

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2023

Programme: BBA

Full Marks: 100

Course: Business Communication I

Pass Marks: 45

Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.*

1. **Read the following case and answer the following questions: [15]**

W.L. Gore & Associates, Inc., a global company headquartered in Newark, Delaware, has gained recognition not only for its innovative products but also for its distinctive business style and corporate culture. With a workforce of over 8,000 employees and operations in more than 45 locations worldwide, Gore specializes in producing proprietary technologies using versatile polymer polytetrafluoroethylene (PTFE). Their renowned products, such as GORE-TEX® and ELIXIR strings, have made significant contributions to industries like healthcare and leisure. However, what truly sets Gore apart is its focus on fostering creativity, initiative, and technical development among its employees.

One notable aspect of Gore's corporate culture is its lack of fixed working hours. Associates at Gore are encouraged to make commitments to their work voluntarily, with no external imposition. The company respects personal and family responsibilities, and individuals are not required to provide explanations for their absence from work. The allocation of working hours for specific projects is determined by the respective teams in charge, fostering a sense of autonomy and ownership. Additionally, some associates have the option to work remotely, and office attendance is only recorded for safety purposes. Gore promotes innovative solutions to reduce travel time, such as leveraging videoconferencing and conference calls for global projects, demonstrating the organization's emphasis on flexibility and trust in associates' judgment.

Ben Stewart, a leader within Gore, exemplifies the company's commitment to work-life balance. When faced with extensive travel requirements for a global project, Stewart reevaluated his circumstances and actively sought ways to reduce his travel time. Encouraged by his sponsor and colleagues, he utilized technology and virtual communication tools to stay connected while minimizing his time away from home. This example showcases Gore's support for its associates in achieving work-life harmony by promoting adaptive solutions and offering compensatory time off for travel-related commitments.

**Questions:**

- a) What is work-life balance? How can modern companies contribute to employees' work-life balance?
  - b) How does the unique corporate culture at W.L. Gore & Associates, Inc., contribute to fostering creativity, initiative, and technical development within the organization?
  - c) If you were the boss of a new company, would you adopt the practices of W.L. Gore & Associates, Inc? Give your critical reasons.
2. What do you understand by technical communication? Discuss it relating to business communication. [15]

**OR**

What is an innovation? How innovations have changed the way we communicate in the business sector?

3. **Answer any five questions: [5×10]**

- a) What are the basic elements of a communication process? Elaborate them drawing a figure.
- b) What is communication ethics? How does manipulation of information differ from plagiarism? Explain with examples.
- c) How do visual aids support technical communication? Support your argument with examples.
- d) What do you understand by audience-centered communication? What are the main concepts propounded by Anderson regarding audience-centered communication?
- e) What is decision-making process? Describe your experience of rational decision making.
- f) What is the collaborative writing process? Explain any five strategies for collaborative Writing.

4. **Give short answers to these questions: [5×2]**

- a) List out some of the concepts that people hate about travelling for business.
- b) How compound sentence is different from complex sentences? Illustrate with examples.
- c) What is the use of the Gantt Chart in technical writing?
- d) What are the differences between attitude and value?
- e) Define the term ethnocentrism.

5. **Change the following sentences as directed in brackets. [5×1]**

- a) it/ can/ tell/ us/ you/ more/ about? (*Rearrange the words to make a question*).
- b) If I (know) the answer to that question, I (be) a very rich person. (*Conditional*)
- c) Keith said, "I am tired of dealing with unreliable suppliers". (*Reported speech*)

- d) We... (work) on this current project for five months. (*Appropriate verb form*)
- e) We have invited the chief guest to the program. (*Active voice*)
6. **Complete these sentences with the most appropriate forms of the verbs given in brackets: [5×1]**
- a) I know it won't ever happen, but what..... (we/do) if our restaurant suddenly.....(become) famous?
- b) Unless you.....(have) good financial planning, your expansion plans .....(end) in disaster.
- c) If I .....(know) the answer to that question, I .....(be) a very rich person!
- d) When they.....(arrive), we ..... (be able to) start the meeting.
- e) Just imagine what.....(you/do) if the firm suddenly..... (go) bankrupt.

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2023

Programme: BBA/BI/TT

Full Marks: 100

Course: Business Mathematics I

Pass Marks: 45

Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.*

## Section “A”

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Evaluate:  $x = \sqrt[5]{-32} \cdot \sqrt[4]{81}$
2. In how many ways can the letters of the word MATHEMATICS be arranged?
3. Find the inverse of the function:  $f(x) = 2x - 3$ .
4. Solve the equation  $\ln(x+2) + \ln x = \ln(x+20)$ .
5. If  $f(x) = x^2 - 3x$ , prove that  $f(a+3) + f(a) = 2a^2$ .
6. Discuss the nature of the roots of quadratic equation  $3x^2 - 2x + 5 = 0$ .
7. If  $P = \begin{bmatrix} 1 & -1 \\ 2 & -2 \end{bmatrix}$  and  $Q = \begin{bmatrix} 4 & 5 \\ 3 & 3 \end{bmatrix}$ , then find  $PQ$  and  $QP$ .
8. If  $2^x = 3^y = 12^z$ , Prove that  $\frac{1}{z} - \frac{1}{y} = \frac{2}{x}$
9. Sketch the graph of  $y=2^x$ .
10. Ramesh saves Re.1 today, Rs.2 the next day, Rs. 4 the succeeding day and so on (each saving being twice of the preceding one). What will be total saving in two weeks time?

## Section “B”

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. a) In how many ways can 5 girls and 5 boys be seated in a row so that
  - i. all boys sit together
  - ii. girls and boys sit alternately
  - iii. no two boys sit together.b) A TV survey shows that 60% people see program A, 50% see program B, 50% see program C, 30% see program A and B, 20% see program B and C, 30% see program A and C, and 10% do not see any program. Find what percent see
  - i. Program A, B and C?
  - ii. Exactly two programs?
  - iii. Program A only?
12. a) While manufacturing a product, a firm incurs costs of two types. Fixed annual costs of \$ 250,000 are incurred regardless of the number of units

produced. In addition, each unit produced costs the firm \$6. If C equals total annual cost in dollars and x equals the number of units produced during a year

- i. Determine the cost function  $C = f(x)$  which expresses annual total cost.
  - ii. What is the cost of production for 200,000 units?
  - iii. How many units need to be produced and sold in order to reach as breakeven, if the selling price per unit is \$10?
  - iv. What is the expected profit / loss if 100,000 units are produced and sold?
- b) Determine the domain of the given function.

$$f(x) = \frac{\sqrt{2x - 50}}{x^2 + 2x - 15}$$

13. a) Find the quadratic equation whose roots shall be the square of the roots be of  $x^2 - 2x + 2 = 0$ .
- b) The demand function for a particular product is  $q = f(p) = 30,000 - 25p$ , where  $q$  is stated in units and  $P$  is stated in dollars. Determine the quadratic total revenue function  $R = g(p)$ . What does total revenue equal at a price of \$60? How many units will be demanded at this price? At what price will total revenue be maximum?
14. a) The resale value  $V$  of a certain equipment has been found to be according to the function  $V = 100000e^{-0.1t}$ , where  $t$  = years since original purchase.
- i. What is the expected resale value after 6 years?
  - ii. How long does it take for the resale value to reach 40% of its original value?
- b) Sale of a newly introduced smart phones are expected to vary with time so that the cumulative total sold at weeks after the sales is launched and it is given by  $s(t) = \frac{3000}{1 + 500e^{-0.3t}}$
- i. Find  $s(0)$ .
  - ii. What is the upper limit on the number units sold?
  - iii. When will be 75% of the upper limit reached?
15. a) Solve the following equations by using Cramer's Rule:

$$x + 2y - z = -5$$

$$2x - y + z = 6$$

$$x - y - 3z = -3$$

- b) Prove that:  $\begin{vmatrix} x+a & b & c \\ a & x+b & c \\ a & b & x+c \end{vmatrix} = x^2(x+a+b+c)$

16. a) Mrs. Shanti wishes to invest Rs. 1,000,000 in two parts, one for her son aged 12 years and another for her daughter aged 4 years in such a way that they should get the same amount when they are 15 years old. How should she divide the sum if the interest is 12% p.a. compounded annually?
- b) A color T.V. set worth Rs. 100000 is purchased on installment plan. The amount of annual installment be Rs. 15000. In how many installments will a buyer clear off his debt if compound interest is charged 8% per annum?
17. a) Prove that:  $3^{\frac{1}{3}} \cdot 3^{\frac{1}{9}} \cdot 3^{\frac{1}{27}} \dots = \sqrt{3}$
- b) If  $A = [-1, 3)$  and  $B = [-1, 5]$  find  $A \cup B$ ,  $A \cap B$ ,  $A - B$  and  $B - A$ .

Section "C"

**Case Analysis** [ $2 \times 10 = 20$ ]

18. a) A customer wants to buy a motorbike. There are various options of paying the cost of motorbike. But customer selects the option of down payment of Rs. 50,000 and the remaining Rs. 200,000 at the end of 4 years which includes a compound interest of 8% p.a. If the customer cannot pay the sum in time, 2% more interest must be paid for the extended time.
- If the customer wants to pay the remaining cost of the motorbike in 2 years after buying, how much will the customer pay for bike?
  - What will be the cost of a bike if payment is made as the option selected?
  - If the customer cannot pay the remaining cost in time, but it takes 2 years more to pay, what will be the cost of a bike?
- b) The following table gives the number of people (in thousands) who visited Australia and South Africa in 2000.

From	To	Australia	South Africa
	North America	440	190
	Europe	950	950
	Asia	1790	200

You estimate that 5 % of all visitors to Australia and 4 % of all visitors to South Africa decide to settle there permanently. Take A to be the  $3 \times 2$  matrix whose entries are the 2000 tourism figures in the above table and take

$$B = \begin{bmatrix} 0.05 \\ 0.04 \end{bmatrix}$$

- Compute the product AB.

- ii. What do the entries in the matrix  $AB$  represent?  
 You estimate that from 2000 to 2015, tourism from North America to each of Australia and South Africa will have increased by 20%, tourism from Europe by 30%, and tourism from Asia by 10 %.  
 Take  $A$  to be the  $3 \times 2$  matrix whose entries are the 2000 tourism figures and take
- $$C = \begin{bmatrix} 1.2 & 0 & 0 \\ 0 & 1.3 & 0 \\ 0 & 0 & 1.1 \end{bmatrix}$$
- iii. Compute the product  $CA$ .
- iv. What do the entries in the matrix  $CA$  represent?

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2023

Programme: BBA/BI/TT/BCIS

Full Marks: 100

Course: Financial Accounting I

Pass Marks: 45

Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.*

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. What is financial accounting?
2. What do you mean by GAAP?
3. Explain about accrual basis of accounting.
4. What do you mean by source document?
5. What are the purposes of preparing balance sheet?
6. What weaknesses do you see in a single step form of the income statement?
7. SHREE corporation starts the year with a retained earning balance of Rs. 55,000. Net income for the year is Rs: 27,000. The ending balance in retained earning is Rs. 70,000. What was the amount of dividend for the year?
8. A restaurant had Rs 8,000 supplies on hand at the beginning of April. During the month Rs 12,000 of supplies were purchased. At the end of the month a check of the supplies indicated that Rs 6,000 of supplies was on hand. Determine the amount of supplies used and journalize the adjusting entry.
9. The provision for tax during the year is Rs. 25,000. The tax payable in the balance sheet decreased by Rs. 10,000. Find the amount of tax paid during the year.
10. Record journal entry on 25<sup>th</sup> July 2022 for making payment of rent for three months for June, July and August of Rs 4,000 each month.

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. What are the different group users of accounting information? Explain their needs for accounting information.
12. What do you understand about the "Annual Report" of a company? Briefly explain the major elements of an annual report.
13. A Company was registered on 1<sup>st</sup> Jan. 2020 by a group of professionals to provide short term management training and business research services to all the small business homes in Kathmandu. Following transactions are taken:



- Jan. 1 Received contributions of Rs. 25000 from each of the six partners in exchange for shares of stock.
- Jan. 4 Purchased a computer and printer for a total of Rs. 35000 with a down payment of Rs. 15000 and the balance due in 10<sup>th</sup> of Feb.
- Jan. 9 Sign a two years promissory note at the bank and cash received Rs. 900.
- Jan. 10 Paid Rs. 400 for wages earned by employees for the first week of the month.
- Jan. 15 Collected Rs. 80,000 in cash for the credit analysis and management training.
- Jan. 18 Paid commission of Rs. 500 to the local agents.
- Jan. 22 Paid Rs. 4000 rent for the month of January and Rs. 8000 for the month of February and March in advance.
- Jan. 30 Billed Rs. 4000 to the local clients for providing consulting service. Clients are allowed to pay on 10<sup>th</sup> February.

**Required:** Pass journal entries, prepare necessary T- accounts and draw up trial balance. [4+4+2]

14. The following is the unadjusted trial balance for the year ended December 2022.

Account Titles	Debit (Rs)	Credit (Rs)
Cash	90,000	
Capital		1,00,000
Furniture	50,000	
Notes Payable		30,000
Prepaid Insurance	4,500	
Office Supplies	1,000	
Account Payable		500
Account Receivable	5,000	
Service Revenue		20,000
Advertisement Exp.	5,000	
Utilities Expenses	5,000	
Commission Income		10,000
Total	1,60,500	1,60,500

Adjustments:

- Utilities expenses payable amounted Rs 500.
- Supplies on hand Rs 200.
- Prepaid Insurance expired to the extent of Rs 1,500.
- Billed to customer previously service performed Rs 2,000.
- Commission earned but not received Rs 3,000.

**Required:**

- a) Adjusting entries. [4]  
 b) 10 column work sheet. [6]

15. The Trial Balance of Nepal Trade House Ltd. Is as follows.

**Nepal Trade House Ltd.****Trial Balance****As on December 31, 2022**

<b>Account Titles</b>	<b>Debit(Rs)</b>	<b>Credit(Rs)</b>
Cash and cash equivalents	5,000	
Receivables	2,000	
Inventories	3,000	
Prepaid expenses	1,500	
Property, Plant and Equipment	30,000	
Accumulated Depreciation : PPE		3,000
Brands, Trademarks and Goodwill, net	20,000	
Other Assets	5,000	
Notes Payable		4,000
Account Payable		5,000
Accrued Payroll		3,000
Advance on sales (Deferred revenue)		6,000
Other current liabilities		5,000
Long term debt		10,500
Other non-current liabilities		9,500
Preferred Stock		5,000
Common Stock		10,000
Retained earnings (Dec 31, 2021)		6,000
Additional paid in capital		1,000
Net Sales		21,000
Cost of goods sold	15,000	
Selling and administrative expenses	1,500	
Interest expenses	2,000	
Gain on sale of machine		1,000
Income tax	1,000	
Cash dividend	4,000	
<b>Total</b>	<b>90,000</b>	<b>90,000</b>

**Required:**

- a) Prepare multi-step income statement. [5]  
 b) Prepare classified balance sheet. [5]

16. The Bank statement for Development Bank Ltd. shows a balance of Rs. 15,907.45 on April 30, 2020. On this date the balance as per book is Rs. 11,589.45. The following reconciling items are determined:

- a. Deposit in transit Rs. 2,201.40.  
 b. Outstanding cheques of Rs. 5,904.

- c. A cheque of Rs. 1,226 correctly written by the company and was correctly paid by the bank. But the company recorded it for Rs. 1,262.
- d. Bank debited NSF cheque for Rs. 425.60, bank charge of Rs.30
- e. Bank credited Note receivable for Rs. 1,000 plus interest earned Rs. 50, less bank collection charge of Rs.15.

**Required:**

- a) Bank reconciliation statement. [8]
  - b) How much cash balance should be reported on Development Bank's April 30, Balance sheet? [2]
17. Consider the following ledger balance of Three Star Corporation at the end of Dec 31, 2022.

Dividend paid	Rs.1,00,000
Rent expenses	Rs.30,000
Utility expenses	Rs.1,000
Commission earned	Rs.2,50,000
Services revenue	Rs.5,50,000
Wages and salary expenses	Rs.1,00,000
Advertising expenses	Rs.20,000

**Required:** Pass necessary closing entries.

Section "C"

**Case Analysis**

18. *Read the case situation given below and answer the questions that follow:* [20]

Butwal Power Company has prepared income statement and balance sheet on 31<sup>st</sup> December, 2021 as follow.

**Butwal Power Company**

**Income Statement**

**For the year ended 31 December, 2021**

Particulars	Amounts
Sales revenue	89,000
Cost of goods sold	57,000
Gross margin	32,000
Depreciation expenses	6,500
Advertising expenses	3,200
Salary expenses	12,00
Total operating expenses	21,700
Operating income	10,300
Loss on sale of land	2,500
Earning before tax	7,800
Income tax expenses	2,600
<b>Earning after tax</b>	<b>Rs5,200</b>

**Butwal Power Company**  
**Comparative Balance Sheet**

Accounts Heads	December 31	
	2021	2020
Cash	12,000	9,500
Accounts receivable	22,000	18,400
Inventory	24,400	20,500
Prepaid advertising	10,000	8,600
<b>Total current assets</b>	<b>69,400</b>	<b>57,000</b>
Land	1,20,000	80,000
Equipment	1,90,000	1,30,000
Less: Accumulated depreciation	(70,000)	(63,500)
Total long-term assets	2,40,000	1,46,500
<b>Total assets</b>	<b>3,09,400</b>	<b>2,03,000</b>
Accounts payable	15,300	12,100
Salary payable	14,000	16,400
Income tax payable	1,200	700
<b>Total current liabilities</b>	<b>30,500</b>	<b>29,200</b>
Capital stock	2,00,000	1,00,000
Retained earning	78,900	74,300
Total stockholders' equity	2,78,900	1,74,300
<b>Total liabilities and equity</b>	<b>3,09,400</b>	<b>2,03,500</b>

**Additional information:**

- Land was acquired during the year for Rs.70,000.
- An un improved parcel of land was sold during the year for Rs.27,500 and its original cost was Rs.30,000.
- A specialized piece of equipment costing Rs. 60,000 was acquired in exchange for capital stock in the company.
- In addition to the capital stock issued in exchange for specialized equipment, some stocks were also sold for cash Rs. 40,000.
- Dividends of Rs. 600 were paid.

**Required:**

- a) Cash flow statement for the year 2021 using direct method. [10]
- b) Re-compute cash flow under operating activity using indirect method. [5]
- c) The financial manager of the company asked you a question about the year end result. He is curious to know that the Rs.5200 net profit for the year is satisfactory. Write a memo to president to explain why not year end result satisfactory. [5]

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2023

Programme: BBA/BI/TT/BCIS/BHCM

Full Marks: 100

Course: Fundamentals of Organizational Behaviour

Pass Marks: 45

Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.*

## Section “A”

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Distinguish between open vs. closed systems.
2. Differentiate between Leaders and Managers.
3. What do you mean by availability Bias?
4. Outline any 4 advantages of bureaucratic structure.
5. What do you mean by the learning organization?
6. Define the concept of filtering in communication.
7. Distinguish between functional vs. dysfunctional conflict.
8. Explain the term worker obsolescence.
9. Differentiate between intrinsic vs. extrinsic motivation.
10. Describe the term Narcissism.

## Section “B”

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. Define organizational behavior. Why the study of organizational behavior is essential for all managers? Explain.
12. Define perception. Why people perceive things differently? Explain the factors that influence our perception.
13. Why some teams are more effective than others? What are the major components for building effective team? Explain.
14. How does a leader influence the behaviors of followers toward goal achievement? Explain with reference to the path-goal theory of leadership.
15. What are the major factors that causes organizational stress? Discuss how this organizational stress can be managed.
16. How your communication travelled with your intendent audiences? Explain with considering the major components in communication process.
17. Why changes to be needed in organization? Describe Lewin’s three step model of social change in brief.

Section “C”  
**Case Analysis**

18. *Read the case situation given below and answer the questions that follow:* [20]

**Wal-Mart Stores**

One of the most successful department stores in America is known as Wal-Mart Store and is named after its founder Sam Walton. Because of the phenomenal Success of these stores, Sam Walton became the richest man in America. Also because of his leadership, the stores have enjoyed continuous growth and expansion, so that by mid 1980s, the chain had over 700 stores and increasing at the rate of an additional 100 stores per year. Its sales increased annually by over 35% per year and the profits have soared close to 40% per year every year since 1975.

Sam Walton, until he died in 1992, took personal interest in his employees. His managerial philosophy was to get right people at the right places and then give them the freedom to be innovative to accomplish their tasks. He called the employees as associates and treated them as associates. As per company policy, all associates are eligible for-profit sharing plans, which motivate the employees further. The managers of the stores are required and encouraged to meet with their employees in a social setting to discuss their concerns as well as an issues of organizational interest, and this makes the employees feel that their input is taken seriously by the management.

Sam Walton himself led a simple life. He did not exhibit any aura about himself, giving employees a feeling that he was one of them. He and his executives regularly travelled in company owned planes to visit Wal-Mart stores situated at various sites across the country. He met with sales clerks, stock clerks, stock boys and sales managers to find out what items were popular. He knew most of them by their first names and addressed them so. He initiated “employee of the month” in all categories and created honor roles for more successful stores. This created inner competition requiring extra effort to improve the sales and services. This policy gained high respect for him as a leader.

The administration of the organization is very cost conscious. It only spends about 2% of sales for general administrative expenses. It shops for suppliers at bargain prices all around the world and has built giant warehouses around the country in such a manner so that most stores are within six hours of driving distance from a warehouse. This helps in better delivery system and reduced inventories at retail stores. Each store prepares monthly financial report which can be studied line by line to look for ways to reduce cost further. These cost savings are passed on to the customers and this in turn generates customer loyalty. Wal-Mart slogan of “quality you need, prices you want” has become a generic organizational statement.

Wal-Mart with more than 2000 stores at present is faced with tough competition from a similar chain of discount stores known as K-Mart. However, Sam Walton did not worry about the competition because he felt that his people-oriented philosophy of operations and cost cutting efforts without diluting the quality of the merchandise would always meet the competition head-on.

- a) How would you describe Sam Walton as an effective leader? What leadership theory is consistent with his leadership style?
- b) What factors, other than the leadership style contributed towards the survival and the growth of the organization? Support your reasons.

# POKHARA UNIVERSITY

Level: Bachelor

Semester: Spring

Year: 2023

Programme: BBA/BI/TT/BCIS/BHCM

Full Marks: 100

Course: Introductory Microeconomics

Pass Marks: 45

Time: 3 hrs.

*Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.*

## Section "A"

### Very Short Answer Questions

Attempt all the questions. [10×2]

1. Why microeconomics is called a pricing theory?
2. Given  $MU_X = 10$ ,  $MU_Y = 20$ ,  $P_Y = 4$  and find the value of  $P_X$  for the consumer's equilibrium.
3. Define the term Marginal Rate of Technical Substitution of Labour for capital.
4. Why do iso-quants never intersect each other?
5. Give the precise meaning of explicit cost.
6. In which condition the firm under monopolistic competition may shut down.
7. What is price discrimination? The concept "Take it or Leave it" falls under which degree of price discrimination.
8. Why does a monopolist firm always earn abnormal profits in the long run?
9. The total output changes from 100 to 150 by adding one extra unit of labour and the total revenue changes from Rs 500 to Rs 600 by selling one extra unit of output; calculate the marginal revenue product of labour.
10. Define the term minimum wage.

## Section "B"

### Descriptive Answer Questions

Attempt **any six** questions. [6×10]

11. "Scarcity is root cause of economic problems." Justify this statement on the basis of resources allocation.
12. Explain the properties of indifference curve.
13. Let individual demand function  $Q_{dx} = 12 - 2P_x$  and market supply function  $Q_{sx} = 20P_x$ . If there are 10 individual customers in the commodity x, find:
  - a) Market demand function
  - b) Market demand schedule and market supply schedule
  - c) Derive market demand curve and market supply curve
  - d) Obtain equilibrium price and quantity mathematically.
14. Explain the producer's equilibrium under two factor inputs.
15. How are the price and output determined under monopoly?
16. What is a wage differential? Explain its types.



17. Consider the following table:

Price (Rs)	Quantity	Total Cost	Marginal Cost	Total Revenue	Marginal Revenue	profit
11	0	10	-	-	-	-
10	1	12	-	-	-	-
9	2	17	-	-	-	-
8	3	21	-	-	-	-
7	4	26	-	-	-	-
6	5	33	-	-	-	-
5	6	43	-	-	-	-
4	7	60	-	-	-	-
3	8	80	-	-	-	-

- a) Complete the above table. [4]  
b) Derive the MR and MC curves according to table. [4]  
c) Find out the profit and profit maximizing output. [2]

#### Section "C"

#### Case Analysis

18. Read the case situation given below and answer the questions that follow: [20]

Nepal does not seem to yield the expected outcome in agricultural production although more than 55% of the population is engaged in it. Animal husbandry is one of the popular professions of the farmers in Nepal. Dairy and meat are the basic consumable products the farmers supply to the public in general. Entrepreneurs are concentrated more on dairy than meat items. The unmanaged slaughtering system and the majority of local retailer butchers might be the reasons for less focus on the large-scale investment in meat products.

However, the investment in dairy products was encouraging since there were altogether 280 dairy firms in 2013 AD. Following the trend two of the BBA graduates, who opted for entrepreneurship, began the 281st dairy firm in Nepal in 2016. It was encouraging that only a few firms were operating under a loss situation and most of them were realizing normal and super-normal profits in a short period. So as the firms operating below the excess profit were also found more enthusiastic to earn excess profit in the long run. Thus, those investors have adopted multiple ways of advancing and improving themselves by introducing different measures such as professional empowerment training to the managers, breakthrough in the use of technology, and adaptation of available measures of improvement as much as possible.

However, in the long run, they experienced a gradual decline in profit and realized normal profit only with the utilization of plants in their sub-optimal capacity. This phenomenon is experienced by all of the 281 dairy firms. A

gradual decline in the industry was the major cause of fear among dairy investors. The successful practice of mergers of the financial institutions encouraged dairy firms to follow the same. Finally, they decided to merge with the hope of synergy.

Dairy firms anticipated that the merger will help to eliminate wastes of competition and remain few competitors in the dairy industry causing the imperfect market competition less vulnerable and enlarging the market share of each firm. Finally, with an expectation to resume their business with higher returns dairy firms have decided to get into collusion and they decided to operate only one dairy in each state (i.e remain only 7 dairy firms in the county) with a view of creating a monopoly within the territory of each state.

However, their fortunate days did not last for long; once again their ill fate of gradual decline began making them realize merely a normal profit. Then they came up with the conclusion that in return their investments in dairy products could give super-normal profit in the short-run only. In the long run, it is always difficult to retain the same. Thus, once again, being hopeful, to uplift their business they decided to adopt a policy of price discrimination instead of following uniform pricing. They eagerly expect a positive outcome that they could avoid the problems they have experienced in past in all dairy items such as Milk, Ghee, Cheese, Paneer, Sweets, etc.

**Questions:**

- a) Identify the market structure for the dairy business before mergers with proper reasons.
- b) Why do dairy firms compel to realize normal profit in long run in their sub-optimal capacity? Give reasons.
- c) How does the firm follow the policy of price discrimination?
- d) Is it rational to follow price discrimination in dairy products? Give your critical comments.