of Dividend decision. 10

OR

Q:4 What is the meaning of Dividend decision and explain Walter's Model under Dividend relevance theory. 10

Q:5 Define IRR method. Also Calculate the IRR of an investment of Rs 1,36,000 which yields the following cash inflows: 10

Year	Cash inflow
1	30,000
2	40,000
3	60,000
4	30,000
5	20,000

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1105N247

Candidate's Seat No : \_\_\_\_\_

IMBA-1 Sem.-2 IMBA (CSM) Examination

CSM\_BBA\_CC\_106

Growth & Structure of Industry

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

- Instructions :** (1) This paper contains **SEVEN** questions.  
(2) Attempt any five.  
(3) All questions carry equal marks.

- |     |  |    |
|-----|--|----|
| Q:1 | Define Industrialization and Discuss its significance in detail.                           | 10 |
| Q:2 | Discuss Weber's Theory of Location in Detail.  | 10 |
| Q:3 | Discuss the Performance of Private Sector in Indian Economy.                               | 10 |
| Q:4 | Define Small Scale Industry and discuss SIDBI in detail.                                   | 10 |
| Q:5 | Write a detailed note on Industrial Policy 1991.   | 10 |
| Q:6 | Define Industrial Sickness and discuss why Industrial Sickness occur in Indian Industries. | 10 |
| Q:7 | Write a note on SIDC and SFC.  | 10 |
- X —

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1105N248

Candidate's Seat No : \_\_\_\_\_

IMBA-1 Sem.-2 IMBA/IMBA (BEM)/IMBA (FM)/IMBA (HRPA) Examination  
BBA\_CC\_106/BEM\_BBA\_CC\_106/FM\_BBA\_CC\_106/HR\_BBA\_CC\_106

Business Statistics-I

Time : 2-00 Hours]

May 2022

[Max. Marks : 50

- Instructions :** (1) This paper contains SEVEN questions.  
(2) Attempt any five.  
(3) All questions carry equal marks.

**Q:1** Calculate Mean and Coefficient of Variation of both the machine: 10

Class	Machine A	Machine B
485-490	12	10
490-495	18	15
495-500	20	24
500-505	22	20
505-510	24	18
510-515	4	13

**Q:2** Calculate range and inter quartile range of the following data: 10

Consumption (kilowatt hour)	No. of Users
0-10	6
10-20	25
20-30	36
30-40	20
40-50	13

**Q:3** Mr. X and Mr. Y appear in an interview for two vacancies in the same post. The probability of Mr. X's selection is  $1/7$  and that of Mr. Y's selection is  $1/5$ . What is the probability that 10

- both of them will be selected
- None of them will be selected
- At least one of them will be selected

**Q:4** In the manufacturing of cotter pins it is known that 5% of the pins are defective. The pins are sold in boxes of 100 and it is guaranteed that not more than 4 pins will be defective in a box. What is the probability that a box will meet this guarantee? 10  
( $e^{-5}=0.0067$ )

P.T.O

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- Q:5** An aptitude test for selecting officers in a bank was conducted on 1000 candidates. The average score is 42 and standard deviation of score is 24. Assuming normal distribution for the score, find the 10
- a) Number of candidates whose scores exceeds 58.  
 b) Number of candidates whose scores between 30 and 66.  
 ( $Z=0.67=0.2486, Z=0.5=0.1915, Z=1=0.3413$ )

- Q:6** A machine is set to deliver packets of given weight. Ten sample of size 5 each were recorded. Below are given the relevant data: 10

Sample Number	1	2	3	4	5	6	7	8	9	10
Mean ( $\bar{x}$ )	15	17	15	18	17	14	18	15	17	16
Range (R)	7	7	4	9	8	7	12	4	11	5

Calculate the chart limits for mean and R chart and shows it in graph. ( $n=5: A_2=0.58, D_3=0$  and  $D_4=2.115$ )

- Q:7 Multiple Choice Question (MCQ): ( Each of 1 Mark)**

10

- Formula for Median in grouped data.
  - $\frac{n}{4}$  th observation
  - $\frac{\sum f_i x_i}{n}$
  - $L + \frac{\frac{n}{2} - cfi}{fi} \times C$
  - None of the above
- Formula for quartile deviation is \_\_\_\_
  - $\frac{Q_3 + Q_1}{2}$
  - $\frac{Q_3 - Q_1}{2}$
  - $\frac{Q_3 - Q_1}{Q_3 + Q_1}$
  - None of the above
- If  $P(A) = \frac{1}{3}, P(B') = \frac{1}{4}$  and  $P(A \cap B) = \frac{1}{6}$ , then  $P(A \cup B) =$  \_\_\_\_
  - $\frac{3}{4}$
  - $\frac{1}{11}$
  - $\frac{11}{12}$
  - $\frac{1}{3}$
- The standard deviation formula for binomial distribution is \_\_\_\_
  - $np$
  - $npq$
  - $\sqrt{npq}$
  - $nq$

N 248.3

5. As per Poisson distribution, mean \_\_\_\_ Variance.
  - a) Equal
  - b) Greater than
  - c) Lesser than
  - d) Not Equal
6. Aggregate of all the probability is equal to \_\_\_\_
  - a) 0
  - b) 1
  - c) 3
  - d) 10
7. Formula for  $P(A/B) =$  \_\_\_\_
  - a)  $\frac{P(A \cap B)}{P(A)}$
  - b)  $\frac{P(A \cup B)}{P(A)}$
  - c)  $\frac{P(A \cap B)}{P(B)}$
  - d)  $\frac{P(A \cup B)}{P(A)}$
8. If two or more events cannot occur simultaneously in a single trial of an experiment, then such events are called \_\_\_\_
  - a) Mutually Exclusive Event
  - b) Independent Event
  - c) Exhaustive Event
  - d) None of the above
9. C Charts follows \_\_\_\_ distribution.
  - a) Normal Distribution
  - b) Binomial Distribution
  - c) Poisson Distribution
  - d) None of the above
10. Which of the following is not chart for attributes?
  - a) p chart
  - b) np Chart
  - c) R chart
  - d) c Chart

XXX

## MBA-1 Sem.-2 MBA (BI) Examination

BI-203

Corporate Finance

May 2022

Time : 2-00 Hours]

[Max. Marks : 50

- Instructions :** (1) This paper contains **FIVE** questions.  
 (2) All questions are compulsory.  
 (3) Question No. **2, 3, 4** have internal options.  
 (4) Figures in the right side in parenthesis indicate marks.

**Q:1** What is Financial Management and explain its objectives? **10**

**Q:2** What is the meaning of capital structure of a company. Explain Net Income approach under Capital Structure Relevance Theory. **10**

OR

**Q:2** The following details are provided by the GSP Limited

Equity share capital.	65,00,000
12% Preference Share Capital.	12,00,000
15% Redeemable Debentures.	20,00,000
10% Convertible Debentures.	8,00,000

The cost of equity capital for the company is 16.30 % and tax rate for the company is 30%.

You are required to calculate the WACC of the company. **10**

OR

**Q:3** The company issued 5,000 20 % debentures of Rs 100 each at a premium of 10% on 1.4.2010 to be matured on 1.4.2020. The debentures will be

N 249-2

redeemed on maturity. Compute the cost of debentures assuming 35% as tax rate. 10

OR

Q:3 The production estimated for next year is 50,000 units. Each unit consume 4 kg of raw material and price of raw material is Rs 10per kg. Management estimate to keep 3 months inventory in stock. Calculate the amount of raw material inventory requirements of the company. 10

Q:4 What are the determinants of Dividend decision. 10

OR

Q:4 What is the meaning of Dividend decision and explain Walter's Model under Dividend relevance theory. 10

Q:5 Define IRR method. Also Calculate the IRR of an investment of Rs 1,36,000 which yields the following cash inflows: 10

Year	Cash inflow
1	30,000
2	40,000
3	60,000
4	30,000
5	20,000

— X —



## Integ LLB Sem.-7 Examination

IL 402

Media Law

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

**Instructions:**

- a) *Attempt any Three questions*
- b) *Figures to the right indicate marks for each questions*

- Q1. Write Short Notes on:
- a. Difference between and Visual Media and Non Visual Media 10
  - b. Censor Board 10
- Q2. Do Indian Courts recognize the right to privacy? Is there a difference between state actors, celebrities and private figures in their exercise of leading a private life? Are sting operations considered to be violative of a person's privacy? 20
- Q3. 'It is imperative for a Journalist to have a basic knowledge of the Constitution'- Discuss. Discuss the scope of Freedom of Press with reference to Constitution of India. 20
- Q4. "A journalist is the most important unit in a democratic system." Discuss the ethics to be exercised by the journalist in discharging his duties in the light of the above statement. 20
- Q5. Describe the various theories of Media in understanding the importance and functioning of Media for maintaining the democratic setup in a country. 20
- Q6. Explain the ASCI Code for the self Regulation of Advertisement in India with relevant case laws and advertisement wars as examples. 20



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1105N251

Candidate's Seat No : \_\_\_\_\_

Integ LLB Sem.-7 Examination

IL 402 B. Com.

(Hons.) Trademark & Geographical Indica.

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

Instruction: Attempt any **three** questions from the following.

Q.1 Explain in detail the provisions relating to the grounds for the refusal of registration of Trademarks under the Trademarks Act, 1999. [20]

Q.2 Explain in detail the registration process of Trademark provided under the Trademarks Act, 1999 [20]

Q.3 Write notes on: [20]

(a) Historical Development of Trademark Law in India

(b) Certification Mark

Q.4 Explain in detail the concept of Infringement and Passing off and remedies thereto. [20]

Q.5 Discuss the definition of Geographical Indications and also explain the procedure for the registration of Geographical Indications. [20]

Q.6 Discuss in detail the salient features of Geographical Indications Act, 1999. [20]

— X —

Integ LLB Sem.-3 Examination

ILBA 202

Psychology-III

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

*Instructions*

- a) Answer any three questions
  - b) All questions carry equal marks
- 

1. What are adjustment disorders? Elaborate on post-traumatic stress disorder.
2. Elaborate on the concept of correctional psychology.
3. Explain in detail the control question technique and the phases involved.
4. Elaborate on the alternate approaches to detect deception.
5. Explain the notion of treating special population and give detailed understanding on treating offenders with mental illnesses.
6. Explain police psychology in detail.

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1105N253

Candidate's Seat No : \_\_\_\_\_

Integ LLB Sem.-3 Examination

ILBBA 202

O. R. &amp; Q. T.

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

S.NO.	QUESTIONS	MARKS																																	
Q.1	<p>Solve the following transportation problem for minimising the total cost. If possible give alternate solution also.</p> <table border="1"> <thead> <tr> <th rowspan="2">Factory</th> <th colspan="3">Sales Depot</th> <th rowspan="2">Availability</th> </tr> <tr> <th>S1</th> <th>S2</th> <th>S3</th> </tr> </thead> <tbody> <tr> <td>F1</td> <td>7</td> <td>10</td> <td>5</td> <td>90</td> </tr> <tr> <td>F2</td> <td>12</td> <td>9</td> <td>4</td> <td>50</td> </tr> <tr> <td>F3</td> <td>7</td> <td>3</td> <td>11</td> <td>80</td> </tr> <tr> <td>F4</td> <td>9</td> <td>5</td> <td>7</td> <td>60</td> </tr> <tr> <td><b>Requirement</b></td> <td>120</td> <td>100</td> <td>110</td> <td></td> </tr> </tbody> </table>	Factory	Sales Depot			Availability	S1	S2	S3	F1	7	10	5	90	F2	12	9	4	50	F3	7	3	11	80	F4	9	5	7	60	<b>Requirement</b>	120	100	110		18
Factory	Sales Depot			Availability																															
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F4	9	5	7	60																															
<b>Requirement</b>	120	100	110																																
OR																																			
Q.1(A)	What is O.R.? Explain the techniques and tools of O.R.	10																																	
Q.1 (B)	<p>Solve the following Game using dominance property.</p> <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="4">Player 2</th> </tr> <tr> <th>9</th> <th>5</th> <th>12</th> <th>8</th> </tr> </thead> <tbody> <tr> <th rowspan="4">Player 1</th> <th>13</th> <td>9</td> <td>5</td> <td>12</td> <td>8</td> </tr> <tr> <th>4</th> <td>13</td> <td>8</td> <td>19</td> <td>10</td> </tr> <tr> <th>9</th> <td>4</td> <td>9</td> <td>7</td> <td>13</td> </tr> <tr> <th>9</th> <td>9</td> <td>4</td> <td>14</td> <td>8</td> </tr> </tbody> </table>			Player 2				9	5	12	8	Player 1	13	9	5	12	8	4	13	8	19	10	9	4	9	7	13	9	9	4	14	8	08		
				Player 2																															
		9	5	12	8																														
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	9	9	4	14	8																														

P.T.O

Q.2	<p>A project has the following time schedule.</p> <table border="1" data-bbox="359 316 777 701"> <thead> <tr> <th>Activity</th> <th>Duration</th> </tr> </thead> <tbody> <tr> <td>1-2</td> <td>2</td> </tr> <tr> <td>1-3</td> <td>5</td> </tr> <tr> <td>2-4</td> <td>4</td> </tr> <tr> <td>3-4</td> <td>3</td> </tr> <tr> <td>3-5</td> <td>5</td> </tr> <tr> <td>4-6</td> <td>6</td> </tr> <tr> <td>5-7</td> <td>2</td> </tr> <tr> <td>6-7</td> <td>4</td> </tr> </tbody> </table> <p><b>Required:</b></p> <ol style="list-style-type: none"> <li>1) Draw the Diagram.</li> <li>2) Identify the critical path &amp; find the total project duration.</li> <li>3) Determine EFT, EST, LFT, LST and Total float.</li> </ol>	Activity	Duration	1-2	2	1-3	5	2-4	4	3-4	3	3-5	5	4-6	6	5-7	2	6-7	4	18																
Activity	Duration																																			
1-2	2																																			
1-3	5																																			
2-4	4																																			
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3-5	5																																			
4-6	6																																			
5-7	2																																			
6-7	4																																			
OR																																				
Q.2 (A)	<p>Solve the following assignment problem. The data regarding production on different machines are given in the following table.</p> <table border="1" data-bbox="344 1251 1150 1607"> <thead> <tr> <th rowspan="2">Operator</th> <th colspan="4">Machines</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15</td> <td>10</td> <td>12</td> <td>13</td> </tr> <tr> <td>2</td> <td>16</td> <td>9</td> <td>14</td> <td>14</td> </tr> <tr> <td>3</td> <td>13</td> <td>9</td> <td>14</td> <td>12</td> </tr> <tr> <td>4</td> <td>12</td> <td>10</td> <td>11</td> <td>9</td> </tr> <tr> <td>5</td> <td>13</td> <td>14</td> <td>12</td> <td>10</td> </tr> </tbody> </table>	Operator	Machines				A	B	C	D	1	15	10	12	13	2	16	9	14	14	3	13	9	14	12	4	12	10	11	9	5	13	14	12	10	10
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3	13	9	14	12																																
4	12	10	11	9																																
5	13	14	12	10																																
Q.2 (B)	<p>What is the objective of assignment problem? Explain the Hungarian Method in detail.</p>	08																																		
Q.3	<p>A company manufactures two kind of Machines each requiring different manufacturing technique. The Deluxe machine requires 18 hours of labours, 9 hours of testing and yields a profit of rupees 400. The second machine requires 3 hours of labour 4 hours of testing and yields a profit of rupees 200. There are 800 hours of labour and</p>	18																																		

W-253-3

600 hours of testing available each month. A marketing forecast shown the monthly demand for the second machine to be no more than 150. The management wants to know the number of each model to produce monthly that will maximize total profit. Formulate and solve this as a linear programming problem graphically.

OR

Q.3 (A)

Represent the following information in form of a network. Find the expected time of each activity and obtain the critical path.

10

Activity	Time Estimates (Weeks)		
	Optimistic	Pessimistic	Most Likely
1-2	4	9	14
2-3	1	5	18
2-4	8	10	17
3-5	3	6	8
4-5	2	4	5
4-6	3	7	10
5-7	3	7	10
5-8	4	8	9
7-9	4	9	14
8-9	2	6	10
9-10	4	11	18
6-10	4	7	9

**Required:**

- (1) Draw the network.
- (2) Determine the critical Path.

P.T.O

N 253-4

Q.3 (B)	<p>Solve the following transportation problem using</p> <p>(1) North – West Corner rule (2) Least Cost Method.</p> <table border="1" data-bbox="353 454 1211 738"> <thead> <tr> <th rowspan="2">Sales Outlets</th> <th colspan="3">Plants</th> <th rowspan="2">Demand</th> </tr> <tr> <th>P1</th> <th>P2</th> <th>P3</th> </tr> </thead> <tbody> <tr> <td>S1</td> <td>7</td> <td>12</td> <td>9</td> <td>16</td> </tr> <tr> <td>S2</td> <td>8</td> <td>10</td> <td>6</td> <td>10</td> </tr> <tr> <td>S3</td> <td>10</td> <td>9</td> <td>12</td> <td>12</td> </tr> <tr> <td>Supply</td> <td>8</td> <td>11</td> <td>19</td> <td></td> </tr> </tbody> </table>	Sales Outlets	Plants			Demand	P1	P2	P3	S1	7	12	9	16	S2	8	10	6	10	S3	10	9	12	12	Supply	8	11	19		08
Sales Outlets	Plants			Demand																										
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S3	10	9	12	12																										
Supply	8	11	19																											
Q.4(a)	<p>Short Notes (Any three out of Five)</p> <ol style="list-style-type: none"> <li>1) Explain in brief any three Limitation PERT.</li> <li>2) List down the assumption of linear programming.</li> <li>3) What are the types of estimates are taken for the duration of time of activities. Explain in brief.</li> <li>4) Explain Matrix minima Method.</li> <li>5) Write any three advantages of duality.</li> </ol>	09																												
(b)	<p>Objectives or one line answers or true false</p> <ol style="list-style-type: none"> <li>(1) If maximin value = Minimax value then it is said to be that game has no saddle point. True or False.</li> <li>(2) In CPM completion of activity is called event. True of False.</li> <li>(3) List down any two uses of Linear Programming Problem.</li> <li>(4) What is the special case of linear programming problem?</li> <li>(5) Linear programming was introduced for _____ in the year _____.</li> <li>(6) What is the main objective of the assignment problem?</li> <li>(7) If all the elements of a particular column are _____ the corresponding elements of any other column, then that column is dominated by other column.</li> </ol>	07																												

## Integ LLB Sem.-3 Examination

## ILBCom 202

## Statistics

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

Instruction: Write Any Three Question.

Each question considers 20 marks.

Q.1 Maximize the objective function  $Z = 8x + 12y$  subject to the following constraints:

$$x, y \geq 0;$$

$$x + y \leq 9;$$

$$x \geq 2,$$

$$y \geq 3,$$

$$3x + 6y \leq 36$$

Q.2 what is liner programming? Write assumptions and limitations of liner programming.

Q.3. obtain solutions of the following transportation problem three methods.

Origin	Destination				Supply
	P	Q	R	S	
A	15	14	13	12	10
B	16	17	12	14	17
C	5	6	8	7	13
D	3	2	10	1	10
Demand	25	10	11	4	50

P.T.O



N-254-D

Q.4 (a) solve the following assignment problem to minimize the total time.

Operator	1	2	3	4	5
1	10	6	9	6	10
2	6	9	12	11	11
3	11	12	10	13	12
4	10	6	7	8	9
5	13	7	12	13	11
6	8	11	8	10	12

(b) give assignment in the following problem for the maximum profit.

	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>
O <sub>1</sub>	2	3	4	5
O <sub>2</sub>	5	6	7	8
O <sub>3</sub>	6	7	8	9
O <sub>4</sub>	9	8	7	6

Q.5. (A) The cost price of machine is Rs.5000. Its maintenance cost and scrap value at the end of each year is given as follow. When should the machine be replaced?

Year	1	2	3	4	5	6	7	8
Maintenance cost in Rs.	1500	1600	1800	2100	2500	2900	3400	4000
Scrap value in Rs.	3500	2500	1700	1200	800	500	500	500

N254-3

(b) The cost price of an item is Rs.7000. annual operating cost is Rs.300 for the first year and then increases by Rs.1500 every year. After how many years should the item be replaced?

Q.6 (a) The number of days of completing different jobs of a project are given below. Prepare a network of the project and determine critical path. Also find EST, EFT, LST, LFT and float time.

Job	Time
1-2	2
2-3	3
2-4	5
3-5	4
3-6	1
4-6	6
4-7	2
5-8	8
6-8	7
7-8	4

(b) write difference between PERT and CPM.

—X—

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**1105N255**

Candidate's Seat No : \_\_\_\_\_

**LLM Sem.-3 Examination**

**502-E-IPR**

**(International Treaties on IPR)**

**May 2022**

**Time : 2-00 Hours]**

**[Max. Marks : 60**

1. Discuss the International Instruments on Industrial Design. 20
2. Discuss the instruments under Madrid System of International registration of Trademarks. 20
3. Discuss in detail the International Instruments regulating neighboring rights. 20
4. Discuss in detail the International Instruments regulating Integrated Circuit Layout Design under the TRIPS regime. 20
5. Critically evaluate the convention establishing World Intellectual Property Organization. 20
6. Write short note on: 20  
(a) Berne Convention.  
(b) International Instruments regulating Industrial Design .

—X—

## LL.M. Sem.-3 Examination

502 : ECRI

Law of Evidence

May 2022

Time : 2-00 Hours]

[Max. Marks : 60

**Instructions :** (1) All question carry equal marks.

(2) State the same question number in your answer-book which is stated in the question- paper.

(3) Cite authorities in support of your answer.

(4) Attempt any three questions from the following.

- 1 Explain in detail the Recognized forms of the Evidence Prevailing in Indian Judiciary with illustrations and Case Laws.
  - 2 Analytically and critically explain the Terms, - "Fact in Issue", "Relevant Facts" and "Conclusive Proof" with illustrations.
  - 3 Analytically explain the Meaning, Nature and Kinds of "Estoppel" with illustrations and Case Laws.
  - 4 Critically and Analytically explain the Nature, concept and Evidential Value of the "Dying Declaration".
  - 5 Critically and Analytically explain the Presumption as to "Dowry Death" with Case Laws.
  - 6 Critically and Analytically explain the Evidential Value of the Witness and Appreciation of his evidence with illustrations and Case Laws.
-

LLM Sem.-3 Examination

502-E-BL

(Law of Industrial &amp; Intellec. Prop.-II)

Time : 2-00 Hours]

May 2022

[Max. Marks : 60

**INSTRUCTIONS:**

1. Answer any three questions from the following.
2. All questions carry equal marks.

- 1 Discuss in detail the salient features of Patent Co-operation Treaty (PCT). Also explain patent protection procedure under PCT. 20
- 2 Write short notes on: 20
  - A. IP Valuation
  - B. State Biodiversity Board
- 3 Critically analyse the regulation of access to Biological Diversity with reference to Intellectual Property Rights in India in light of decided cases. 20
- 4 Discuss the provisions of Freedom of Speech and Expression with special reference to Intellectual Property Right. 20
- 5 Write Short Notes on: 20
  - A. WIPO Copyright Treaty
  - B. The Evidentiary Problems in action of passing off.
- 6 Write Short notes on: 20
  - A. International and Global patent information retrieval systems
  - B. IPR and Food Security

\*\*\*

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**1105N258**

Candidate's Seat No : \_\_\_\_\_

**LLM Sem.-3 Examination**

**502-E-G**

**(Principles of Transparency Act)**

**May 2022**

**Time : 2-00 Hours]**

**[Max. Marks : 60**

1. Discuss in detail the concept of tortious liability of the Government. 20
2. Critically discuss the Government Contracts. 20
3. Briefly discuss the various fact finding commissions and Inquiry. 20
4. Discuss in detail the need for devolution of adjudication power on administration. 20
5. Discuss in detail the need for accountability and transparency in judiciary. 20
6. Write short note on: 20  
(a) Sovereign Immunity.  
(b) Sale of Government Property.

→ X ←