



DR. B. R. AMBEDKAR OPEN UNIVERSITY

ROAD NO. 46, JUBILEE HILLS, HYDERABAD – 500 033. T.S.

Dear Student,

We are enclosing *TWO* assignments in each course, for *ALL* the *SIX* courses of **THIRD SEMESTER**, of second year, **MBA Programme (2021-22 Batch)**. Please note the following points, while answering these assignments:

1. Writing and submitting the ‘Assignments’ are *compulsory* for the students of MBA Programme. They have a weightage of 30% in each course.
2. You have to submit *BOTH* the assignments together *compulsorily*. You will not be allowed to appear for the year-end examinations of any course, unless you submit both the assignments in time, pertaining to that course.
3. Each assignment carries a *maximum of 15 marks* and you have to score a minimum of 40% marks, i.e., 6 out of 15, to qualify in that assignment. If you fail to score the minimum marks in any assignment, you have to necessarily resubmit that particular uncleared assignment along with the regular/current Batch. Repetition of the same assignment will in no case be allowed.
4. The maximum marks for each course at the semester-end examination are 70 and you have to score a minimum of 40% marks, i.e., 28 out of 70 marks.
5. Division will be awarded on the basis of the aggregate marks obtained in assignments as well as in the semester-end examinations.
6. Dates of submission for the assignments are:

****ASSIGNMENTS SUBMITTED AFTER THE DUE DATE WILL NOT BE ACCEPTED****

7. If, under unavoidable circumstances, you fail to submit the assignments within the stipulated time, your results will be declared only after the submission and evaluation of all the assignments.
8. If any student fails to submit all the assignments within the stipulated time, he/she has to answer the set of assignments that are sent to the Batch in currency/progress at that time.
9. You have to submit your assignments in the same Study Centre to which you are attached.

10. The *first and front page* of your *response sheet* should be in the following format.

Student's Admission No. :
Name of the Student :
Address :
Mobile No. :
E-mail Id. :
Name of the Programme :
Year and Semester :
Course Code and Title :
Assignment No. :
Study Centre (Name & Code) :
Date of Submission :
Signature of the Student :

11. Please go through the relevant course units thoroughly, before answering your assignments.
12. In case the assignment is in figurative/problem-solution model, you have to answer it in the required/pertinent format. You should give *working notes* also, wherever necessary.
13. Before submitting the assignments, check them carefully to make sure that you have attempted all the main points of all the questions asked to answer.
14. You are required to use only *foolscap/A4-size paper* for your responses. Allow '*an inch*' margin on the left, in order to facilitate the evaluator to record his comments.
15. You have to answer the assignments in your own words.
16. Do not copy from the response sheets of other students. If copying is noticed, the assignments of all such students will be rejected.
17. Write each assignment in a separate set of papers/sheets.
18. You can consult your respective course counsellor/s, and get clarification on your doubts, if any, while answering the assignments.
19. The assignment response sheets should be neatly presented with your own hand writing. **Typed or Computerized assignments will not be accepted.**

20. You have to prepare your responses in duplicate (one - *original* and another - *a photocopy*), submit the original hand written one at your Study Centre and retain the second photocopy one with yourself as a record, for your future reference.
21. You can collect back the evaluated assignments from your Study Centre, with a written request, in case you want.
22. In case you give request for a *change in Study Centre*, you should submit your assignments only to the original Study Centre until the University gives effect to such request.
23. Further correspondence should be made only to the below addressee:

**The Director (SSB)
Dr. B.R. Ambedkar Open University
Prof. G. Ram Reddy Marg,
Road No. 46, Jubilee Hills,
HYDERABAD – 500 033. Telangana State.**

*Sd/-
HEAD
DEPT OF BUSINESS MANAGEMENT*



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME
(BATCH: 2021-22)
COURSE – 13: BUSINESS ETHICS AND CORPORATE GOVERNANCE
(THIRD SEMESTER)

ASSIGNMENT – I **(MARKS: 15)**
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) What do you mean by 'Business Ethics'. Explain the factors influencing business ethics. Also discuss the major ethical issues that business facing now-a-days with suitable examples.
b) Discuss the important value systems in Indian society. Examine the relevance of these value systems for business in the present situation.
2. a) Explain the terms 'Ethical Codes, Dilemmas and Dialectics' with the help of examples.
b) Explain the following concepts:
(i) Value-Based Management; (ii) Social Audit;
(iii) Ethical Leadership; & (iv) Ethical Culture.
3. a) Examine briefly the ethical issues involved in marketing, with special focus on advertising.
b) Define 'Intellectual Property Rights'. State the different forms of IPRs. Explain the threats faced by IPR in India.

ASSIGNMENT – II **(MARKS: 15)**
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) "Corporate Governance is of vital significance for the success of any business" – Comment. Also explain the philosophy behind the term 'Corporate Governance'.
b) How are corporate governance and corporate social responsibility related to each other? Discuss with particular reference to Indian companies. Also present the theories of CSR briefly.

2. a) List out various types of directors. Discuss the role, functions and powers of the Board of Directors.
b) In achieving the goal of transparency, write on the role of: (a) Stakeholders and (b) Board of Directors.
3. Analyze the case given below and answer the questions asked at the end:

Special Steel Company Limited (SSCL) is a reputed company and specializes in alloy steel manufacturing in Nagpur. The company turnover is 650 crores in last fiscal and has quality reputation in the market. It entered market in mid-70's and its exports in last year value Rs. 69 crore. Growth rate of the company is 11% and SSCL is looking forward for brown field expansion of its capacities.

SSCL markets its products at competitive prices in all industrial towns in India. The exports are handled from its head office in Nagpur and export division in Mumbai. The domestic marketing is divided in 4 Zones North with its office in Delhi, South Zonal Office in Chennai. Similarly Eastern Zonal Office, Kolkata. Mumbai is Western Zonal Office and also in addition handled exports and imports activities.

The company by practice has established good ethical standards. The standards were by the Chairman of the SSCL - Aravind Jain. The company executives were known for their integrity and hard work and thus taking the company to growth path. Chairman of SSCL was assisted by Board of Directors and Company Secretary.

The functional and full time directors were in the area of Finance, Production, Marketing, HRD and Project. Director Marketing and Director Project used to go on tours frequently to Delhi, Kolkata, Chennai, and Mumbai and to overseas on their work. The tour frequencies were almost weekly. Regular coordination and follow up of activities were done in department and Zonal meetings.

Last Saturday Aravind Jain was following news item on Star News. He was shocked to see news flash that the Marketing Director K. Ram of SSCL was alleged for molestation of a lady employee serving in his office in Mumbai. The Mumbai police were looking for Ram for arresting and further action. Ram was in Delhi on Saturday. Jain telephoned immediately Zonal Manager in SSCL Mumbai and Delhi, so that he can get first-hand information. He was angry that he should get his company information through TV news.

The Zonal Manager, Delhi informed that he was not aware of any Mumbai incident. The Zonal Manager Mumbai was not available in his house in Mulund (a suburb of Mumbai). Even after 2 days there was no news of the whereabouts of the Mumbai Zonal Manager.

TV news on 3rd Day gave that Mumbai police were searching the absconding K. Ram, Marketing Director of SSCL. Newspapers and weekly business magazines published news articles on the

subject. A business weekly gave a story with photographs of K. Ram and the lady employee giving their side of the story.

Ram aged 54, is a marketing wiz-kid and considered good in exports and international negotiations. Son of Ram was in UK as a software engineer. Ram's story gave that the lady employee, a secretary in Mumbai office, did come to his five star hotel room and went away.

The TV story was made up by Competitor Company to tarnish SSCL image. The lady employee contended that she was called by Ram along with Zonal Manager for official work to the hotel. In the hotel room Ram molested her telling that she will be promoted as officer shortly. The lady ran and lodged FIR in police station. The lady was middle aged and has a son going to high school.

The next week TV news said "Ram, Director of SSCL surrenders to Mumbai police. Police took him to custody and produced in Magistrate Court. The court granted bail to Ram".

Questions:

- (1) Discuss the ethical issues of the company involved in this case.
- (2) What is the role of different stakeholders of SSCL while dealing with such issues?
- (3) What actions you suggest that: (a) Jain should take immediately and (b) Policy decisions to stop such recurrences.



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME
(BATCH: 2021-22)
COURSE – 14: STRATEGIC MANAGEMENT
(THIRD SEMESTER)

ASSIGNMENT – I

(MARKS: 15)

ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) What is the Strategic Management? Explain the importance or role of Strategic Management? Is the Strategic Management relevant in the backdrop of the uncertainties and turbulence in business market?
b) Present McKinsey 7S Framework. Also discuss how to build a strategy for competitive advantage with the help of an example.
2. a) What do you mean by ‘Environmental Analysis’? Discuss its role the strategy formulation.
b) Explain the concepts of ‘Value Chain Analysis’, ‘Balanced Scorecard’ and ‘SWOT Analysis’ and their role in organizational analysis.
3. a) Explain the following models:
(i) BCG Matrix; & (ii) GE McKinsey Nine Box Matrix.
b) Examine the role of various techniques of financial analysis in strategic management. Of these techniques, in your opinion, which is the more crucial one? Why?

ASSIGNMENT – II

(MARKS: 15)

ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) Explain the concept of Differentiation Strategy. Illustrate your answer with suitable example. Discuss the conditions under which an organization can attain cost leadership and differentiation simultaneously. How is this achieved?
b) What do you mean by Grand Strategies? State the different types of grand strategies. Discuss how the combination strategies can be adopted sequentially or simultaneously.
2. a) What is ‘Organizational Culture’? How do the changes at individual, group and organizational levels affect the functioning of an organization?
b) Explain the concepts of Strategic Evaluation, Strategic Control and Operational Control. Is the evaluation and control process appropriate for a corporation that emphasizes creativity?

3. Analyze the following case and answer the questions asked at the end:

On March 14, 2000, Stephen King, the horror writer, published his new book – Riding the Bullet – on the Internet before it appeared in print. Within 24 hours, around 4,00,000 people had downloaded the book – even though most of them needed to download the software in order to read the book. The unexpected demand crashed servers.

According to Jack Romanos, President of Simon & Schuster, “I don’t think anybody could have anticipated how many people were out there who are willing to accept the written word in a paperless format”. To many, this announced the coming of the electronic novel.

Environmentalists applauded that e-books would soon replace paper books and newspapers, thus reducing pollution coming from paper mills and landfills.

The King book was easy to download and took less time than a trip to the bookstore. Critics argued that the King book used the Internet because at 66 pages, it was too short to be standard printed novel. It was also free, so there was nothing to discourage natural curiosity. Some people in the industry remarked that 75% of those who downloaded the book did not read it.

Questions:

- a) What are the pros and cons of electronic publishing?
- b) Should newspaper and book publishers convert to electronic publishing over paper?
- c) The Wall Street Journal and others publish in both paper and electronic formats. Has this been a success?
- c) Would you prefer books in an electronic format? Why or why not?
- e) What is the future of internet publishing, particularly in developing countries like India where internet connectivity and bandwidth problems exist?



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME

(BATCH: 2021-22)

COURSE – 15: MANAGEMENT INFORMATION SYSTEMS
(THIRD SEMESTER)

ASSIGNMENT – I

(MARKS: 15)

ANSWER ALL QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

1. a) What do you mean by Decision Support System? Explain the components of DSS. Prepare a comprehensive plan to establish DSS for a mid-sized manufacturing unit.
- b) Explain the concepts of Business Intelligence, Artificial Intelligence and Data Analytics. Examine the emerging trends of AI and their applications in manufacturing and service sectors.
2. a) Write a detailed note on economic and human aspects of MIS. Also explain how to integrate MIS across the organization.
- b) Explain the concept and aim of Transaction Processing System (TPS). Discuss the steps involved in the Transaction Processing Cycle.
3. a) Explain the following terms:
(i) Data Mart; (ii) Data Mining; (iii) ETL; and (iv) OLAP.
- b) What are the components of Information System? Also describe the relationship between the information system and organizational change.

ASSIGNMENT – II

(MARKS: 15)

ANSWER ALL QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

1. a) List and explain the steps in the prototyping process. Also discuss how prototyping is different from the SDLC.
- b) Narrate briefly various techniques used to evaluate MIS.
2. a) List out different types of cyber crimes. Also explain various procedures normally adopted for information security.
- b) What is Marketing Information System? What are its sub-systems? Explain the use of marketing information for the success of an organization.
3. a) Write a note on the concept, merits and demerits of Accounting and Finance Information Systems.
- b) Analyze the following case and answer the questions asked at the end:

The director of information systems of a major engineering firm is pondering whether to break apart and totally reconfigure his computer operations centre. At present, a single large computer supports the company's batch and online systems. Workloads are quite erratic and in the past year long response time delays on the online systems, combined with batch schedules, have put him under considerable pressure to provide more responsive service.

Questions:

- (a) Suggest several alternative hardware configurations and evaluate them in terms of both overall efficiency and responsiveness to user needs.
- (b) What other actions might be taken to improve responsiveness to user needs without reconfiguring the hardware?



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME
S
(BATCH: 2021-22)
COURSE – 16: ENTREPRENEURSHIP DEVELOPMENT
(THIRD SEMESTER)

ASSIGNMENT – I **(MARKS: 15)**
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) Explain the concepts of Entrepreneur, Intrapreneur, Promoter and Manager. Also discuss the social factors influencing the entrepreneurship development in a country like India.
b) What do you mean by Ease of Doing Business? Also examine the role of entrepreneurship in the economic development of a nation, with special to Indian economy.
2. a) Explain any one economic theory and any one psychological theory of entrepreneurship. Select any successful entrepreneur of your choice (other than the ones given in the material) and briefly present his / her success story.
b) Present Peter F. Drucker's views on entrepreneurship with examples. List out two innovative products introduced recently in the market and comment on their usefulness to the common man.
3. a) Explain the following concepts:
(i) Effectuation; (ii) Disruptive Technology; (iii) Crowd Funding;
(iv) Messanine Finance; and (v) Corporate Bonds.
b) Examine the role of Venture Capitalist and Angel Investor in promoting entrepreneurship.

ASSIGNMENT – II **(MARKS: 15)**
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) State and explain the steps involved in the preparation of DPR. Assume that you want to become an entrepreneur. Prepare a DPR for your proposed project.
b) Explain the following concepts with the help of examples (other than ones given in the course material):
(i) Franchising; (ii) Product Extension Merger; (iii) Hostile Takeover;
(iii) Reverse Takeover; and (v) Functional-Based Joint Venture.

2. a) Elaborate the growth and working of Start-Ups. Also explain the three pillars of the Action Plan of Start-Ups and also the future of Start-Ups.
b) Examine the need for organizing EDP programmes for women entrepreneurs in India. Also explain the promotional activities taken by the Government towards development of women entrepreneurs.
3. Analyze the case given below and answer the questions asked at the end:

Retail Entrepreneurship Development in India: A Case Study of Big Bazaar

The Indian retail industry has strong linkages with the economic growth and development of the economy. India is one of the largest emerging markets. It is one of the largest economies in the world in terms of purchasing power. Retailing in India is at an emerging stage of its evolution. Organized retailing has become more popular in big cities in India and most of the metropolitan cities and other big cities are flooded by modern organized retail stores. Many semi-rural areas have also witnessed entry of such organized retail outlets. Indian retail industry is currently estimated at US\$ 490 billion. India's retail market is expected to touch a whopping Rs 47 trillion (US\$ 782.23 billion) by 2016-17, expanding at a compounded annual growth rate (CAGR) of 15 percent, according to a study by a leading industrial body. The total organized retail supply in 2013 stood at approximately 4.7 million square feet (sq.ft), witnessing a strong year-on-year (y-o-y) growth of about 78 percent over the total mass supply of 2.5 million sq. ft. in 2012. The foreign direct investment (FDI) inflows in single-brand retail trading during the period April 2000-January 2014 stood at US\$ 98.66 million. Retailing as a whole contributes almost 14-15% of India's GDP and employs almost 8% of India's employable population.

Big Bazaar is credited with bringing organized mega retailing to India. The project was conceived as a uniquely Indian hypermarket in a format that combined the look, touch and feel of Indian bazaars with the comfort, convenience and quality that modern retailing brings. Launched in August 2001, Big Bazaar has now become the iconic destination of modern retailing for all sections of Indian consumers. There are more than hundred Big Bazaar stores in big cities as well as smaller towns like Sangli, Durgapur, Panipat, Palakkad, Ambala, Meerut, Kolhapur and Haldia. Attracting over 100 million customers every year, it has democratized shopping in India and become synonymous with great promotions that offer quality products at affordable prices. This typical Big Bazaar store offers over 1,60,000 products across categories like apparel, general.

Questions:

- a) What are the entrepreneurial opportunities you can find in retail sector in India?
- b) How organized retailing has become more popular in big cities in India?
- c) How Big Bazaar retail store would retain its business in today's competitive world among retail firms?



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME
(BATCH: 2021-22)
COURSE – 17: OPERATIONS RESEARCH
(THIRD SEMESTER)

ASSIGNMENT – I **(MARKS: 15)**
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) (i) What do you mean by ‘Operations Research’? Explain various applications and limitations of OR.

(ii) A company is making two products A and B. The cost of producing one unit of product A and B is Rs. 60 and Rs. 80 respectively. As per agreement, the company has to supply at least 200 units of product B to its regular customers. One unit of product A requires one machine hours whereas product B has machine hours available abundantly within the company. Total machine hours available for product A are 400 hours. One unit of each product A and B requires one labour hour each and total of 500 labour hours are available. The company wants to minimize the cost of production by satisfying the given requirements. Formulate the problem as a LPP.

b) (i) Solve the following linear programming problem graphically:

$$\text{Maximize } Z = 200X + 500Y$$

Subject to constraints

$$X + 2Y \geq 10$$

$$3X + 4Y \leq 24$$

$$X, Y \geq 0.$$

(ii) A company makes two kinds of leather belts – Belt A and Belt B. Belt A is a high quality belt and belt B is of lower quality. The respective profits are Rs. 4 and Rs. 3 per belt from Belts A and B respectively. The production of each of type A requires twice as much time as a belt of type B, and if all belts were of type B, the company could make 1,000 belts per day. The supply of leather is sufficient for only 800 belts per day (both A and B combined). Belt A requires a fancy buckle and only 400 of these are available per day. There are only 700 buckles a day available for belt B.

What should be the daily production of each type of belt? Formulate this problem as an LP Model and solve it using the Simplex Method.

2. a) (i) A firm manufactures two products in three departments. Product A contributes Rs. 5/- per unit and requires 5 hours in department M, 5 hours in Department N and one hour in department P. Product B contributes Rs. 10/- per unit and requires 8 hours in department M, 3 hours in Department N and hours in department P. Capacities for departments M, N, P are 48 hours per week. Find the optimal product mix using Simplex Model.

(ii) Discuss the role of Sensitivity Analysis in linear programming. Under what circumstances is it needed, and under what conditions do you think it is not necessary?

b) (i) Determine an initial basic feasible solution to the following transportation problem by using (a) NWCM, (b) LCM, and (c) VAM:

Source	Destination–D ₁	Destination–D ₁₂	Destination–D ₁₃	Destination–D ₄	Supply
A	11	13	17	14	250
B	16	18	14	10	300
C	21	24	13	10	400
Demand	200	225	275	250	---

(ii) A manufacturer has distribution centres located at Agra, Allahabad and Kolkata. These centres have available 40, 20, and 40 units of his product. His retail outlets at A, B, C, D and E requires 25, 10, 20, 30 and 15 units of the product, respectively. The shipping cost per unit (in rupees) between each centre an outlet is given in the following table:

Distribution Centre	Retail Outlet A	Retail Outlet B	Retail Outlet C	Retail Outlet D	Retail Outlet E
Agra	55	30	40	50	40
Allahabad	35	30	100	45	60
Kolkata	40	60	95	35	30

Determine the optimum shipping cost.

3. a) (i) A sales person travels from one city to another city. The distance between pairs of cities is given below:

From	To - A	To - B	To - C	To - D
A	0	15	25	20
B	22	0	45	55
C	40	30	0	25
D	20	26	38	0

Suggest an optimal route to the sales person, which enables him to visit each of the cities only once at the minimum total distance travelled.

(ii) A company has 4 territories and four salesmen for assignment. The territories are not equally rich in their sales potential. It is estimated that a typical salesman operating in each territory would bring the following annual sales:

Territory	I	II	III	IV
Annual Sales (Rs.)	60000	50000	40000	30000

The four salesmen are also considered to differ in ability, it is estimated that working under same condition their yearly sales could be proportionately as follows:

Sales Man	A	B	C	D
Proportion	0.7	0.5	0.5	0.4

If a criterion is to maximize expected sales, the intuitive answer is to assign the best salesman to the richest territory and next best to second richest and so on. Verify this answer by assignment technique.

b) (i) Solve the following LP Problem:

$$\text{Maximize } Z = 6x_1 + 4x_2$$

Subject to the constraints

$$(i) 2x_1 + 3x_2 \leq 30, \quad (ii) 3x_1 + 2x_2 \leq 24, \quad (iii) x_1 + x_2 \geq 3$$

$$\text{and } x_1, x_2 \geq 0.$$

(ii) Determine the symmetric dual of the program:

$$\text{minimize } z = 5x_1 + 2x_2 + x_3$$

$$\text{subject to: } 2x_1 + 3x_2 + x_3 \geq 20$$

$$6x_1 + 8x_2 + 5x_3 \geq 30$$

$$7x_1 + x_2 + 3x_3 \geq 40$$

$$x_1 + 2x_2 + 4x_3 \geq 50$$

with: all variables non-negative.

ASSIGNMENT – II
ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

(MARKS: 15)

1. a) (i) Define Queuing Model. Explain the assumptions involved in queuing models.

(ii) Patients are scheduled for a certain test at a clinic every 5 minutes, beginning at 9.00 A.M. The test takes exactly 8 minutes to complete and is normally administered by a single doctor hired for this purpose. Whenever three or more patients are in the waiting room, a second doctor at the clinic also administers the test, and continues to do so until the waiting room is empty upon his completing a test. At that point, this second doctor takes up his previous duties until his services are required again. (a) At what time does the second doctor first begin administering tests and when does he first stop? (b) What is the average number of patients in the waiting room 9.00 to 10.00 A.M.? (c) What is the average number of patients in the clinic from 9.00 to 10.00 A.M.?

b) (i) A game is played using two regular numbered six faced dice. In every trial the player rolls the dice together. If the sum of the faces turned up is a multiple of three, the player wins and becomes eligible for a sum of Rs. 5/-. In each trial the player has to pay Rs. 2/-. Using the following random streams simulate the faces turned up in each die for ten trials each. Count the net gain of the player at the end of the game.

Die 1: 0.577, 0.206, 0.969, 0.525, 0.509, 0.037, 0.454, 0.708, 0.930, 0.506.

Die 2: 0.997, 0.005, 0.563, 0.303, 0.888, 0.668, 0.089, 0.211, 0.959, 0.435.

(ii) Define the term ‘Simulation’. Explain the merits and demerits of simulation.

2. a) (i) A firm has a single channel service station with the following arrival and service time probability distributions:

Inter-arrival Time	Probability	Service Time (minutes)	Probability
10	0.10	5	0.08
15	0.25	10	0.14
20	0.30	15	0.18
25	0.25	20	0.24
30	0.10	25	0.22
		30	0.14

The customer’s arrival at the service station is a random phenomenon and the time between the arrivals varies from 10 to 30 minutes. The service time varies from 5 minutes to 30 minutes. The queuing process begins at 10.00 A.M. and proceeds for nearly 8 hours. An arrival immediately, goes to the service facility if it is free. Otherwise, it waits in a queue. The queue discipline is first-come first-served.

If the attendant’s wages are Rs.20 per hour and the customer’s waiting time costs Rs.15 per hour, then would it be an economical proposition to engage a second attendant? Answer using Monte Carlo Simulation Technique.

(ii) What is pay-off table? A departmental store buys Christmas cakes in the lots of 50 only. Each piece of cake costs Rs.10 is sold at Rs.25. Unsold cakes are total loss to the store. The probability distribution of the possible demand for the cakes based on the past experience is as follows:

Demand	50	100	150	200
P (Demand)	20%	40%	30%	10%

Prepare a pay-off table for the profit earned.

b) (i) A businessman has to independent investment portfolios A and B, available to him, but he lacks the capital to undertake both of them simultaneously. He can either choose A first and then stop, or if A is not successful, then take B or vice versa. The probability of success of A is 0.6, while for B it is 0.4. Both investment schemes require an initial capital outlay of Rs.10,000 and both return nothing if the venture proves to be unsuccessful. Successful completion of A will

return Rs.20,000 (over cost) and that of B will return Rs.24,000 (over cost). Draw a decision tree in order to determine the best strategy.

(ii) Give any two examples of replacement of items that fail suddenly. A firm is thinking of replacing a particular machine whose cost price is Rs.12,200. The scrap price of this machine is only Rs.200. The maintenance costs are found to be as follows:

Year	1	2	3	4	5	6	7	8
Maintenance Cost	220	500	800	1200	1800	2500	3200	4000

Determine when the firm should get the machine replaced.

3. a) (i) Solve the following problem by using Branch-and-Bound Algorithm:

$$\text{maximize: } z = x_1 + 2x_2 + x_3$$

$$\text{subject to: } 2x_1 + 3x_2 + 3x_3 \leq 11$$

with: all variables non-negative and integral.

(ii) Define 'Dynamic Programming'. A manufacturing firm producing refrigerators has given a contract to supply 50 units at the end of the first month, 50 at the end of the second month, and 50 at the end of the third. The cost of producing 'X' number of refrigerators in any month is given by X^2 . The firm can produce more number of refrigerators in any month and carry them to the next month. However, a holding cost of Rs.20 per unit is charged for any refrigerator carried over from month to the next. Assuming there is no initial inventory, determine the number of refrigerators to be produced in each month so as to minimize the total cost, using Dynamic Programming Approach.

b) (i) What is meant by Quadratic Programming? How does a quadratic programming problem differ from a linear programming problem? Explain with the help of an example.

(ii) What is Goal Programming? Clearly state its assumptions. Explain the conditions require that a GP model rather than an LP model be used to solve a decision problem?



DR. B.R. AMBEDKAR OPEN UNIVERSITY
DEPARTMENT OF BUSINESS MANAGEMENT
MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAMME
(BATCH: 2021-22)
COURSE – 18: INTERNATIONAL BUSINESS
(THIRD SEMESTER)

ASSIGNMENT – I

(MARKS: 15)

ANSWER ALL QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

1. a) What is 'International Business'? State the constituents of international business environment. Also discuss the impact of technological and socio-cultural environment on international business with the help of examples.
b) Discuss the constraints in globalization of business. Also analyze the implications and impact of globalization on Indian economy.

2. a) Explain the concept of Country-Risk Analysis. What are the causes of political risk that may impact a firm? What are the different means adopted by companies to deal with political risks in international business?
b) Explain different Exchange Rate Systems. The Monetary Policy is the policy formulated by the central bank. Reserve Bank of India (RBI) in India regulates the money supply in the country to change the cost of credit in the economy. On 5th December 2019, the RBI released its fifth bi-monthly Monetary Policy Statement for 2019-20 in which the Monetary Policy Committee led by Shri Shaktikanta Das, Governor, decided to keep the policy Repo Rate unchanged at 5.15%. In 2019, the RBI has cut Repo Rate by 135 basis points so far to a nine-year low of 5.15%. What is the impact of low repo rates on the industry?

3. a) Define the term 'Balance of Payments'. What do you mean by Disequilibrium in the Balance of Payments? Explain the causes of disequilibrium in the Balance of Payments.
b) Define the term 'Dumping'. Explain various types of dumping. Examine the impact of dumping by China and East Asian countries on Indian industry and agriculture.

ASSIGNMENT – II

(MARKS: 15)

ANSWER ALL QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

1. a) Explain the role of foreign investment in the economic growth of India. Also discuss the regulations for investing in Indian companies.
b) Explain the following terms and their role in international business:
(i) TRIPS; (ii) TRIMS; & (iii) GATS.
2. a) What is 'Countertrade'? Give a brief account of the reasons for the growth of countertrade. Is countertrade desirable?
b) Define the term of 'Block-Chain Technology'. Discuss the use of Block-Chain Technology in international business. Take an example each from manufacturing and service sectors and explain.
3. Analyze the case given below and answer the questions asked at the end:

***Basmati* is aromatic rice grown in Northern India and Pakistan.**

In September, 1997, Rice Tec., a small food technology company based in Texas, United States, was granted a patent by the US patent office to call an aromatic rice variety developed in USA *Basmati*. India challenged the case, arguing that *Basmati* is a unique aromatic rice grown in Northern India, and not a name Rice Tec could claim. In fact, only inventions can be patented. Consequently, the US patent office accepted India's basic position, and Rice Tec had to drop 15 of the 20 claims that it had made. Of the remaining claims, Rice Tec managed to evolve three new varieties of rice for which it got a patent from United State Patent and Trademarks Office (USPTO), as India had not objected to these. The ruling has not handed over Rice Tec the *Basmati* brand. Rather, it provides it a patent for superior three strains of *Basmati* developed by cross-breeding a Pakistani basmati with a semi-dwarf American variety.

According to the WTO Agreement, geographical indications like *Basmati* can be legally protected and their misuse can be thus prevented. The unfortunate thing is that Government of India has not taken timely steps for protecting our geographical indications and bio-diversity. Although a Geographical Indication of Goods Bill was introduced in Indian Parliament in 1999, even at the end of 2001, it had not become an Act.

Questions:

- a) Can any of the following, viz., turmeric, neem and the name *Basmati* be patented? Substantiate your answer.
- b) Evaluate the role played by Government of India in preventing the misuse of the name *Basmati*.
