

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Course No. : BTM 4301

Course Title : Management Accounting

Winter Semester, A. Y. 2019-2020

Time : 90 minutes

Full Marks : 75

There are **4 (four)** questions. Answer **any 3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. a) "Operating Leverage acts as a multiplier." Explain with example. 5
- b) Macro Company manufactures and sells a specialized cordless telephone for high 20
electromagnetic radiation environments. The company's contribution format income
statement for the most recent year is given below:

	Total	Per Unit
Sales (20,000 units)	\$1,200,000	\$60
Less: Variable expenses	<u>900,000</u>	<u>45</u>
Contribution margin	300,000	<u>\$15</u>
Fixed expenses	<u>240,000</u>	
Net operating income	<u>\$ 60,000</u>	

Management is willing to increase the company's profit and has asked for an analysis of a number of items.

Required:

- i) Compute the company's break-even point in both units and sales dollars.[Use the Formula Method]
- ii) Refer to the original data. Assume that next year management wants the company to earn a profit of at least \$90,000. How many units will have to be sold to meet this target profit? [Use the Equation Method]
- iii) Refer to the original data. Compute the company's margin of safety in dollar.
- iv) Compute the company's degree of operating leverage at the present level of sales.
- v) Assume that through a more intense effort by the sales staff, the company's sales increase by 8% next year. By what percentage would you expect net operating income to increase?
- vi) In an effort to increase sales and profits, management is considering the use of a higher quality speaker. The higher-quality speaker would increase variable costs by \$3 per unit, but management could eliminate one quality inspector who is paid a salary of \$30,000 per year. The sales manager estimates that the higher-quality speaker would increase annual sales by at least 20%.
 - Assuming that changes are made as described above, prepare a projected contribution format income statement for the next year.

- Compute the company's new break-even point in dollars of sales. [Use the formula method]
- Would you recommend that the changes be made?

2. a) "More than one cost driver might be needed to adequately explain all of the costs in an organization." Explain with example. 7
- b) Yummy House is a family-owned restaurant that specializes in Scandinavian-style seafood. Data concerning the restaurant's monthly revenues and costs appear below (q refers to the number of meals served): 18

	Formula
Revenue	$\$16.50q$
Cost of ingredients	$\$6.25q$
Wages and salaries	$\$10,400$
Utilities	$\$800 + \$0.20q$
Rent	$\$2,200$
Miscellaneous	$\$600 + \$0.80q$

Required:

- i) Prepare the restaurant's planning budget for April assuming that 1,800 meals are served.
- ii) Assume that 1,700 meals were actually served in April. Prepare a flexible budget for this level of activity.
- iii) The actual results for April appear below. Prepare a flexible budget performance report for the restaurant for April.

Revenue	\$27,920
Cost of ingredients	\$11,110
Wages and salaries	\$10,130
Utilities	\$1,080
Rent	\$2,200
Miscellaneous	\$2,240

3. a) Write short notes of the following with example: 8
- Product Cost
 - Sunk Cost
 - Selling and Distribution Cost
 - Factory Overhead
- b) What are the differences between Financial Accounting & Management Accounting? 7
- c) Describe Per Unit Variable Cost. Is per unit variable cost always remain same? Give your explanation with graphical example. 10

4. a) Define Cost Sheet? What are the importance of Cost Sheet?

5

b)

Opening stock of raw material	12,500
Purchases of raw material	1,36,000
Closing stock of raw material	8,500
Direct wages	54,000
Direct expenses	12,000
Factory overheads	100% of direct wages
Office and administrative overheads	20% of works cost
Selling and distribution overheads	26,000
Cost of opening stock of finished goods	12,000
Cost of Closing stock of finished goods	15,000
Profit on Selling Price	20%

20

Required:

From the above information, prepare a Cost Sheet for the period ended on 31st March, 2018.

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DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Winter Semester, A. Y. 2019-2020

Course No. : BTM 4303

Time : 90 minutes

Course Title : Human Resources Management

Full Marks : 75

There are **4 (four)** questions. Answer any **3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

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1. a) Human resource management (HRM) is the process of acquiring, training, appraising, and compensating employees, and of attending to their labor relations, health and safety, and fairness concerns. There are three elements associated with human resource management. Identify those three basic elements and explain how a manager converts these three elements at organization for successfully accomplishing HR related task. 7
 - b) The consulting firm Accenture estimates that social media connections via tools like LinkedIn will soon produce as many as 80% of new recruits—often letting line managers bypass the human resource management unit. Five main types of digital technologies are driving this transfer of functionality from HR professionals to automation. Discuss about these five technologies. 10
 - c) The HRM function contributes to the achievement of different dimensions of organizational effectiveness. Prominent dimension are the gaining and maintaining of competitive advantage, the fostering of a positive standing in financial markets and the development of a reputation for corporate social responsibility. In light of this statement, clarify the relationship between HRM and the achievement of organizational effectiveness. 8
 2. a) At one Ball Corp. packaging plant, managers trained supervisors to set and communicate daily performance goals. Within 12 months production was up 84 million cans, customer complaints dropped by 50%, and the plant's return on investment rose by \$3,090,000. It is predicted that engaged employees experience a high level of connectivity with their jobs and work hard to accomplish their task-related goals. How does HR department of an organization improve performance through employee engagement? 5
 - b) Businesses are becoming more than slim and anorexic in 21st century. Discuss the challenges and solutions of human resource management (HRM) in 21st century. 10
 - c) Some trends are occurring in the environment of human resource management that can shape human resource management (HRM) procedure. Identify those trends with their impact on human resource management. 5

- d) Today, employers expect their human resource management teams to focus more on big-picture issues, including instituting human resource policies and practices that support the companies' strategic objectives and to foster high performance through dedicated employees. To do so, human resource managers need new competencies for the application of evidence-based human resource management. Define evidence based human resource management with relevant example. 5
3. a) A process for assigning financial and nonfinancial goals or metrics to the human resource management related chain of activities required for achieving the company's strategic aims and for monitoring results. Managers use special scorecard software to facilitate these activities. The computerized scorecard process helps you to quantify the relationships among the HR activities, the resulting employee behaviors and the resulting firm-wide strategic outcomes and performance. How do you create a HR scorecard? 7
- b) Evaluate three theoretical perspectives on the nature of HR strategy and show how each perspective expresses a different view on the contribution of people to the organization. 10
- c) The former chief HR officer of Google needed \$100 million to reorganize Google's HR operations several years ago, he told to top management that "I am going to deliver talent to you that's skilled and on time and ready to be deployed, I will be able to measure the skill to tell you what skills we have, what skills we don't have then to show you how to fill the gaps or enhance our training". Human resource managers use metrics to valid the claims. Explain with examples why are metrics essential for identifying and creating high-performance human resource policies and practices? 8
4. a) Companies are flattening their hierarchies, squeezing out managers, and leaving the remaining workers with more jobs to do. Changes like these tend to blur where one job starts and another ends. In situations like these, relying on a list of job duties that itemizes specific things you expect the worker to do is often impractical. Many employers are therefore using a newer job analysis approach. Instead of listing the job's duties, they are listing, in competency models (or profiles), the knowledge, skills, and experience someone needs to do the job. Explain how to write competencies job description through job competency model. 10
- b) Qualitative method of job analysis technique is not always suitable when you want to compare jobs for pay purposes a mere listing of duties may not suffice. At that time, you have to apply quantitative method for job analysis. Mention different types of quantitative method of job analysis technique with example. 5
- c) For forecasting personnel needs, organization uses some basic tools. Identify and explain these basic tools with relevant examples to help forecast personnel needs. 10

Programme: BScEngg CEE, BScTE, DTE 1st Sem.

Date: 28th February 2020, (Morning)

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANIZATION OF THE ISLAMIC COOPERATION (OIC)
DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Mid Semester Examination

Course No: Hum4157/ 4137

Winter Semester (2019-2020)

Time : 90 Minutes.

Course Title: Islamiyat

Full Marks : 50

There are 4 (four) questions. Answer question no. 1 and any two from the rest.

Figures in the right margin indicate marks of the questions.

1.
 - a. Explain "Tawheed ur Rububiyyah" and "Tawheed ul Uluhiyyah" briefly. 8
 - b. "Seeking Engineering knowledge is Ibadah", explain it in light of Quran, Hadith and Dr. Martin Luther king's saying- "Intelligence plus Character- that is the Goal of true Education". 10
2.
 - a. What is the basis of Eemaan? 4
 - b. Define Ibadah according to Quran and Hadith. 4
 - c. "Mumin's matter is surprising", explain this in light of hadith. 4
 - d. Explain the etiquettes with respect to Al-Qur'an. 4
3.
 - a. "O Allah's Messenger is there any responsibility that I have to fulfill toward my parents after they have passed away?" Allah's Messenger (PBUH) replied, "Yes, there are four matters." What are the four matters discussed in the Hadith? 05
 - b. Which verse of the holy Qur'an is posted at the Entrance Wall of Harvard University? What it is all about? 05
 - c. How to turn your worst enemy into your dearest friend? Explain in light of the Verse of the holy Qur'an -(Fussilat: 34). 03
 - d. "Whoever has the four (characteristics) will be a pure hypocrite and whoever has one of the four characteristics will have one characteristic of hypocrisy unless and until he/ she gives it up". What are the four characteristics according to Hadith? 03
4. Write short notes on the following: 16
 - i. Sabr/ Patience
 - ii. Pride and Humbleness
 - iii. Justice and Oppression
 - iv. Cheating

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Course No. : Hum 4163

Course Title : Business English

Winter Semester, A. Y.2019-2020

Time : 90 Minutes

Full Marks : 75

There are **4 (four)** questions. Answer **any 3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. a) Complete the sentences below with appropriate words in the box.

10

Misanthropic; mettlesome; nutritive; mellifluous;
medial; mealy-mouthed; nugatory; overweening

- i. It was the bitter resentment of an unhappy childhood that set Butler against all dogma, all authority and authoritarianism.
- ii. The days of suavity had not yet come to the Faculty.
- iii. I might refer to the general conviction and the common sense of society that such an investment cannot be treated as absolutely idle and
- iv. I have a friend who is shorter than me and one that is taller than me, making me the individual in our group as far as height is concerned.
- v. She sounded quite on the phone. Let's see how she turns out to be in person.
- vi. When you have a problem, people create a commission to look at it, because it may be
- vii. It would be of you to say that every human being is a greedy, selfish liar.
- viii. Meanwhile the actual costs of BP's environmental initiatives to date have been, while the effect of improving its relations with the public has been invaluable.
- ix. Given that I have also shown that its practical impact upon children's wellbeing is, there seems to be no satisfactory justification for its retention.
- x. Milk protein has a smooth mouth feel and high and biological values.

- b) Write two sentences with each of the following words:

15

- i. Transcend
- ii. Transmute
- iii. Trepidation
- iv. Truculent
- v. Truculent
- vi. Umbrage
- vii. Unctuous
- viii. Unfeigned
- ix. Untenable

- x. Untoward
- xi. Upshot
- xii. Vacuous
- xiii. Wanting
- xiv. Wont
- xv. Zenith

2. Paraphrase the following paragraphs.

25

Life is too short to be unhappy at work. Yet many professionals who are free to shape their careers are just that: disengaged, unfulfilled, and miserable. Multiple factors account for this contemporary malaise. But it's not always outside forces that push us over the happiness line. Sometimes we do it to ourselves.

"Happiness traps"—destructive mindsets and ways of working that keep us stuck, unhappy, and ultimately less successful. Three of the most common happiness traps—ambition, doing what's expected of us, and working too hard—seem productive on the surface but are harmful when taken to the extreme.

The Ambition Trap

The drive to achieve goals and further our careers pushes us to be and do our best. But when ambition is coupled with hyper competitiveness and a single-minded focus on winning, we get into trouble. We become blind to the impact of our actions on ourselves and others; relationships are damaged and collaboration suffers; we start chasing goals for the sake of hitting targets; and work begins to lose its meaning.

The "Should" Trap

Doing what we think we should do rather than what we want to do is a trap that all of us risk falling into at some point in our work lives. True, some of the unwritten rules that shape our careers are positive, such as completing an education so that we can help our families and observing punctuality and civility at work. But too many of our workplace norms—what I call shoulds—force us to deny who we are and to make choices that hinder our potential and stifle our dreams.

Avoiding the 'should' trap isn't about completely ignoring the rules, of course. Absolute nonconformity and cultural deviance would challenge even the most inclusive organization. Instead, we need to recognize which rules end up being harmful.

The Overwork Trap

Some of us react to the very real pressures of the "always on" 21st-century workplace by spending every waking moment working or thinking about work. We don't have time for friends, exercise, healthful food, or sleep. We don't play with our children or even listen to them. We don't stay home when we're sick. We don't take the time to get to know people at work or put ourselves in their shoes before we jump to conclusions.

Overwork is seductive, because it is still lauded in so many workplaces. Boston University's Erin Reid found, in fact, that some people (men in particular) lie about how many hours they work. They claim to put in 80-plus-hour weeks—presumably because they think excessive hours impress their bosses. What's more, obsession with work can stem from our inner demons: It feeds on our insecurities, assuages our guilt when we see others overwork, or helps us escape personal troubles. Many over workers believe that working more will alleviate stress: If they just finish that project, get that report done, read all that e-mail, they'll feel less out of control. But of course the work never ends.

Breaking Free

The first step is to accept that you deserve happiness at work. That means giving up the misbelief that work is not meant to be a primary source of fulfillment. For centuries it was simply a means of staving off hunger. To be sure, many people still struggle with low

wages and horrible working conditions, and for them, work may equal drudgery. But research has shown that even menial jobs can provide fulfillment. What's surprising is that successful executives—today's knowledge workers and creative—sometimes don't find true meaning in their work. Instead they buy into the myth that it's a grind.

Moving from Trapped to Happy

Too many people believe that if they're successful, they'll be happy. That's backward. It's simple: Happy people perform better than their unhappy peers. Three—emotional self-awareness, emotional self-control, and organizational awareness—are particularly useful when casting off an outdated mindset.

3. Many people join distance-learning programmes (study material, post, TV, Internet) and study at home, but some people think that it cannot bring the same benefit as attending colleges or universities does. 25

Do you agree or disagree?

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

- 4 a) Ask a question with each of the following words: 15

- i. Abhor
- ii. Abortive
- iii. Aboveboard
- iv. Accord
- v. Accretion
- vi. Acrid
- vii. Acrimony
- viii. Actuate
- ix. Adage
- x. Addle
- xi. Adroit
- xii. Adversity
- xiii. Advocate
- xiv. Affable
- xv. Affluence

Necessary; adage; deceitful; zenith; necessary;
defensible; diurnal; tacit; advocate; necessary;
nomad; nugatory; accord; nugatory

- i. It is impossible to eradicate the passions; but we must strive to direct them to a noble aim, and it is therefore that everyone should be able to satisfy his passions within the limits of virtue.
- ii. It's best to notice patterns in the way that people respond to you to tell if they are truly being
- iii. Dr Wallich's attribution of this and other specimens subsequently sent in to the genus *Camellia*, although scientifically....., unfortunately diverted attention from the significance of the discovery.
- iv. Dean asked, a decibel louder than....., causing a head-turn or two.
- v. It was a assumption; however, that is all the information that is already known.
- vi. The sun was well past its and headed toward the trees on the west side of the cabin.
- vii. There are two classes of these Indian Fakirs: the religious orders, and therogues who infest the country.
- viii. She made him what he was, but his suffering was to ensure his survival.
- ix. The inequality is shown for " winter " and " summer " respectively.
- x. A ticket

BBA in TM, 1st Sem.

Date: February 28, 2020 (Morning)

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT (BTM)

Mid-Semester Examination

Winter Semester, A.Y. 2019-2020

Course Code : Hum 4161

Time : 90 Minutes

Course Title : Sociology

Full Marks : 75

There are **4 (Four)** questions. Answer **any 3 (Three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. (a) What is sociology? How does sociological perspective differs from common sense? Explain with examples. 10
- (b) "Society has been recognized as an arena of inequality that generates conflicts and change."-Based on the statement demonstrate how the social inequality generates conflicts and change in the light of social conflict approach of sociology. 08
- (c) "The meaning of truth may not be absolute because it depends upon knowledge, expertise, agreements and scientific evidence."-critically evaluate the statement. 07
2. (a) Describe the importance of ideas to the development of human societies in the light of Max Weber's rationalization of society theory. 07
- (b) "Culture is the ways of thinking, acting, and living"-based on the statement describe how different elements of culture shape the activity, lifestyle and thinking of a particular community. 10
- (c) Contrast between: (i) High culture and popular culture 08
(ii) Cultural ethnocentrism and cultural relativism
(iii) Mechanical solidarity and organic solidarity
3. (a) What is socialization? Analyze how family, school, peer groups and the mass media guide the socialization process. 07
- (b) "Human development is the outcome of both nature and nurture."- Do you agree with the statement? Why or why not? 06
- (c) What are Piaget's four stages of cognitive development? How would relate these stages with Lawrence Kohlberg's theory of moral development and Carol Gilligan's theory of gender and moral development? 12

4. (a) The meaning of success vary across distinctive stages of life. Explain how does the meaning of success influences people's behavior throughout the life-cycle of a person? 09
- (b) Describe how the technological development has shaped the history of human societies. 10
- (c) "Capitalism creates social conflict and social alienation"-Evaluate the statement. 06

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
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DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid Semester Examination

Course Code: Math 4161

Course Title: Mathematics-I

Winter Semester, A.Y. 2019-2020

Time : 90 Minutes

Full Marks : 75

There are **4 (Four)** questions. Answer **any 3 (Three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Programmable calculators are not allowed. Do not write on this question paper. The Symbols have their usual meaning.

1. a) Solve each of the following inequalities and illustrate them on a number line: 9
 (i) $\frac{3}{2}(s - 2) + 1 > -2(s - 4)$; (ii) $\frac{(x+2)}{(x^2+2x-3)} < 0$.
- b) For a company that manufactures aquarium heaters, the combined cost for labor and material is \$21 per heater. Fixed costs (costs incurred in a given period, regardless of output) are \$70,000. If the selling price of a heater is \$35, how many must be sold for the company to earn a profit? 8
- c) One leg of a right triangle is 2 inches longer than the other. How long should the shorter leg be to ensure that the area of the triangle is greater than or equal to 4? 8
2. a) The graph of a function f is shown in Figure 1. 8
 (i) Find the value of $f(1)$ and $f(5)$
 (ii) What are the domain and range of f

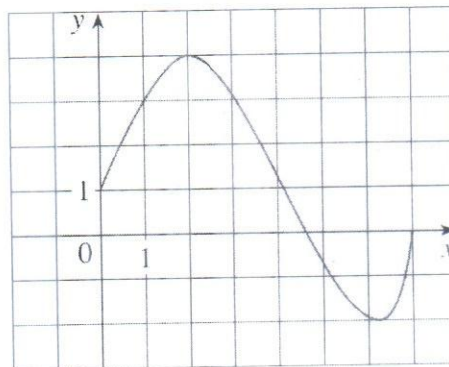


Figure 1

- b) An insurance company examined the records of a group of individuals hospitalized for a particular illness. It was found that the total proportion discharged at the end of t days of hospitalization is given by 8

$$f(t) = 1 - \left(\frac{200}{200 + t} \right)^3$$

Evaluate (i) $f(0)$, (ii) $f(100)$ and (iii) $f(800)$, (iv) at the end of how many days was half of the group discharged?.

- c) Suppose Pureit a manufacturer of water filters, has a monthly fixed cost of \$10,000 and a variable cost of $-0.0001x^2 + 10x$ ($0 \leq x \leq 40,000$) dollars, where x denotes the number of units manufactured per month. Also suppose the total revenue realized by the Pureit from the sale of water filters is given by $R(x) = -0.0005x^2 + 20x$. 9
- Find a function C that gives the total cost incurred by the company in the manufacture of x filters.
 - Find the total profit function.
 - What is the profit when the level of production is 10,000 filters per month?
3. a) In a recent survey of 400 students in IUT, 100 were listed as gmail user and 150 are Yahoo user; 75 were both gmail and yahoo. Find out how many students are neither gmail nor yahoo users. Also show your result using Venn diagram. 9
- b) A survey of 600 workers in a plant indicated that 410 owned their own houses, 500 owned cars, 550 owned televisions, 410 owned cars and televisions, 340 owned cars and houses, 370 owned houses and television and 300 owned all three. Is this data correct? 8
- c) Transform the equation $x^2 - y^2 - 2\sqrt{2}x - 10\sqrt{2}y + 2 = 0$ when the axes are turned through $\frac{\pi}{4}$, the axes of coordinates being rectangular. 8
4. a) Transform the equation $11x^2 + 24xy + 4y^2 - 20x - 40y - 5 = 0$ to rectangular axes through the point $(2, -1)$ and inclined at an angle $\tan^{-1}\left(-\frac{4}{3}\right)$. 15
- b) Through what angle must the axes be rotated to remove the term containing xy in $11x^2 + 4xy + 14y^2 = 5$? What is the transformed equation? 10

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DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Winter Semester, A. Y.2019-2020

Course No. : BTM 4501

Time : 90 minutes

Course Title : Research Methodology

Full Marks : 75

There are **4 (four)** questions. Answer **any 3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. a) Define the term research. Discuss the steps in details for conducting a research along with appropriate figure. 13
- b) Briefly discuss the importance of 'Case Study' as an effective tool of qualitative research. 12
2. a) Briefly discuss different types of research with examples. 15
- b) Define research design. How does research design help us in conducting business research? Discuss. 10
3. a) What are the sources of data? Briefly discuss different methods of data collection. 10
- b) Define questionnaire and schedule. What are the objectives of a research questionnaire/schedule? 15
4. a) Discuss how to design a research questionnaire and explain with examples its applicability. 10
- b) What do you mean by Piloting/Pre-testing of a research questionnaire? Why is it so important? Discuss. 15

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
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DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Course No. : BTM 4503

Course Title : Financial Management 1

Winter Semester, A. Y.2019-2020

Time : 90 Minutes

Full Marks : 75

There are **4 (four)** questions. Answer **any 3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. a) Draw the cash flows in a firm and its stakeholders. 5
- b) Why is value maximization superior to profit maximization as a goal for management? 5
- c) Lambda Corporation has current liabilities of \$450,000, a quick ratio of 1.8, inventory turnover of 5.0, and a current ratio of 3.5. What is the cost of goods sold for Lambda Corporation? 5
- d) Explain why the quick ratio or acid-test ratio is a better measure of a firm's liquidity than the current ratio. 5
- e) Why is the ROE a more appropriate proxy of wealth maximization for smaller firms rather than for larger ones? 5
2. a) Kronka, Inc., is expecting cash inflows of \$13,000, \$11,500, \$12,750, and \$9,635 over the next four years. What is the present value of these cash flows if the appropriate discount rate is 8 percent? 5
- b) Explain the phrase "a dollar today is worth more than a dollar tomorrow." 5
- c) Twenty-five years ago, Amanda Cortez invested \$10,000 in an account paying an annual interest rate of 5.75 percent. What is the value of the investment today? What is the interest on interest earned on this investment? 5
- d) You have \$12,000 in cash. You can deposit it today in a mutual fund earning 8.2 percent semiannually, or you can wait, enjoy some of it, and invest \$11,000 in your brother's business in two years. Your brother is promising you a return of at least 10 percent on your investment. Whichever alternative you choose, you will need to cash in at the end of 10 years. Assume your brother is trustworthy and both investments carry the same risk. Which one will you choose? 10
3. a) Jeremy Denham plans to save \$5,000 every year for the next eight years, starting today. At the end of eight years, Jeremy will turn 30 years old and plans to use his savings toward the down payment on a house. If his investment in a mutual fund will earn him 10.3 percent annually, how much will he have saved in eight years when he buys his house? 5

- b) You have just won a lottery that promises an annual payment of \$118,312 beginning immediately. You will receive a total of 10 payments. If you can invest the cash flows in an investment paying 7.65 percent annually, what is the present value of this annuity? 5

- c) You have been provided the following data on the securities of three firms and the market: 15

Security	$E[R_i]$	σ_{R_i}	ρ	β_i
Stock A	0.15	?	1.0	1.5
Stock B	0.15	0.18	0.5	?
Stock C	0.10	0.02	?	0.5
Market portfolio	0.10	0.04		
Treasury bills	0.05	0		

Assume the CAPM and SML are true and fill in the missing values in the table. Would you invest in the stock of any of the three firms? If so, which one(s) and why?

- 4 a) Describe the difference between a total holding period return and an expected return. 5
- b) Friendly Airlines stock is selling at a current price of \$37.50 per share. If the stock does not pay a dividend and has a 12 percent expected return, what is the expected price of the stock one year from today? 5
- c) Kate recently invested in real estate with the intention of selling the property one year from today. She has modeled the returns on that investment based on three economic scenarios. She believes that if the economy stays healthy, then her investment will generate a 30 percent return. However, if the economy softens, as predicted, the return will be 10 percent, while the return will be 25 percent if the economy slips into a recession. 5
If the probabilities of the healthy, soft, and recessionary states are 0.4, 0.5, and 0.1, respectively, then what are the expected return and the standard deviation of the return on Kate's investment?
- d) Describe how investing in more than one asset can reduce risk through diversification. 5
- e) The expected value of a normal distribution of prices for a stock is \$50. If you are 90 percent sure that the price of the stock will be between \$40 and \$60, then what is the variance of the stock price? 5

BBA in TM, 5th Sem.

Date: February 24, 2020 (Morning)

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination

Winter Semester, A.Y. 2019-2020

Course Code : BTM 4505

Time : 90 Minutes

Course Title : Marketing Management

Full Marks : 75

There are **4 (Four)** questions. Answer **any 3 (Three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. (a) How holistic marketing concept is superior to marketing concept? Describe the four components of holistic marketing concept. 08
- (b) How would you define demand? Describe demand management strategies for each of the eight kinds of demand along with real life examples. 10
- (c) Demonstrate the relationship among 4Ps, 4Cs, and 4As of marketing mix. What insights might a marketer gain by considering 4As rather than 4Cs or 4Ps? Explain. 07
2. (a) Hess Corporation can define their business by saying- "We sell gasoline" or "We supply energy". Which of these two definitions would be better for them and why? Explain. 06
- (b) Think about a particular group company-like Jamuna Group, Megna Group, Bashundara group, BRAC, or Unilever. Describe how you can allocate resources among different SBU of that group company applying GE/McKinsey Matrix. 10
- (c) Name and describe the four product/market expansion grid strategies. KFC is now rolling out a new Kentucky Grilled Chicken line to add to its traditional fried chicken lineup. Which growth strategy does it represent and how? 09
3. (a) Describe the elements of a company's microenvironment and give examples illustrating why each of them is important? 10
- (b) What is customer-perceived value? How would customer-perceived value concept help you to implement 80-20 rule in customer-product profitability analysis? Explain. 08
- (c) "While customer satisfaction can increase both attitudinal and behavioral loyalty, customer dissatisfaction may force company to stay out of market."- Based on the statement, explain how customer satisfaction increases customer loyalty and how customer dissatisfaction can be a blunder for a particular company. 07

4. (a) Describe the types of consumer buying behavior. Which one would you most likely to use if deciding on a laptop computer purchase and which for picking a restaurant for dinner? 09
- (b) How would you go about developing a quantitative formulation that captures customer lifetime value (CLV) of a particular business? How would that business change if it fully embraced the customer equity concept and maximized CLV? 08
- (c) What is buying center? Describe about the participants in business buying process along with their roles. 08

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
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DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Mid-Semester Examination
Course No. : HUM 4561
Course Title : Introduction to Psychology

Winter Semester, A. Y. 2019-2020
Time : 90 Minutes
Full Marks : 75

There are **4 (four)** questions. Answer **any 3 (three)** questions. All questions carry equal marks. Marks in the margin indicate full marks. Programmable calculators are not allowed. Do not write on this question paper.

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1. a) Describe the basic ideas behind the school of structuralism. Who were the pioneers of this approach? What is the basic approach of functionalism, and how does this approach differ from structuralism? 10
 - b) What were the basic ideas and who were the important people behind the early approaches known as Gestalt, psychoanalysis, and behaviorism? 7.5
 - c) Describe the major perspectives of psychology with proper examples. 7.5
 2. a) What is the basic idea behind Freud's psychodynamic view of personality? Describe the three major parts of the mind, according to Freud's theory. What are defense mechanisms, and why are they used by the ego? 10
 - b) Explain how classical conditioning, operational conditioning, and observational learning are related to personality. Relate this to Bandura's social learning theory. How does self-schema relate to personality? 7.5
 - c) Think about your own tendency to be friendly or unfriendly. To what extent is the situation important in determining your level of friendliness? What are some of the reinforcements and punishments you've had in your life that might have contributed to your tendency to be friendly or unfriendly? 7.5
 3. a) Explain the nature and nurture debate on psychological development. Briefly discuss the theory of motor stage development of infant. 05
 - b) Briefly discuss the Piaget's stages of cognitive development and Kohlberg's stages of moral reasoning. 7.5
 - c) Some theorists have claimed that there are sensitive periods for the development of infant. What would the implications of such sensitive periods be? How does the memory develop and what kinds of things do young children remember? Why are early memories unable to be recalled? 7.5
 - d) If there is a poor goodness of fit between a child's temperament and characteristics of parental styles, what can be done to create a better match? Provide a specific example of how this might occur 05

4. a) Drawing from your own day-to-day experiences, can you identify the difference between an emotion and a mood? Do emotions and moods feel different, subjectively? 05
- b) Illustrate the schematic diagram of the emotion process and explain all the components of this process. What are some of the cognitive processes by which a particular emotion might perpetuate itself? 10
- c) In what way is the James–Lange theory of emotions similar to Schachter and Singer’s two-factor theory? In what way do these two theories differ? 05
- d) Research suggests that if you merely interact with a person who suppresses his own emotions, your own physiological arousal may increase. How might this happen? 05