BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA | **Date : 26.04.2025**
Batch : 2024-26 | **Class Test : II**
Subject : Corporate Finance | **Duration : 1 Hr.**
Subject Code : MBPC1004 | **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. What is capital structure in the context of corporate finance? [CO3]

b. What does the term 'trading on equity' imply? [CO3]

c. What do you mean by dividend policy? [CO3]

d. Define working capital management in financial terms. [CO4]

e. How would you define net working capital? [CO4]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. Calculate the Operating Leverage, Financial Leverage, and Combined Leverage using the following data: Sales: ₹50,000, Variable Cost: ₹25,000, Fixed Cost: ₹15,000, Interest: ₹5,000. [CO3]

b. Explain the various factors that affect the formulation of a firm's dividend policy. [CO3]

c. Explain Net Operating Income (NOI) approach with suitable example. [CO3]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. The following information is available is respect of a firm.
Capitalization rate = 10%. Earnings per share = Rs. 50
Assumed rate of return on investment = 12%, 8%, 10%
Show the effect of dividend policy on market price of shares applying Walter's Model when dividend payout ratio is (a) 0% (b) 20% (c) 40% (d) 80% (e) 100%. [CO3]

b. What are the various factors that influence the working capital requirement of a business? [CO4]

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BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA **Date : 26.04.2025**
Batch : 2024-26 **Class Test : II**
Subject : Cost and Management Accounting **Duration : 1 Hr.**
Subject Code : MBPC1005 **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. What is marginal costing? [CO3]
b. What do you understand by break-even point? [CO3]
c. Calculate profit when sales, variable cost & fixed cost are Rs. 12000, Rs. 7000, and Rs. 4000 respectively. [CO3]
d. What is standard costing? Briefly explain its how it works. [CO4]
e. Briefly explain the concept of budgetary control. [CO4]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. How does absorption costing differ from marginal costing in terms of cost treatment and profit calculation? [CO3]
b. The following data are available from the records of a company: Sales Rs. 60,000, Variable Cost Rs. 30,000 & Fixed Cost Rs. 15,000. You are required to calculate the P/V Ratio, Break-Even Point and Margin of Safety at this level and the effect of 10% increase in sale price. [CO3]
c. What are normal and abnormal losses, and how are their causes and treatments handled in product cost analysis? [CO4]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. A product passes through three distinct processes to completion. These processes are numbered respectively, 1, 2 and 3. During the week ended 31 January, 1,000 units are produced. The following information is obtained:

	Process 1	**Process 2**	**Process 3**
Materials	₹6,000	₹3,000	₹2,000
Labour	₹5,000	₹4,000	₹5,000
Direct expenses	₹1,000	₹200	₹1,000

The indirect expenses for the period were ₹2,800, apportioned to the processes on the basis of labour cost. Prepare process accounts showing total cost and cost per unit. [CO3]

b. Distinguish between budgetary control and standard costing based on their objectives, approach, and utility in cost management. [CO4]

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Semester : 2nd Sem. MBA **Date : 26.04.2025**
Batch : 2024-26 **Class Test : II**
Subject : Human Resources Management **Duration : 1 Hr.**
Subject Code : MBPC1006 **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. Elucidate the importance of performance appraisal in improving employee's performance? [CO2]

b. What is job evaluation and how it is different from Job Analysis? [CO2]

c. How minimum wage, fair wage, and living wage differ from each other? [CO2]

d. What is Potential appraisal. [CO1]

e. Explain the concept of BARS? [CO1]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. While designing 360-degree appraisal for your company, what factors will you consider to integrate it into your HR strategy? [CO4]

b. Explain the various components of Executive Compensation [CO1]

c. Highlight different types of rater biases that negatively affect the performance appraisal. [CO3]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. Explain the factors influencing compensation structure in an organization. Elucidate the importance of nonfinancial compensation for employee's satisfaction. [CO3]

b. How will you design point rating method as a tool of job evaluation in your company? [CO4]

All the Best

BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA | **Date : 28.04.2025**
Batch : 2024-26 | **Class Test : II**
Subject : Business Research | **Duration : 1 Hr.**
Subject Code : MBQT1002 | **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. Define degree of freedom. [CO1]
b. Explain level of significance. [CO1]
c. Differentiate between null and alternate hypothesis. [CO1]
d. What is the size of sample in t test and z test . [CO1]
e. Write one assumption of chi-square test? [CO1]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. It is claimed that a random sample of 100 tyres with a mean life of 15269 kms is drawn from a population of tyres which has a mean life of 15200 kms and a standard deviation of 1248 kms. Test the validity of the claim at (i) 5% (Z tab =1.96) and (ii) 1 % ((Z tab =2.58) level of significance . [CO2]

b. Out of a sample of 120 persons in a village,76 persons were administered a new drug for preventing influenza and out of them 24 persons were attacked by influenza. Out of those who were not administered the new drug, 12 persons were not affected by influenza:
Prepare (a) 2x2 table showing actual and expected frequencies.
(b) use Chi-square test for finding out whether the new drug is effective or not. (at 5% level of significance with tabulated value 3.841) [CO2]

c. Differentiate between parametric and non-parametric test, mention the three different tests under both the category with explanations. [CO1]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. Three group of students are given coaching on Operations management by three teachers BRM Sir, MKR Sir and SM Madam. At the end of semesters, they were given a test and their scores are as follows. [CO3]

BRM Sir	80	83	79	85	90	68	
MKR Sir	93	65	77	78	88		
SM Madam	82	84	60	72	86	67	91

Use Kruskal Wallis test to determine if there is significant difference in the coaching of three teachers. **Use 5% level of significance with tabulated value 5.991.**

b. To study the performance of three detergents and three different water temperatures, the following "**whiteness**" reading were obtained with specially designed equipment. (CO3)

Water temperature	**Detergent** A	**Detergent** B	**Detergent** C	**Detergent** D
Cold water	6	4	8	6
Warm water	7	6	6	9
Hot water	8	5	10	9

a) Perform a two-way analysis of variance both on detergent and water temperature, with 5% level of significance.
(Tabulated $F_{0.05}(2,6)=5.14$, Tabulated $F_{0.05}(3,6)=4.76$))

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All the Best

Semester : 2nd Sem. MBA **Date : 28.04.2025**
Batch : 2024-26 **Class Test : II**
Subject : Business Analytics **Duration : 1 Hr.**
Subject Code : MBPC1008 **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. How do you read a CSV file into R? [CO1]
b. In time series analysis, what is the difference between a trend and a cycle? [CO1]
c. How is standard deviation interpreted in descriptive analytics? [CO1]
d. What is Euclidean distance. In clustering? [CO1]
e. What does multicollinearity mean in the context of multiple linear regression? [CO2]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. What is Clustering? What are the types clustering explain al the steps involve in K means Clustering algorithm. [CO5]
b. Explain the importance of data visualization in R and discuss the various types of plots available for visualizing data, highlighting their uses and advantages. [CO3]
c. What is the difference between ==, !=, >, and < in R? Explain with examples how these relational operators are used for comparing variables. [CO2]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. A café owner wants to understand how the daily temperature affects coffee sales. She collects data for 7 consecutive days: [CO4]

Day	Temperature (°C) (X)	Coffee Cups Sold (Y)
1	20	250
2	22	240
3	25	230
4	27	220
5	30	200
6	32	180
7	35	160

Questions: Using Simple Linear Regression (SLR)

i. Find the equation of the line that best fits the data.
ii. Predict how many cups of coffee will be sold if the temperature is 28°C.
iii. What does the intercept mean in this case? Is it practically meaningful?

b. What is Time Series analysis? Explain the following components of a time series with suitable examples: [CO2]

a) Trend
b) Seasonality
c) Cyclic Patterns
d) Horizontal Patterns
e) Stationarity

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BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA | **Date : 28.04.2025**
Batch : 2024-26 | **Class Test – II**
Subject : Management Information System | **Duration : 1 Hr.**
Subject Code : MBPC1009 | **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. What is MRP II ? [CO2]

b. What are the dis advantage of ERP? [CO2]

c. Write benefits of Supplier Relationship Management. [CO2]

d. What are the Key Components of Manufacturing Systems. [CO2]

e. Who are the main players in the ERP market? [CO2]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. How Closed loop ERP is different from MRP? [CO2]

b. Describe the Evolution of ERP. [CO2]

c. Explain the concept of Customer Relationship Management (CRM) and state its objectives. [CO2]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. What Is the need of ERP system? Explain the characteristic of ERP system. [CO2]

b. Define Supply Chain Management, describe its types, and explain the application systems that support Supply Chain Management. [CO2]

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BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA **Date : 29.04.2025**
Batch : 2024-26 **Class Test – II**
Subject : Operations Management **Duration : 1 Hr.**
Subject Code : MBPC1007 **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. Define Total Quality Management (TQM)? [CO3]
b. What do you mean by Project Life Cycle? [CO3]
c. Differentiate between CPM and PERT. [CO3]
d. What do you mean by Master Production Schedule? [CO3]
e. Why most of the company optimize the Inventory Level? [CO4]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. Discuss the role of Supply chain management in Manufacturing Company along with suitable Example. [CO3]

b. From the following particular find the BEP. Where, variable cost per unit is Rs. 15, fixed expenses is Rs. 54,000, Selling price per unit is Rs. 20. What should be the selling price per unit, if the breakeven point should be brought down to 6500 units? [CO4]

c. The Reliance Company estimates its carrying cost at 15% and its ordering cost at Rs. 9 per order. The estimated annual requirement is 48000 units at a price of Rs. 4 per unit. Required

i. What is the most economical number of units to order?
ii. How many orders should be placed in a year?
iii. How often should an order be placed? [CO2]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. Find out the critical path and expected project completion time for the following information. [CO3]

Activity	Predecessors	Optimistic time	Most likely time	Pessimistic time
A	_	5	5	11
B	_	2	3	10
C	_	3	6	15
D	A	2	5	8
E	A	2	3	4
F	A	2	6	10
G	B,C	2	3	10
H	C	5	5	5
I	D	3	3	9
J	E,G	7	8	9

b) A project schedule has the following characteristics; [CO4]

Activity	1-2	1-3	2-4	3-4	3-5	4-9	5-6	5-7	6-8	7-8	8-10	9-10
Time (Day)	5	1	1	1	6	5	4	8	1	2	5	8

(i) Construct Network Diagram.
(ii) Compute the earliest event time and latest event time.
(iii)Determine the critical path and total project duration.

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Semester : 2nd Sem. MBA | **Date : 29.04.2025**
Batch : 2024-26 | **Class Test – II**
Subject : Strategic Management | **Duration : 1 Hr.**
Subject Code : MBPC1010 | **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. What are the five forces in Porter's Five Forces framework? [CO2]

b. Define 'core competency' Give two examples. [CO2]

c. What is unrelated diversification? [CO3]

d. Differentiate between cost leadership and differentiation strategy. [CO3]

e. What is the purpose of the BCG Matrix in strategic planning? [CO3]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. Explain the concept of Sustainable Competitive Advantage. What steps can a firm take to achieve it? [CO2]

b. Describe the stages of the Industry Life Cycle and how strategy should adapt across these stages. [CO2]

c. Using the Ansoff Matrix, explain how a business can pursue growth through market penetration and product development. Give examples. [CO3]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. Discuss the generic strategic alternatives of stability, expansion, and retrenchment. In what scenarios would each be most appropriate? Provide real-world examples. [CO3]

b. What are the generic building blocks of competitive advantage? Explain how a firm can develop distinctive competencies using these building blocks. [CO3]

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BIJU PATNAIK INSTITUTE OF INFORMATION TECHNOLOGY & MANAGEMENT STUDIES, BHUBANESWAR

Semester : 2nd Sem. MBA **Date : 29.04.2025**
Batch : 2024-26 **Class Test – II**
Subject : Introduction to AI **Duration : 1 Hr.**
Subject Code : MBPC1011 **Full Marks : 30**

Section- A

1. Answer any four out of following questions. [4 x 2 = 8]

a. What is Image Processing? Which is better for image classification? Supervised or unsupervised classification? [CO2]

b. Can machine learning replace human intelligence? Why or why not? [CO1]

c. What is the role of exploratory data analysis (EDA) in a data science project? [CO2]

d. How Generative Adversarial Networks (GANs) work, and what do makes them different from other neural networks? [CO3]

e. Explain Sentimental analysis in NLP? [CO2]

Section-B

2. Answer any two questions out of following [2 x 6= 12]

a. How does the workflow of a data science project differ from a machine learning project? [CO2]

b. What are the major application areas and techniques of AI? [CO-2]

c. A bank manager is given a data set containing records of 1000s of applicants who have applied for a loan. How can AI help the manager understand which loans he can approve? Explain. [CO2]

Section-C

3. Answer any one out of following questions. [1 x 10= 10]

a. Analyze a successful case study of a self-driving car initiative? [CO3]

b. Define LLM. How does a Large Language Model understand and generate human-like text? [CO2]

All the Best