

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION DECEMBER 2024
(First Semester)

Branch – COMMERCE (BUSINESS PROCESS SERVICES)

MATHEMATICS FOR BUSINESS PROCESS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The simple interest on Rs.5000 at 10% for 3 years is ----- (a) Rs.500 (b) Rs.1000 (c) Rs.1500 (d) Rs.6500	K1	CO1
	2	Amount due under immediate annuity is----- a) $\frac{A}{i} [1 - (1+i)^{-n}]$ b) $A + \frac{A}{i} [1 - (1+i)^{-(n-1)}]$ c) $\frac{A}{i} (1+i) [(1+i)^n - 1]$ d) $\frac{A}{i} (1+i) [(1+i)^n - 1]$	K2	
2	3	In a Hermitian matrix, the diagonal elements are ----- a) Real b) Complex c) Positive d) zero	K1	CO2
	4	If A is a singular matrix, $ A =$ ----- a) 0 b) 1 c) ∞ d) I	K2	
3	5	Find the eigen values of the matrix $\begin{pmatrix} 4 & 1 \\ 1 & 4 \end{pmatrix}$ a) 3,-3 b) -3,-5 c) 3,5 d) 5,0	K1	CO3
	6	$ A - \lambda I = 0$ is called ----- a) Characteristic equation c) eigen value b) Characteristic Polynomial d) eigen vector	K2	
4	7	The differential coefficient of a constant c is----- a) 0 b) 1 c) c d) ∞	K1	CO4
	8	$\frac{d}{dx} \left(\frac{1}{x} \right) =$ ----- a) $\log x$ b) 0 c) $-1/x^2$ d) $1/x^2$	K2	
5	9	$\int_{-1}^1 5x^4 dx =$ ----- a) 0 b) 2 c) 5 d) 3	K1	CO5
	10	$\int a^x dx =$ ----- a) $\frac{a^{x+1}}{x+1} + c$ b) $a^x + c$ c) $\frac{a^x}{\log a} + c$ d) $1/\log a + c$	K2	

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.c.	Mr. X borrows Rs.1,716. He repays Rs. 250 at the end of each year. In how many years can he clear the debt if the rate of compound interest is 7.5% p.a.?	K1	CO1
		(OR)		
	11.b.	Find the effective rate of interest equivalent to a nominal rate of 12% p.a. compounded monthly. Further, find the effective rate when interest is compounded continuously.		

Cont...

2	12.a.	Show that the matrix $\frac{1}{3} \begin{bmatrix} -1 & 2 & 2 \\ 2 & -1 & 2 \\ 2 & 2 & -1 \end{bmatrix}$ is orthogonal.	K2	CO2
	(OR)			
	12.b.	Express $\begin{bmatrix} 6 & 8 & 5 \\ 4 & 2 & 3 \\ 9 & 7 & 1 \end{bmatrix}$ as the sum of a symmetric and a skew symmetric matrices.		
3	13.a.	Find all the characteristic vectors of the matrix $\begin{bmatrix} 3 & 2 \\ 2 & 3 \end{bmatrix} = 0$.	K3	CO3
	(OR)			
	13.b.	Verify Cayley-Hamilton theorem or $A = \begin{bmatrix} 1 & 2 & -2 \\ 2 & 5 & -4 \\ 3 & 7 & -5 \end{bmatrix}$		
4	14.a.	Differentiate the following with respect to (i) $(3x^2 + 4x - 5)^3$ (ii) x^x	K4	CO4
	(OR)			
	14.b.	The total cost function y for x units is given by $y = \frac{3x(x+7)}{x+5} + 5$. Show that the marginal cost and decrease continuously as the output increases.		
5	15.a.	Evaluate (i) $\int_0^2 (x^2 - 4x + 5)dx$ and (b) $\int_0^4 (\sqrt{x} + e^x)dx$	K5	CO5
	(OR)			
	15.b.	Integrate with respect to x. (i) $\sqrt{5x + 3}$ (ii) e^{7x} .		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	(i): Calculate the compound interest for Rs. 2,500 for 4 years at 8% per annum. (ii): Calculate the compound interest in the above case when interest is compounded (a) half yearly and (b) quarterly.	K1	CO1
2	17	Find the rank of the matrix $A = \begin{bmatrix} 1 & 1 & 1 & -1 \\ 1 & 2 & 3 & 4 \\ 3 & 4 & 5 & 2 \end{bmatrix}$	K2	CO2
3	18	Find the eigen values and eigen vectors of the matrix $\begin{bmatrix} 3 & 10 & 5 \\ -2 & -3 & -4 \\ 3 & 5 & 7 \end{bmatrix}$.	K3	CO3
4	19	If $y = ae^{mx} + be^{-mx}$, show that $\frac{d^2y}{dx^2} = m^2y$.	K4	CO4
5	20	Integrate $(\log x)^3$ with respect to x.	K5	CO5

Z-Z-Z

END

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION DECEMBER 2024
(Third Semester)

Branch - **COMMERCE (BUSINESS PROCESS SERVICES)**

RETAIL ENVIRONMENT AND MARKET RESEARCH

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Marketing research is an applied component of _____. a) Event management b) Marketing management c) Consumer research d) Promotional research	K1	CO1
	2	_____ are finished products bought by individual buyers for their use. a) Consumer goods b) Consumer behaviour c) Industrial goods d) Marketing research	K2	CO1
2	3	The word retail is derived from the _____ word. a) Latin b) French c) English d) German	K1	CO2
	4	_____ is the practice of dividing your target market into approachable groups. a) Research b) Market research c) Market segmentation d) Common interest	K2	CO2
3	5	On the basis of information sought there are two types of research which are Qualitative research and _____. a) Qualitative research b) Exploratory research c) Retail research d) Applied research	K1	CO3
	6	_____ is essential for obtaining fresh, direct feedback from customers. a) Primary research b) Secondary research c) Customer surveys d) Sentiment analysis	K2	CO3
4	7	The supply chain concept originated in what discipline? a) Operations b) Production c) Logistics d) Marketing	K1	CO4
	8	_____ is the added value endowed on services and products. a) Brand value b) Brand strategy c) Brand equity d) Brand premise	K2	CO4
5	9	Media research is related to _____. a) Primary data collection b) Secondary data collection c) Copy- testing technique d) Raw data and facts	K1	CO5
	10	_____ is a formal, systematic inspection of the various aspects of a retail business. a) Retail audit b) Internal audit c) Audit notebook d) Audit working papers	K2	CO5

Cont...

SECTION - B (35 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Distinguish between Market and Market research.	K4	CO1
		(OR)		
	11.b.	What are consumer goods? Discuss the types.		
2	12.a.	Write the need for market segmentation.	K2	CO2
		(OR)		
	12.b.	Explain the significance of data management in market research.		
3	13.a.	State the types of Primary research.	K1	CO3
		(OR)		
	13.b.	What are the features of a product?		
4	14.a.	State the objectives of pricing.	K3	CO4
		(OR)		
	14.b.	What are the objectives of branding?		
5	15.a.	What is data validation and why it is important for marketers?	K1	CO5
		(OR)		
	15.b.	Why are consumer panels important?		

SECTION -C (30 Marks)Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Briefly explain the various types of Market research.	K2	CO1
2	17	Explain the characteristic of retailing.	K2	CO2
3	18	Describe the features of a product.	K4	CO3
4	19	Enumerate the stages of product life cycle.	K4	CO4
5	20	What is a consumer panel? How do you use consumer panels?	K1	CO5

Z-Z-Z

END

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom DEGREE EXAMINATION DECEMBER 2024
(Fifth Semester)

Branch – COMMERCE (BUSINESS PROCESS SERVICES)

CAPITAL MARKET\$FOR BUSINESS PROCESS SERVICES

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The capital market in India is controlled by _____
(i) RBI (ii) NABARD
(iii) SEBI (iv) IRDA
- 2 The term _____ refers to the market where the borrowing and lending of currencies take place outside the country of issue.
(i) Euro currency market (ii) Capital market
(iii) Primary market (iv) Financial market
- 3 What is the primary purpose of collateral management in financial markets?
(i) To increase trading volume (ii) To mitigate credit risk
(iii) To reduce operational costs (iv) To comply with tax regulations
- 4 Which is the first mutual fund established in India?
(i) SBI mutual fund (ii) Kothari pioneer
(iii) UTI (iv) Adithya Birla
- 5 If any risk is concerned with financial loss ,it is termed as _____
(i) Business risk (ii) Business loss
(iii) Financial risk (iv) Insurable claims

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Explain the importance of capital markets.
OR
b Who are the market participants in trading?
- 7 a Enlist the features of Government securities.
OR
b What are the advantages of Euro currency market?
- 8 a What are the issues with securities lending?
OR
b What is Return of Capital? State the advantages of ROC's.
- 9 a Explain the objectives of Mutual funds in India.
OR
b Write a note on Fund Of Funds.

Cont...

- 10 a Sketch the differences between Forward and Future strategies.
OR
b Give four main features of a derivative.

SECTION -C (30 Marks)

Answer any **Three** questions

ALL questions carry **EQUAL** Marks

(3 x 10 = 30)

- 11 Explain the features of an Order Management System.
12 Describe the types of Bonds.
13 What is Trade Life Cycle? Write its importance.
14 Enumerate the different types of Hedge fund.
15 Write a note on i) Operational risk, ii) Liquidity risk and iii) Market risk.

Z-Z-Z

END

PSG COLLEGE OF ARTS & SCIENCE
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BCom DEGREE EXAMINATION DECEMBER 2024
(Fifth Semester)

Branch – COMMERCE (BUSINESS PROCESS SERVICES)

MAJOR ELECTIVE COURSE – I: CORPORATE SOCIAL RESPONSIBILITY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

1. _____ is a primary motivation for companies to engage in CSR activities.
(i) Avoiding taxes (ii) Enhancing brand reputation
(iii) Reducing employee salaries (iv) Maximizing shareholder wealth
2. The term "triple bottom line" in CSR refers to _____ dimensions.
(i) Profit, people, planet (ii) Finance, marketing, operations
(iii) Revenue, costs, net profit (iv) Innovation, growth, sustainability
3. The term "Green washing" refers to _____.
(i) Genuine sustainability efforts
(ii) Misleading claims about the environmental benefits of a product or service.
(iii) Effective environmental management
(iv) Government regulations on environmental practices
4. The main purpose of the SA8000 standard is _____.
(i) To enhance product quality
(ii) To ensure social accountability in the workplace.
(iii) To improve environmental performance
(iv) To manage financial risk
5. The main purpose of the ILO Tripartite Declaration is to _____.
(i) Regulate international trade agreements
(ii) Establish guidelines for MNC in relation to social policy.
(iii) Promote globalization without restrictions
(iv) Ensure that governments have the final say in labor issues

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. Interpret the Pyramid of Corporate Social Responsibility.
OR
b. Identify the activities are not covered in CSR Expenditure.
- 7 a. Summarize the Stakeholders' participation & perspectives of about CSR.
OR
b. Infer the types of CSR Activities.
- 8 a. Explain the various benefits of CSR.
OR
b. Analyze the key stakeholders of CSR.

Cont...

- 9 a. Explain about the CSR Reporting and its elements.

OR

- b. Interpret the role of Government as a Regulator of CSR.

- 10 a. ILO tri-partite declaration of principles on multinational enterprises.

OR

- b. Analyse the relationship between CSR and Sustainable development goals.

SECTION -C (30 Marks)

Answer any **Three** questions

ALL questions carry **EQUAL** Marks

(3 x 10 = 30)

11. Analyze the CSR framework in India and List out CSR initiatives under Companies' Act 2013.
12. Examine the Relationship between CSR and development of an organization.
13. Explain the challenges to CSR in India and suggest the steps can be taken to address the challenges.
14. Examine the Standards for CSR.
15. Analyse the current trends and opportunities in CSR.

Z-Z-Z

END