



PAST PAPERS

Faculty	Department / Section/Division
Not Applicable	Learning Resource Centre

Past Papers

Faculty of Management, Humanities & social Sciences
Department of Management and Business Studies

**BSc Hons in Business and Industrial
Mathematics
(Year 1 – Semester I)
2022**

Document Control & Approving Authority	Senior Director – Quality Management & Administration
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Faculty of Management and Social Sciences
Department of Management and Business Studies
BSc Hons in Industrial and Business Mathematics
Course CODE: BSc 562



Year I Semester II
REPEAT EXAMINATION
Introduction to Business Law – BBIM 1312

- This paper consists of EIGHT (08) questions on TWO (02) pages.
- Answer FIVE (05) Questions including Question 01
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.

Date: 2022.08.25

Pass mark: 40%

Time: 03 Hours

Question 01: (Compulsory)

Law and morality are two distinct questions, yet many are of the view that, a law which is truly immoral cannot be a real law and that people may have an option of not following such a law.

Appraise the above statement considering natural law and legal positivism. (20 Marks)

Question 02

- 1) List out the sources of law in a domestic legal system (05 Marks)
- 2) Briefly explain the concept of *stare decisis* (Precedents) (15 Marks)

Question 03

- 1) What is the modern definition of international law? (05 Marks)
- 2) Briefly explain the criteria of Statehood under international law. (15 Marks)

Question 04

- 1) What is a contract? (05 Marks)
- 2) What is the difference between an offer and an invitation to treat? (05 Marks)

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- 3) What are the differences in the consequences which may result from a breach of a condition in comparison to a breach of a warranty? (10 Marks)

Question 05

- 1) What is a Partnership? (05 Marks)
- 2) A partner is both a principle and an agent. How correct is this statement? (10 Marks)
- 3) List out the ways in which a partnership may be dissolved. (05 Marks)

Question 06

- 1) What is an agency? (05 Marks)
- 2) What are the modes in which an agency relationship may be created? (05 Marks)
- 3) What are the requirements that needs to be established to prove the existence of an agency of necessity? ¹⁰~~(05)~~ Marks)

Question 07

A company once duly incorporated has an existence of its own. Discuss this statement considering the Salomon principle. (20 Marks)

Question 08

Write a brief description about any two of the following. (10*2=20 Marks)

- 1) Consideration and *justa causa*.
- 2) Insurable interest.
- 3) Monism and Dualism.
- 4) Concept of subrogation.

-----END OF THE QUESTION PAPER-----



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BSc (Hons) in Business and Industrial Mathematics
Course CODE: BSc562

Year I Semester I
SEMESTER END EXAMINATION
Business Economics I – BBIM1303

- This paper consists of EIGHT questions on SEVEN (07) pages.
- Answer Five questions including question 01.
- Only non-programmable calculators are allowed.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.30

Pass mark: 40%

Time: 03 Hours

Question 01 (Compulsory)

- (a) Define the term of **Economic Models** and explain the purpose of using such Economic models in economics. (05 Marks)
- (b) Calculate Cross Price Elasticity of Demand of the following product and interpret the coefficient results. (05 Marks)

Table 1:1 - Demand

Tea (Price) (Rs)	Coffee Demand (Q) (Kg)
20	100
40	150

- (c) Identify the characteristics of an underdeveloped country. (05 Marks)



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- (d) Find the Point Elasticity of Demand at price of **Rs: 4.0** using the following Demand and Supply functions.

$$Q_d = 200 - 10p$$

$$Q_s = 100 + 15p$$

(05 Marks)

Question 02

There is a smaller proportion of large firms in Africa than in Asia. The two African countries with the largest firms are Nigeria and South Africa. These two countries' firms have more capital goods than most other African countries' firms. Firms in South Africa produce a range of products including gold and petrochemicals. In recent years, a number of African firms have developed into Multinational Companies (MNCs), producing mainly in other African countries.

- (a) Define a capital good with aid of an example. (04 Marks)
- (b) Briefly explain two challenges faced by the small firms at the long run of their production. (06 Marks)
- (c) Define the terms of Short Run and the Long Run of a firm with the aid of an example. (04 Marks)
- (d) Analyze, using a demand and supply diagram, how a rise in income may affect the market for gold. (06 Marks)



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Question 03

In 2017, the Japanese government announced improvements to its tax system. The amount of tax raised is influenced by the size and age distribution of a country's population. Japan's birth and death rates are falling, its population is ageing, and it has low immigration. Overall, Japan's population is decreasing.

(a) Define the term of "Tax" and identify the types of taxes related to Manufacturing Industry. (05 Marks)

(b) Suppose government increases the unit tax of an essential good by 10% for a unit. Using the following supply function, construct the new supply function after tax and briefly explain what is meant by a unit tax.

$$Q_s = -50 + 5P_x \quad (05 \text{ Marks})$$

(d) Analyze, using a production possibility curve (PPC) diagram, the effect of decrease in population size on an economy. (05 Marks)

(e) Suppose the Japanese government expect to increase the fuel tax by 5%. Analyze the impact of fuel taxes on public transport. You may use suitable diagrams to quote your answer. (05 Marks)



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Question 04

Consider the following Demand and Supply equations of an ARS Airline.

$$Q_{dx} = 350 - 08P_x$$

$$Q_s = 150 + 12P_x$$

- (a) Find the equilibrium Price and the Quantity. (04 Marks)
- (b) Find the excess demand and excess supply at the price of Rs: 05. (03 Marks)
- (c) Find the Consumer Surplus and Producer Surplus. (04 Marks)
- (d) Suppose government impose a unit tax of Rs: 50 for a trip for the entire airlines which landed in Sri Lanka. Calculate the new equilibrium price and the quantity after imposing a unit tax. (04 Marks)
- (e) Calculate the total government revenue after imposing a unit tax. (02 Marks)
- (f) Calculate the Deadweight Loss. (03 Marks)

Question 05

Singapore is usually ranked as one of the best countries in which to do business. It is an open economy engaging in free trade. It has a history of strong entrepreneurship, low



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unemployment, low average costs and relatively low tax rates. Its example may encourage other countries to remove trade restrictions.

- (a) Define 'Average Costs' with the aid of an example (05 Marks)
- (b) Briefly describe the term "Entrepreneurship". (03 Marks)
- (c) "No government intervention in the Open Economy". Briefly explain the statement with the aid of an example. (06 Marks)
- (d) Briefly explain the Economies of Scale with the help of a diagram (06 Marks)

Question 06

- (a) Identify the factors affecting to price Elasticity of Supply. (05 Marks)
- (b) Briefly explain the terms of "Cross Price elasticity of Demand" and interpret the coefficient sign of the results. (06 Marks)
- (c) Assume, the price of petrol increases from Rs:100 to Rs:110 and demand fall from 8,000 units to 6,000. Calculate the PED of the above commodity. (04 Marks)
- (d) Assume your income is increased from Rs: 125,000 to Rs:135,000 and the demand for transportation is decreased from 10 to 20 (Number of trips). Calculate the income elasticity of demand (YED) and interpret the results. (05 Marks)



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Question 07

Following demand function is expressed of a manufacturing company in Sri Lanka.

$$P = 100 - 2Q$$

- (a) Express the **Total Revenue (TR)** as a function of **Q** and Illustrate the Total Revenue Curve on a suitable diagram. (04 Marks)
- (b) For what values of **Q** is Total Revenue become **Zero**. (04 Marks)
- (c) What is the maximum value of **Total Revenue**. (04 Marks)

Following Average cost function is expressed of the Mundo Gas Manufacturing Ltd.

$$AC = 2q + 6 + \frac{13}{Q}$$

- (d) Find an expression for **Marginal Cost (MC)**. (04 Marks)
- (e) If the current output is 15, estimate the effect on **Total Cost (TC)** of a 3 - unit decrease in Quantity (**Q**). (04 Marks)

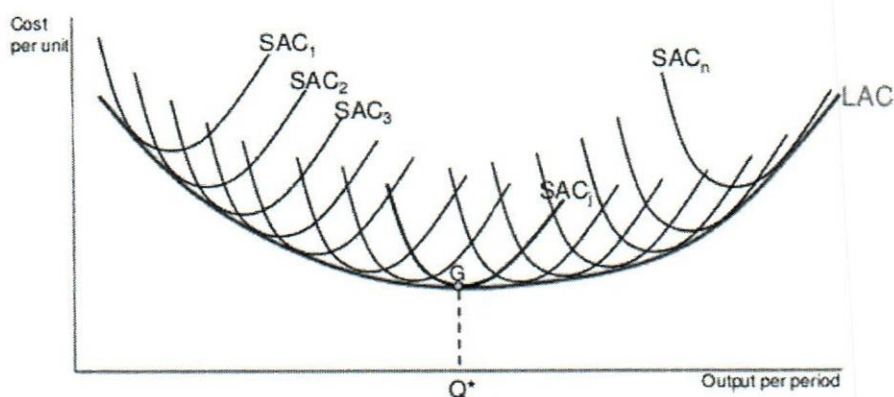


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Question 08

Part - A

(a) Identify 02 (Two) characteristics of a Perfectly Competitive Market. (02 Marks)



(b) Based on the above diagram, briefly explain the significance of the long run average cost with the aid of an example. (03 Marks)

Part - B

Briefly describe the following Terms/Concepts with the aid of an example.

Answer any Four (03) Questions

- (a) Diseconomies of Scale
- (b) Direct Taxes
- (c) Subsidies
- (d) Inferior Goods
- (e) Average Cost
- (f) Supply function
- (g) Perfectly Inelastic Supply
- (h) Demand function

(03*05 Marks=15 Marks)

-----END OF THE QUESTION PAPER-----

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 Department of Management and Business Studies
 BSc Hons in Business and Industrial Mathematics
 Course CODE: BSc 562
 Year 1 Semester I
SEMESTER END EXAMINATION
Fundamentals of Mathematics– BBIM 1302

- This paper consists of EIGHT (08) questions on FIVE (05) pages.
- Answer FIVE (05) questions including question 01.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.24

Pass mark: 40%

Time: 03 Hours

Question 01: Compulsory

(a) Draw the rough sketch for the following function. Where $x \in [-4, 6]$

$$G(x) \begin{cases} (1/2)x + 3 & x \leq -2 \\ 2 & -2 < x \leq 0 \\ x^2 + 2 & 0 < x < 2 \\ 7 & 2 = x \\ 8 & 2 < x \end{cases}$$

- (i) Find the domain and range of the function.
 (ii) Check the continuity of G , at $x = -2$ and $x = 2$. (10 Marks)
- (b) Find A, B two matrices on \mathbb{Z} such that $|A| \neq 0, |B| \neq 0$ But $|A + B| = 0$. (10 Marks)
- (c) Show the following. (Hint : $|A|$ denotes determinant of A)

$$\begin{vmatrix} 1 & 1 & 1 \\ a & a & a \\ bc & ca & ab \end{vmatrix} = 0$$

(10 Marks)

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(e) Determine the following definite integral.

$$\int_{-2}^6 |x^2 - 1| dx$$

(05 Marks)

(f) Use first principal of derivatives to find the slope of function

$$f(x) = -x^2 - x + 2 \quad , \quad \text{at } (-1,0)$$

(05 Marks)

Question 02

(a) Solve the following equation.

$$\det \begin{bmatrix} \lambda & 1 \\ 4 & \lambda \end{bmatrix} = 0$$

(03 Marks)

(b) Let $A = \begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix}$, $B = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$, $C = \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$

(i) Show that $(A+B)^T = A^T + B^T$

(ii) Use A, B and C matrices to show that matrix addition is associative

(10 Marks)

(c) Suppose $A = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$ (Where $K_1, K_2 \in [\mathbb{R}]$)

Show that $(K_1 + K_2) A = K_1.A + K_2 A$

(02 Marks)

Question 03

(a) (i) Show that $\log_a b = 1 / \log_b a$.

(ii) Further above result to show that $\log_y x = \frac{\log_a x}{\log_a y}$

(04 Marks)

(b) The formulae for the amount of energy E (in joules) released

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by an earthquake is $E = 3.21 \times 10^{19} \times 10^{1.44M}$, Where M is the magnitude of the earth quake on the Richter scale.

- (i) The Newcastle earthquake in 1989 had a magnitude of 4 on the Richter Scale. How many Joules were released?
- (ii) In an earth quake in San Francisco in the 1900's the amount of energy released was doubled that of the Newcastle earth quake. Find the Richter Scale. (04 Marks)
- (c) Solve the following equations for x.
- i. $\text{Log}_2 [x / (x - 3)] = 2$
- ii. $7 - 8 \ln (2x) = -57$ (04 Marks)
- (d) Write the following expressions as a single term.

$$\text{Log}_4(8) - \text{Log}_4(2) + \text{Log}_4(64) - \text{Log}_4(4) \quad (03 \text{ Marks})$$

Question 04

- (a) Determine the following finite and infinite limit values.
(Where a,b and c are constants)

(i) $\lim_{x \rightarrow 2} (x^2 - x + 4)$	(iii) $\lim_{x \rightarrow -3} \frac{(x^5 + 3^5)}{(x+3)}$	
(ii) $\lim_{\theta \rightarrow 0} \frac{[\sin a \theta \cdot \sin b \theta]}{2ac\theta^2}$	(iv) $\lim_{x \rightarrow -\infty} \left(\frac{-x^3 + x + 5}{x^3 + x + 1} \right)$	(08 Marks)

- (b) Find the First Derivative at $x = (\pi/4)$ for the following functions.

(i) $f(x) = x^2 + 2x + 8$	(ii) $g(x) = \sin x \cdot \cos 3x$	(07 Marks)
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Question 05

- (a) Find the following indefinite integrals (where a,b and c are constants)

(i) $\int (x^{1/4} + \cos cx + e^{bx}) dx$	(iii) $\int bc \tan ax dx$
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(ii) $\int 2x^2 e^{2x} dx$

(iv) $\int 3 \cos 2x dx$

(08 Marks)

(b) Find the following definite integrals. (Where a,b and c are constants)

(i) $\int_0^{\frac{\pi}{4}} [2 \cos(x)] dx$

(ii) $\int_0^3 |-x^2| dx$

(07 Marks)

Question 06

(a) Find the limits of the following functions.

(i) $\lim_{\theta \rightarrow 0} \frac{[1 - \cos 4\theta + \sin^2 2\theta]}{\theta^2}$

(ii) $\lim_{x \rightarrow 6} \frac{(x^2 - 36)}{\sqrt{x-5} - 1}$

(04 Marks)

(b) Use first principal of derivatives to find the slope of function $f(x) = x^2 + x + 1$ at (1,0)

(03 Marks)

(c) Find the first derivative of the followings.

(i) $f(x) = \frac{e^x}{x^2+3}$

(ii) $g(x) = \log(\sin x)$

(04 Marks)

(d) Find A, B two matrices on N such that, $A \neq 0, B \neq 0$, But $AB = 0$ (0 is zero matrix)

(04 Marks)

Question 07

(a) Solve the following system

$$\begin{aligned} \log_y(x) &= 7 \\ x y &= 256 \end{aligned}$$

(06 Marks)

(a) Solve following equations for X in terms of Y

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$$Y = b e^{(3x+a)} \quad (a, b \text{ are constants.}) \quad (03 \text{ Marks})$$

(d) Find A, B two matrices on \mathbb{Z} such that $|A| = 0, |B| = 0$ But $|A + B| \neq 0$

(06 Marks)

Question 08

(a) Solve the following equation.

$$\det \begin{bmatrix} 2t^2 & t \\ 4t - 4 & (t - 1) \end{bmatrix} = 0$$

(04 Marks)

(b) Let $A = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$, $B = \begin{pmatrix} 1 & 1 \\ 1 & 0 \end{pmatrix}$, $C = \begin{pmatrix} 0 & 1 \\ 1 & 0 \end{pmatrix}$

(i) Show that $(AB)^T = B^T A^T$

(ii) Use A and C matrices to show that matrix multiplication is not Commutative

(08 Marks)

(c) Suppose $A = \begin{pmatrix} 2 & 1 \\ 1 & 0 \end{pmatrix}$ (Where $K_1, K_2 \in [\mathbb{R}]$)

Show that $(K_1 K_2) A = K_1 (K_2 A)$

(03 Marks)

-----END OF THE QUESTION PAPER-----

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Department of Management and Business Studies
BSc Hons in Business and Industrial Mathematics
Course CODE: BSc 562

Year 1 Semester I

SEMESTER END EXAMINATION
Introduction to Logic and Set Theory- BBIM 1305

- This paper consists of SIX (06) questions on SIX (06) pages.
- Answer FOUR (04) questions including question 01.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.08

Pass mark: 40%

Time: 03 Hours

Question 01: (Compulsory)

Encircle the correct response.

- i. Let $f(x)$ be a one-to-one and onto function. If $f(x) = \frac{x+4}{2x-5}$, then $f^{-1}(x)$ is equal to,
- | | |
|------------------------|---------------------------|
| a) $\frac{5x+4}{2x-1}$ | b) $\frac{x+4}{(2x-5)^2}$ |
| c) $\frac{2x-5}{x+4}$ | d) $x + 4$ |
- ii. Let $A = \{Tom, Ann, Mary, Jerry\}$. Which of the following statements is incorrect?
- | | |
|--------------------------------|-----------------------------|
| a) $Mary \in A$ | b) $\{Tom, Ann\} \subset A$ |
| c) $\{Tom, Ann, Jerry\} \in A$ | d) $\emptyset \subset A$ |
- iii. Choose the set which is not finite.
- Birds in Singharaja forest.
 - $\{x|x \text{ is a multiple of } 5 \text{ less than } 125, x > 0\}$
 - $\{x|x \text{ is odd}\}$
 - $\{1, 2, 3, 4, \dots, 500\}$
- iv. Which of the following sets are different from the others?
- \emptyset
 - $\{0\}$
 - $\{\emptyset\}$
- a) None of the sets are different from each other b) B only

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c) A and C only

d) All three sets are different from each other

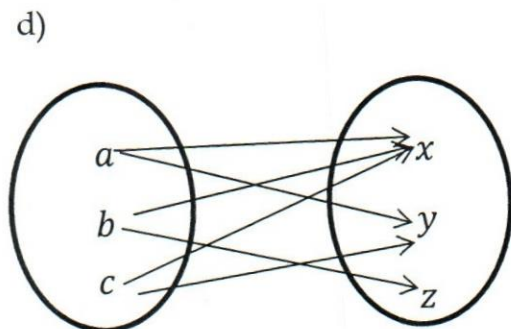
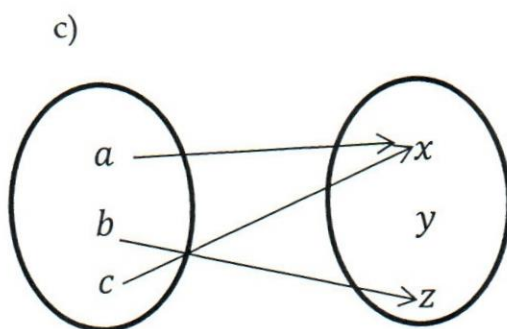
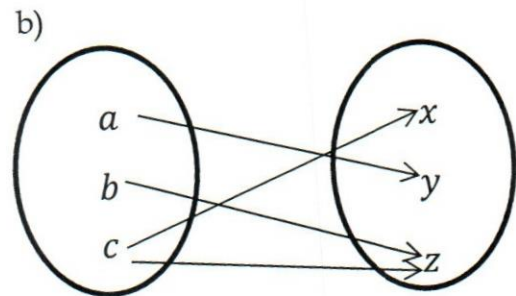
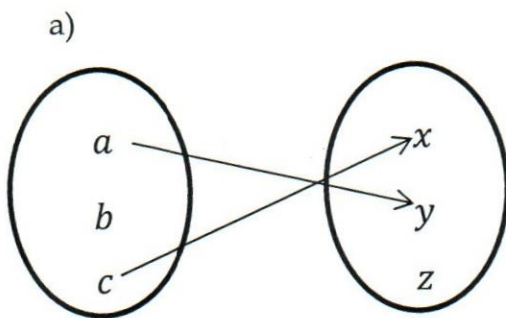
v. Let p : The weather is nice, q : The birds are singing. A verbal sentence describing $(\sim p \wedge q) \rightarrow p$ is,

- a) The weather is not nice and the birds are singing, where the weather is nice.
- b) If the weather is not nice and the birds are singing, then the weather is nice.
- c) It is not true that the weather is not nice and the birds are not singing, but the weather is nice.
- d) The weather is not nice and if the birds are singing then the weather is nice.

vi. Which is a tautology?

- a) $p \wedge q$
- b) $p \vee q$
- c) $(p \wedge q) \rightarrow (p \vee q)$
- d) $\sim(p \rightarrow \sim q)$

vii. Which of the following defines a function?



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viii. Let the functions f, g, h and k of \mathbb{R}^+ to \mathbb{R}^+ be defined by,

- a) $f(x) = x^2$
- b) $g(y) = y^2$
- c) $h(z) = z^2$
- d) k assigns to each real number its square

Which of the above functions are equal?

- a) f, g and k
- b) g and h
- c) All of the above
- d) None of the above

- ix. A relation associates five food items to the food groups to which they belong.
 $\{(Cheese, dairy), (beans, vegetables), (pineapple, fruit), (milk, dairy), (orange, fruit)\}$

Which of the following statements is/are true?

- A. Vegetables is an element in the domain.
- B. Orange is an element in the range.
- C. This relation is a function.
- D. This relation is a one-to-one function.

- a) A and B only.
 - b) C only.
 - c) C and D only.
 - d) None of the above.
- x. Each of the following sentences define a relation R in the natural numbers \mathbb{N} . Which is a symmetric relation?
- A. " x is less than or equal to y "
 - B. " x divides y "
 - C. " $x + y = 10$ "
 - D. " $x + 2y = 10$ "
- a) A and D
 - b) B and D
 - c) A and C
 - d) None of the above

(25 Marks)

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Question 02

a) Let $A = \{1, 2, 3, 4, 5\}$.

Let,

$R =$

$\{(1, 1), (1, 3), (1, 4), (2, 2), (2, 5), (3, 1), (3, 3), (3, 4), (4, 1), (4, 3), (4, 4), (5, 2), (5, 5)\}$ be a

relation defined on A .

- i. Show that R is an equivalence relation. (07 Marks)
 - ii. Find R^{-1} . (08 Marks)
 - iii. Find the distinct equivalence classes of R . (06 Marks)
- b) i. Define countable sets. (02 Marks)
- ii. Give two examples of countable sets. (02 Marks)

Question 03

a) Let p, q and r be propositions. Prove that,

i. $p \vee (q \wedge r) \equiv (p \vee q) \wedge (p \vee r)$

ii. $p \rightarrow (q \wedge r) \equiv (p \rightarrow q) \wedge (p \rightarrow r)$

(12 Marks)

b) Negate each of the following statements.

i. $\exists x, p(x) \wedge \forall y, q(y)$

ii. $(\exists x \in A)(x + 3 = 10)$

(06 Marks)

c) Let p : He is rich, q : He is happy. Write each of the following in symbolic form using p and q .

i. He is neither rich nor happy.

ii. If he is unhappy, then he is poor.

iii. If he is not poor, then he is happy.

iv. He is poor, or else he is rich and unhappy.

(07 Marks)

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Question 04

- a) State the Peano's axioms. (05 Marks)
- b) Sketch the regions shown by,
i. $] - 2, 1[\times] - 2, 1[= \{(x, y) | x \in \mathbb{R}, y \in \mathbb{R}, -2 < x < 1, -2 < y < 1\}$
ii. $\{(x, y) | x \in \mathbb{R}, y \in \mathbb{R}, x^2 \leq y\}$ (10 Marks)
- c) Using the principle of mathematical induction, prove that,
 $2^{2n} - 1$, is divisible by 3. (10 Marks)

Question 05

- a)
i. Write the definition of Cardinal numbers. (03 Marks)
- ii. For any Cardinal numbers, α, β and γ , prove that,
a) $(\alpha + \beta) + \gamma = \alpha + (\beta + \gamma)$
b) $(\alpha\beta)\gamma = \alpha(\beta\gamma)$
c) $\alpha + \beta = \beta + \alpha$ (12 Marks)
- b) Let $A = \{2, 4, 6, 8, 10, 16, 18, 24, 36, 72\}$ and $(A, |)$ be the ordered set, where $|$ denotes division.
i. Draw the Hasse diagram for the above ordered set.
ii. Find all minimal elements.
iii. Find all maximal elements. (10 Marks)

Question 06

- a) Find the truth table of the following.
 $\sim(p \wedge q) \vee \sim(q \leftrightarrow p)$ (08 Marks)
- b) Let $G = [0, 1]$ and $H = [2, 5]$ and $f: G \rightarrow H$ be defined by $f(x) = 3x + 2$. Are G and H equinumerous sets? Give reasons. (05 Marks)
- c) Determine whether the following functions are,
i. Injective (one-to-one)
ii. Surjective (onto)

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- $f: \mathbb{Z} \rightarrow \mathbb{Z}$ defined by,

$$f(k) = \begin{cases} k, & \text{if } k \geq 0 \\ -k, & \text{if } k < 0 \end{cases}$$

- $g: \mathbb{Z} \rightarrow \mathbb{Z}$ defined by,

$$g(k) = 2k$$

(Clearly mention the reasons. You may use a rough sketch of graphs if necessary to show your arguments)

(12 Marks)

-----END OF THE QUESTION PAPER-----



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BSc Hons in Business and Industrial Mathematics
Course CODE: BSc 562

Year I Semester I
SEMESTER END EXAMINATION
Principles of Management– BBIM 1301

- This paper consists of EIGHT(08) questions on FOUR (04) pages.
- Answer FIVE (05) questions including question 01.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.12

Pass mark: 40%

Time: 03 Hours

Question 01: (Compulsory)

Professor Henry Mintzberg has introduced ten managerial roles model in order to identify the complex role of a manager in a typical organizational environment. Explain the figurehead, monitor, entrepreneur, spokesperson and the negotiator roles in the model with appropriate examples. (20 Marks)

Question 02

- (a) "Technological environmental force was quite helpful for many organizations to survive during the Covid-19 pandemic situation in the year 2020"
Do you agree with the above statement? Justify your answer with appropriate examples. (10 Marks)
- (b) Briefly explain the Maslow's hierarchy on motivation. Support your answer with appropriate examples. (10 Marks)

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Question 03

- (a) List down the benefits of self-directed work teams for an organization (05 Marks)
- (b) Appreciate the managerial styles introduced by Blake and Mouton in managerial grid. (15 Marks)

Question 04

Freshco is a large scale dairy manufacturer in Sri Lanka which is a multinational company. As a CSR project by the organization, 60% of the fresh milk that they use for their production is purchased from local farmers. Low cost leadership is a strategy used by the organization to expand the market share locally. Their annual supplier evaluation is done referring the below mentioned criterions and the actual data collected by the suppliers are available in the table mentioned below.

Criterion/Supplier	Lanka Dairy Ltd.	Everyday Milk (Pvt) Ltd.	White Milk Corporation	Dolawatte Milk suppliers
01 Milk price (01 L)-Rs	50	51	55	53
02 On-Time Delivery	99%	98%	98%	99%
03 Flexibility of the service	Good	Very Good	Good	Average
04 Quality Compliance	97%	95%	98%	97%
05 Supplier participation or collective decision making	Average	Very Good	Good	Very Good

You are required to assign weights for the above decision criterions as per your own judgment and rate the above supplies. You may provide appropriate independent prioritization for each supplier based on your evaluation and select the best supplier

(20 Marks)

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Question 05

(a) Employee creativity is the core to success for many organizations in today's competitive business world. Assume that you are a manager in a reputed 3PL business organization and explain how you are going to enhance your employees' creativity in order to provide innovative logistics solutions to your clients. (10 Marks)

(b) Change curve is determined how the individuals positively and negatively respond to the changes.

Assume that you are a manager and going to shift your factory to a new place away from Colombo. This is decision obviously affect for your employees' and unions' attention due to the changes of their day today way of working and routines.

Explain how you are going to successfully handle the issues and support your people and get their commitment for the change. (10 Marks)

Question 06

Write short notes on **four selected topics**, mentioned below

- (i) Functional structure of departmentalization
 - (ii) Public pressure groups in Task environment
 - (iii) Role of the Mission statement in an organization
 - (iv) Concurrent controlling
 - (v) Emotional intelligence in effective communication
 - (vi) Job specialization
- (20 Marks)

Question 07

(a) Distinguish the terms "Job description" and "Job Specification" (10 Marks)

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- (b) Effective communication is vital for successful decision making and execution in an organization. Briefly explain five (05) communication barriers in an organizational environment. (10 Marks)

Question 08

“Concentration strategy is focused on a primary line of business and increasing the number of products offered or markets served”

Explain the above the statement using the Ansoff Matrix on strategy development with examples. (20 Marks)

-----END OF THE QUESTION PAPER-----

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Year 1 Semester I

SEMESTER END EXAMINATION

IT for Business- BBIM 1306

- This paper consists of EIGHT (08) questions on FIVE (05) pages.
- Answer FIVE (05) questions including question 01.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.15

Pass mark: 40%

Time: 03 Hours

Question 01: (Compulsory)

- (a) What is Information Technology? Explain. (02 Marks)
- (b) What is CPU? Explain. (03 Marks)
- (c) Explain the terms "Shareware" and "Freeware" (04 Marks)
- (d) What are the main 3 types of hardware components of the computer. Provide two (2) examples for each component. (06 Marks)
- (d) What are the 2 types of software components of the computer. Provide two (2) examples for each component. (05 Marks)

Question 02

- (a) Explain four functions of an operating system. (03 Marks)
- (b) Write two (02) types of operating system interfaces with an example for each. (05 Marks)
- (c) Differentiate Files and Folders. (05 Marks)
- (d) What is file compression? Briefly explain the importance of file compression. (04 Marks)
- (e) List four items you can find out on a Desktop environment. (03 Marks)

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Question 03

- (a) Explain WWW with use of it. (03 Marks)
- (b) What is an ISP? Name 4 ISPs available in Sri Lanka. (05 Marks)
- (c) Define the term "Extranet". (02 Marks)
- (d) What are the risks associated with online activities? Explain (03 Marks)
- (e) Explain how electronic mail works by use of a diagram. Define which protocols associate with it when sending from one place to another place. Use a diagram on explaining. (07 Marks)

Question 04

- (a) What is a HTML page? (02 Marks)
- (b) Write HTML code segments for following situation.
 - (i) To insert the title "ABC Books" to web page (02 Marks)
 - (ii) To insert the heading "Book Details" (02 Marks)
 - (iii) To insert a list with following details (02 Marks)
 - 1. Children Books
 - 2. Novels
 - 3. Educational Books
 - (iv) To link to another web page "<https://www.yahoo.com/>" (03 Marks)
 - (v) To insert the following paragraph. Font should be **Bolded**. (03 Marks)

"ABC have an extensive collection of books to purchase online and in store"
 - (vi) To insert following table. (06 Marks)

Table 4:1 - Book Prices

Exercise Book	Price
20 pages single rule	Rs. 60
40 pages single rule	Rs. 120

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Question 05

- (a) Define the terms "Data" and "Information" with examples. (04 Marks)
- (b) Explain the terms "Primary Key" & "Foreign Key" in database with examples. (04 Marks)
- (c) List four (04) difficulties of traditional file environment when handling large volume of data in an organization. (04 Marks)
- (d) Identify which data types would be suitable for storing following information in MS Access databases. (08 Marks)
- (i) Name of the student
 - (ii) Salary amount
 - (iii) Contact Number
 - (iv) NIC Number
 - (v) An email address
 - (vi) Date and Time of the meeting
 - (vii) A detailed student description
 - (viii) Whether the payment is paid or not

Question 06

	A	B	C
1	Student	Marks	Status
2	L.M.Perera	78	Pass
3	T.S.Gunathilake	84	
4	R.Rathnasiri	43	
5	K.Dharmadasa	70	
6	K.D.Gunarathne	32	
7	Total		
8	Average		
9	Maximum		
10	Count		
11			
12			

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- (a) Refer to the spreadsheet given below and write down formulas to calculate followings.
- (i) Obtain the **Status** column based on the Marks. If the mark is 50 or above mark it as "Pass" otherwise "Fail". (02 Marks)
 - (ii) Calculate the Total Mark in cell B7. (02 Marks)
 - (iii) Calculate the Average Mark in cell B8. (02 Marks)
 - (iv) Calculate the Maximum Marks in cell B9. (02 Marks)
 - (v) Calculate the Count of the Students in cell B10. (02 Marks)
- (b) Write down the features use to perform following tasks on excel sheets
- (i) To compare marks easily. (02 Marks)
 - (ii) Organize students' names in alphabetic order. (02 Marks)
 - (iii) Automate tasks (02 Marks)
- (c) Briefly explain the following error messages in excel.
- (i) ##### (02 Marks)
 - (ii) #DIV/0! (02 Marks)

Question 07

Mahela Jayawardana

Denagamage Praboth Mahela de Silva Jayawardana (born 27 May 1977), known as Mahela Jayawardana, is a former Sri Lankan cricketer and captain of the Sri Lankan cricket team. He is regarded as one of the modern greats of batsmanship, specially due to his mastery of playing spin bowling. Jayawardana's highest test score, 374 against South Africa is the highest test score by a right-handed batsman in the history of test cricket. It is also regarded as the highest absolutely chance-less innings by a batsman in test cricket history.

Jayawardana made his Test cricket debut in 1997 and his One Day International (ODI) debut

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the following season. In 2006 he made the highest ever score by a Sri Lankan in Test cricket, scoring 374 in the second Test of Sri Lanka's home series against South Africa. He has a test cricket average of just under 50 and a One Day average in the 30s. He is the first player in the history of Sri Lankan cricket to score over 10,000 Test runs. Despite his relatively low ODI average, Jayawardana is considered to be one of the best batsmen produced by Sri Lanka.

- (a) Name the way that can be used to achieve following changes to the above text.
- (i) Fully justify the text. (02 Marks)
 - (ii) Capitalized the heading. (02 Marks)
 - (iii) Find the word **debut** and replace it with the word **entrance**. (02 Marks)
 - (iv) Check for the grammar and spelling errors. (02 Marks)
 - (v) Short cut for **undo** the change. (02 Marks)
- (b) Explain the purpose of followings.
- (i) Charts. (02 Marks)
 - (ii) Comments. (02 Marks)
 - (iii) References. (02 Marks)
 - (iv) Water Mark. (02 Marks)
 - (v) Mail merge. (02 Marks)

Question 08

Write short notes on following

(4*5 Marks)

- (a) RAM
- (b) Computer Viruses
- (c) Internet
- (d) Primary Key
- (e) Search Engine

-----END OF THE QUESTION PAPER-----



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Year 1 Semester I

SEMESTER END EXAMINATION
English for Business I- BBIM 1304

- This paper consists of EIGHT (08) questions on TEN (10) pages.
- Answer ALL questions.
- You may use appropriate graphs, diagrams, equation/s to prove or justify the answers.
- If you have any doubt as to the interpretation of the wording of a question, make your own decision, but clearly state it on the script.
- Write legibly.

Date: 2020.09.17

Pass mark: 40%

Time: 03 Hours

Question 01

1. **A. Fill in the blanks in the following paragraph with correct form of the active voice verbs given within brackets. (10 Marks)**

Dinesh Peiris e.g. works (work) in a leading bank. He (i)..... (be) a legal officer. He (ii)..... (join) the bank nearly five years ago. Before accepting this post, he (iii)..... (work) in a law firm. At present, he (iv)..... (follow) a master's degree in Business Administration. Most of his friends live abroad. He (v)..... (migrate) to one of the European countries next year.

- B. Fill in the blanks in the following paragraph with correct form of the passive voice verbs given within brackets. (10 Marks)**

The money printing authority e.g. is given (give) to the Central Bank of Sri Lanka. The Central Bank of Sri Lanka (i)..... (establish) in 1950 and since then the role of money printing (ii).....(do) by the Central Bank. If the trust in money (iii)..... (lose), all business activities in an economy

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will collapse. At present, all measures (iv)..... (take) to prevent printing counterfeit notes. We can witness more e-money (v)..... (use) in transactions in the future.

2. Complete the paragraph underlining the correct word given within brackets.

(10 Marks)

The field of inferential statistics {e.g. enumerates/ enables/ encourages} you to make educated guesses about the {(i). numerical/ literal/ physical} characteristics of large groups. The logic of sampling gives you a way to test {(ii). ideas/ proposals/ conclusions} about such groups using only a small portion of its members.

Often, researchers want to know things about populations but do not have data for every person or thing in the {(iii). circular/ comparison/ population}. If a company's customer service division wanted to learn whether its {(iv). owners/ customers/ visitors} were satisfied, it would not be {(v). practical/ reasonable/imaginable} or perhaps even possible to contact every individual who {(vi). delivered/produced/ purchased} a product. Instead, the company might select a sample of the population. A sample is a smaller group of members of a population selected to {(vii). reduce/ represent/ increase} the population.

A random sample is one in which every member of a sample has an equal {(viii). chance/ capability/ necessity} of being selected. The most {(ix). haphazardly/ unevenly/ commonly} used sample is a simple random sample. It {(x). requires / precedes/ estimates} that every possible sample of the selected size has an equal chance of being used.

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3. Fill in the blanks with the most suitable word formed from the word given within brackets. (10 Marks)

Example: A mortgagee is an entity that lends money to a borrower for the purpose of purchasing real estate. [mortgage]

- (i). The retailers blamed workmanship for the problem. [fault]
- (ii). The plane uses state-of-the-art navigation [equip]
- (iii). The insurance company has a large regular [client]
- (iv). Senior managers are directly to the Board of Directors.
[accountability]
- (v). The location should be to everyone. [access]
- (vi). The must be made according to a strict set of criteria.
[allocate]
- (vii). His helped put the company on the map as a thriving tyre manufacturer. [entrepreneur]
- (viii). The company managed to remain during recession.
[solvency]
- (ix). Financial institutions must maintain sufficient to meet the demands of depositors. [liquidate]
- (x). The company has announced net of Rs.7.5 million. [lose]

4. Complete the blanks in the following paragraph with the most appropriate phrase given in the box. (10 Marks)

change/ economic/ behavior/ influence/ goods/ allocation/ choices/ models/ science/ services

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Microeconomics is the study of individuals, households and firm's (i)..... in decision making and (ii)..... of resources. It generally applies to markets of goods and (iii)..... and deals with individual and (iv)..... issues. Macroeconomic study deals with what (v)..... people make, what factors (vi)..... their choices and how their decisions affect the (vii)..... markets by price, demand and supply. As a purely normative (viii)....., it does not try to explain what should happen in a market. Instead, it only explains what to expect if certain conditions (ix)..... Macroeconomists formulate mathematical (x)..... based on samples of behavior and test the models against real world observations.

5. Which statement expresses the given statement most accurately? Underline the correct answer a, b, c or d. (10 Marks)

(i). If all the candidates had come on time, the interviews would have been over by now.

(a). Some of the candidates didn't come on time.

(b). The interviews were over as the candidates came on time

(c). The interviews are still going on because some of the candidates didn't come on time.

(d). The interviews are still going on because all the candidates came late.

(ii). Public limited companies raise capital to commence or continue their business by issuing shares or debentures to the general public.

(a). It's prohibited for a public limited company to issue shares to the general public.

(b). Either issuing shares or debentures are sources of finance public limited companies have to acquire capital.

(c). Selling of shares is the only source of finance public limited companies

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use to raise capital.

- (d). Both issuing shares and debentures are means of gaining capital for private limited companies.

6. Read the following extract of the minutes written by the secretary of the KayCee Group of companies. (10 Marks)

The minutes of July meeting of KayCee Group

Date: 25th July 2020, 03.00 p.m. to 05.30 p.m.

Location: Main Boardroom

Chairperson: Carlo Thumbawila, General Manager

Secretary: Shehara Peiris

In Attendance: Malith Perera, Dinesh Gayan, Rohan Perera, Nishan Basnayake,
Nimal Senadheera, Mohan Silva, Ranjan Pius

Absent: Anura Tennakoon

- (i) Review of Previous minutes

Ranjan Pius pointed out the proposal to amend the executive powers of the ad hoc committees hasn't been included in the minutes. Rohan Perera suggested to use 'the meeting adjourned' instead of 'the meeting wound up'. The members accepted the proposed changes and it was confirmed that the revised minutes was in order.
confirmed

- (ii) Review of Agenda - Chairperson

Item 5 on the agenda, the new plan of amalgamation deferred to the meeting in September until Anura Tennakoon who is currently abroad returns.

Action: Anura Tennakoon

- (iii) Status of preparing the accounts for audit

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Malith Perera appealed for a speedy finalization of the details of all transactions up to 30th June 2020 in the marketing department.

Action: *Dinesh Gayan*

(iv) EPF and ETF Issues

HR Manager explained that the company was unable to deposit EPF and ETF of employees for the past three months due to low sales and income and once the flow of income returns to normal, the money will be duly deposited. He requested employees to refrain from sending any letters of complaints to the department of labor since the matter will be sorted out by 31st December.

(v) Temporary holding of salary increments

(vi) Annual meeting of the material suppliers

Deferred to next meeting.

(vii) Year-end get together

Cancelled for this year and was not taken up at the meeting.

(viii) Closing Remarks

The Managing Director expressed that the outbreak of the unexpected epidemic internationally affected drastically the business operations of the company. It takes time for business for business operation to return to its usual state. He said he was optimistic and requested the employees to bear with the deprivation of fringe benefits that the company couldn't afford.

(ix) Next Meeting

The next meeting will be held in the Boardroom at 9.00 a.m. on 27th August 2020.

Now answer the following questions

← (a). What did Rohan Perera suggest?

.....

← (b). Write the reason for deferring item 5

.....

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- (c). Why was there a necessity to finalize accounts?
-
- (d). What was the item that wasn't taken up at the last meeting?
-
- (e). What has affected the business operations of the company?
-

7. Write sentences to bring out the meaning of five words given below. (10 Marks)

information	global	business tycoon
commit	achiever	founder
innovate	expansion	e-commerce
investor	risk	shareholder

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-----END OF THE QUESTION PAPER-----