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II Semester M.B.A. Degree Examination, October 2020
(CBCS) (2014 – 15 & Onwards)
MANAGEMENT
Paper – 2.6 : Quantitative Techniques and Operations Research

Time : 3 Hours

Max. Marks : 70

SECTION – A

Answer **any five** of the following questions. **Each** question carries **five** marks. **(5×5=25)**

1. Explain how OR is applicable in the field of production management and research and development.
2. Define game theory. Explain the application of the game theory in business.
3. Calculate the total elapsed time and idle time from the information given below :

		Jobs						
		A	B	C	D	E	F	G
Machines	M_1	3	8	7	4	9	8	7
	M_2	4	3	2	5	1	4	3
	M_3	6	7	5	11	5	6	12

4. A manufacturing company keeps stock of a special product. Previous experience indicates the daily demand as given below :

Daily Demand	:	5	10	15	20	25	30
Probability	:	0.01	0.20	0.15	0.50	0.12	0.02

Based on the random number simulate the product for next 12 days, 25, 39, 65, 76, 12, 05, 73, 89, 19, 49, 14, 95. Also find the daily average demand for that product.

5. Solve the following LPP Graphically

Minimize $Z = 20X + 40Y$

Subject to $6x + y \geq 18$

$x + 4y \geq 12$

$2x + y \geq 10$

and $x, y \geq 0$.

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6. Discuss the meaning and uses of the queuing theory in business.
7. Solve the following assignment problem in order to minimize the total sales.

		Territories				
		I	II	III	IV	V
Salesman	A	10	15	17	14	14
	B	6	18	10	12	16
	C	12	5	13	13	6
	D	8	11	16	10	12

SECTION – B

Answer **any three** of the following questions. **Each** question carries **ten** marks. **(3×10=30)**

8. Discuss the different models used in OR.
9. From the following information. Draw a network diagram and determine earliest, latest times and floats.

Activity :	1 – 2	1 – 3	2 – 3	2 – 5	3 – 4	3 – 6	4 – 5	4 – 6	5 – 6	6 – 7
Duration : (in days)	15	15	3	5	8	12	1	14	3	14

10. Solve the following transportation problem in order to minimize cost using
    a) North-west corner rule
    b) Lowest cost entry method.

	Sales Agency				
Factory	**1**	**2**	**3**	**4**	**Capacity**
A	7	5	6	4	10
B	3	5	4	2	15
C	4	6	4	5	20
D	8	7	6	5	15
Monthly Requirements	8	12	18	22	

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11. The following mortality rates have been observed for a certain types of fuses.

Week	:	1	2	3	4	5
% failing by the end of week	:	5	15	35	75	100

There are 1000 fuses in use and it costs Rs. 10 to replace on individual fuse. If all fuse were simultaneously it would cost Rs. 2 per fuse. At what intervals the groups replacement should be done ? Which policy is better ?

SECTION – C

12. **Compulsory.** **(1×15=15)**

You are beginning a new Company. Explain which OR techniques you will use to forecast demand for your product i.e., ready made branded shirts. You have bought machinery for manufacturing the shirts. Discuss the methods for replacing the machinery and to find out when replacing is needed. Explain the technique required to find out the idle time of the machine. If you are manufacturing the shirts as a project, explain the technique used to find the critical path. If you have established 4 warehouses in the different geographic locations of India and would like to transport your product to different retail locations, which OR technique is useful ? In making various management decisions, can you use any other OR techniques ? All your answers should be illustrated with examples. Draw columns and actual diagrams to illustrate your answers.

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PG – 288

II Semester M.B.A. Degree Examination, October 2020
(CBCS Scheme)
(2014-15 and Onwards)
MANAGEMENT
Paper – 2.5 : Financial Management

Time : 3 Hours Max. Marks : 70

SECTION – A

Answer **any five** of the following, **each** question carries **five** marks. **(5×5=25)**

1. Explain the financial goals of a firm.
2. Discuss the factors determining working capital of a firm.
3. Explain the stages of venture capital. How is venture capital important in a business ?
4. A company offers 14% rate of interest on deposits. What is the effective rate of interest if the compounding is done (i) half yearly and (ii) monthly ?
5. From the following information, calculate the percentage of change in earnings per share, if sales are increased by 5% :

	(₹ lakhs)
Earnings Before Interest and Tax (EBIT)	1,120
Profit Before Tax (PBT)	320
Fixed cost	700

6. The current price of company share is ₹ 95 and dividend per share is ₹ 6. Calculate the dividend growth rate if its capitalisation rate is 14%.
7. Determine which of the following two mutually exclusive projects should be selected if they are :
   i) one-off investments, or
   ii) if they can be repeated indefinitely.

	Project	
	A	B
Investment (₹)	40,000	60,000
Life	4 years	7 years
Annual net cash inflows (₹)	15,000	16,000
Scrap value (₹)	5,000	3,000

Cost of capital is 15%. Ignore taxation. The present value of annuity for 4 years and 7 years at 15% respectively 2.8550 and 4.1604 and the discounting factors at 4 years and 7 years respectively are 0.5718 and 0.3759.

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SECTION – B

Answer **any three** of the following, **each** question carries **ten** marks. **(10×3=30)**

8. Explain the role of finance manager in Indian public sector undertakings and the challenges faced by him.

9. What is dividend policy ? Explain the factors influencing dividend policy of a company.

10. A company's capital structure consists of the following :

	₹
Equity share of ₹ 100 each	20 lakhs
Retained earnings	10 lakhs
9% preference shares	12 lakhs
7% debentures	8 lakhs
Total	**50 lakhs**

The company earns 12% on its capital. The Income tax rate is 50%. The company requires a sum of ₹ 25 lakhs to finance its expansion programme for which the following alternatives are available to it :

i) Issue of 20,000 equity shares at a premium of ₹ 25 per share

ii) Issue of 10% preference shares

iii) Issue of 8% debentures.

It is estimated that the P/E ratios in the cases of equity, preference and debenture financing would be 21.4, 17 and 15.7 respectively.

Which of the three financing alternatives would you recommend and why ?

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11. A company newly commencing business in 2017 has the under mentioned projected P & L A/c.

	₹	₹
Sale		
Cost of goods sold		42,00,000
Gross profit		30,60,000
Administrative expenses	3,00,000	11,40,000
Selling expenses	2,40,000	5,40,000
Profit before tax		6,00,000
Provision for taxation		2,00,000
Profit after tax		**4,00,000**
The cost of goods sold has been arrived at as under		
Materials used		16,80,000
Wages and manufacturing expenses		12,50,000
Depreciation		4,70,000
		34,00,000
Less : Stock of finished goods (10% of goods produced not yet sold)		3,40,000
		30,60,000

The figures given above relate only to finished goods and not to work in progress. Goods equal to 15% of the year's production (in terms of physical units) will be in process on the average requiring full materials but only 40% of the other expenses. The company believes in keeping material equal to two months consumption in stock.

All expenses will be paid one month in arrear, suppliers of material will extend $1\frac{1}{2}$ month credit; sales will be 20% for cash and the rest at two month's credit; 90% of the income tax will be paid in advance in quarterly installments. The company wishes to keep ₹ 1,00,000 in cash.

Prepare an estimate of the requirement of

i) Working capital (total basis) and

ii) Cash cost of working capital.

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SECTION – C

12. Case study **(compulsory)** : **(15×1=15)**

A company is considering a proposal to purchase a new equipment. The equipment would involve a cash outlay of ₹ 4,00,000 and working capital of ₹ 50,000. The expected life of the project is 5 years without any salvage value. Assume that the company is allowed to charge depreciation on straight line basis for income tax purpose. The estimated before tax cash inflows (earnings before depreciation of tax) are given below :

Year	:	1	2	3	4	5
EBD & T	:	1,60,000	2,00,000	1,70,000	1,50,000	1,20,000

The applicable income tax rate to the company is 35%, the opportunity cost of capital of the company is 10%.

You are required to calculate

1) NPV 2) Discounted payback 3) IRR

The PV factors at 10%, 13% and 15% are given as below :

Year	1	2	3	4	5
PV factor@					
10%	0.909	0.826	0.751	0.683	0.621
13%	0.885	0.783	0.693	0.613	0.543
15%	0.870	0.756	0.658	0.572	0.497

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II Semester M.B.A. Degree Examination, October 2020
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(2014 – 15 and Onwards)
MANAGEMENT
Paper – 2.4 : Human Capital Management

Time : 3 Hours Max. Marks : 70

SECTION – A

Answer **any five** of the following questions. **Each** question carries **5** marks. **(5×5=25)**

1. Explain the operative functions of human resources management.
2. Discuss the process of job evaluation.
3. What are the different types of transfer ?
4. What are the consequences of industrial disputes ?
5. What are the causes for poor employee relations ?
6. Mention any five objectives of HRD.
7. Explain the functions of Trade Unions.

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SECTION – B

Answer **any three** of the following. **Each** question carries **10** marks. **(3×10=30)**

8. Explain the contemporary issues and practices in HRM.
9. What are the processes of training ? Explain any two methods of training.
10. Discuss "recent trends in compensation management".
11. Discuss the various factors affecting human resource planning. Suggest guidelines for effective human resource planning.

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PG – 287

SECTION – C

(Compulsory)

12. Case study. **(1×15=15)**

Mr. Arun a middle aged man was hired by the administration manager because of his administrative background. He was given charge of running the company canteen of administering welfare services such as transport, sports activities and medical facilities. He was to report to the administration manager not only for larger policy matters, but also for operational matters. In the course of his service, his integrity and honesty was established beyond questions. However he kept on referring every detail to the administration manager, who had actually hired Mr. Arun to relieve himself of his workload. In fact the administration manager had delegated much of his powers, including negotiation with the canteen suppliers: Mr. Arun however, had his own way of doing his job. He also had the habit of giving his unsolicited advice to his peers and superiors, particularly. The latter, as to how and what they should be doing, instructions given to him were selectively carried – out. Yet he runs to his superior, even for trivial matters more often than not.
The administrative manager gave him 'poor' rating.

Questions :

a) How would you communicate the poor performance to Mr. Arun ?

b) If you were Mr. Arun, how would you react to the situation ?

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PG – 286

II Semester M.B.A. Degree Examination, October 2020
(CBCS) (2014-15 and Onwards)
MANAGEMENT
Paper – 2.3 : Entrepreneurship and Ethics

Time : 3 Hours Max. Marks : 70

***Instruction** : Answer **all** Sections.*

SECTION – A

Answer **any five** questions, **each** question carries **5** marks. **(5×5=25)**

1. What are the qualities of good entrepreneur ? Explain.
2. Explain the factors affecting the growth of entrepreneurship in India.
3. What are the business opportunities to new entrepreneurs in India ? Explain.
4. What are the challenges new Start-ups face in India ? Explain.
5. What is feasibility analysis of Industry ? Explain with an example.
6. Write a brief note on patents and copyrights.
7. What is social entrepreneurship ? Explain its significance in India.

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SECTION – B

Answer **any three** questions, **each** question carries **ten** marks. **(10×3=30)**

8. What is business plan ? Explain its contents as you are presenting it for project funding.
9. What do you understand by legal structure of entrepreneurial organisations ? Explain different forms of legal structure.
10. How is ethics relevant to today's businessman ? Explain with reasons.
11. What is CSR ? How can an enterprise demonstrate corporate citizenship through CSR ? Explain.

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PG – 286

SECTION – C

Compulsory question. **(15×1=15)**

12. On the go shoe dressing Pvt. Ltd.

Four MBA students have came together to start a new venture "on the go shoe dressing Pvt. Ltd." They have developed an automatic coin operated shoe polishing machine which can be installed at various commercial outlets and junctions on franchise model where in it will be maintained and run by the franchisee for some franchise fees. All the consumables will be supplied by the company. They have patented the product as well.

Initially they want to manufacture 100 machines and get them installed in various locations in Bangalore as a pilot case. For this they need an investment of 6.50 lakhs and are looking for potential investors.

They are approaching you seeking advice on various fronts :

a) As an advisor evaluate the above opportunity and give your remarks.

b) Prepare a marketing plan for the above venture.

c) Suggest them to how they can raise the required capital. Help them in preparing a funding plan.

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PG – 285

II Semester M.B.A. Degree Examination, October 2020
(CBCS Scheme)
(2014 – 15 & Onwards)
MANAGEMENT
Paper – 2.2 : Managerial Research Methods

Time : 3 Hours Max. Marks : 70

SECTION – A

Answer **any five** questions from the following, **each** question carries **5** marks. **(5×5=25)**

1. What is a research problem ? What considerations should a researcher keep in mind while formulating a research problem ?
2. What is a case study ? What are the advantages and limitations of case study ?
3. Explain about various types of measurement scales.
4. Develop a 5-point Likert scale for measuring student's attitude towards internet as a source of general information.
5. Differentiate exploratory and descriptive research design with examples.
6. From the following, identify the type of scales. Explain your answers.

   a) How do you feel today ?
      i) Very unhappy
      ii) Unhappy
      iii) Ok
      iv) Happy
      v) Very happy

   b) Where do you live ?
      i) Bangalore east
      ii) Bangalore west
      iii) Bangalore north
      iv) Bangalore south

7. Explain the significance and making of a research report.

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SECTION – B

Answer **any three** questions from the following, **each** question carries **10** marks. **(3×10=30)**

8. Explain the different steps involved in research process.
9. Explain in detail, the different methods of data collection in research.
10. Develop a questionnaire to conduct a market research for an FMCG product.
11. Explain the various types of research report in detail.

SECTION – C

12. **Compulsory** Case Study. **(1×15=15)**

A company that is newly formed is manufacturing a bath soap for sale in Bangalore. They would like you to conduct a research on the preferences of consumers as regards the features of the soap.

You are required to draft a complete research design for this purpose.

You must specify the sampling procedure and the research process in detail.

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