

Programme: BScTE 2 Years-4th Semester &
BScTE 1 Year-2nd Semester
Semester: Summer

Date: 13th April, 2022 (Thursday)
Time: 10:00 am – 01:00 pm

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

Exam: Final Semester Examination
Course Number: TVE 4203
Course Title: Psychology of Teaching & Learning

Academic Year: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8** (eight) questions. Answer **6** (six) questions. Questions **5, 6** and **8** are compulsory.
The symbols have their usual meaning.

-
1.
 - a) Define Psychology and name any 5 (five) branches of Psychology. (08) [CO1]
 - b) According to John W., **Educational psychology** “Is the branch of psychology that specializes in understanding teaching and learning in educational settings”. What is your understanding of that definition? (07) [CO2]
 - c) Explain the commonality and difference between **Psychology** and **Educational Psychology**. (10) [CO2]

 2.
 - a) Psychologists claim that psychology plays an important role if teaching and learning is to take place successfully. Do you agree with them? Why? (05) [CO2]
 - b) The factors that may have impact on the learner include home environment, social grouping, peer groups, among others. Explain how a weak student could be affected by keeping company with hard-working students. (05) [CO2]
 - c) The main aims of Educational Psychology are **Understanding, Forecasting or Predicting, and Controlling**. As a trained teacher, describe how you can apply those aims in your profession to ensure effective students’ learning? (15) [CO2]

 3.
 - a) Name 5 (five) specific objectives of educational psychology. (10) [CO1]
 - b) Research has proved that all the various types of learning domains are linked with the cognitive domain. With the use of examples, demonstrate how skills related to the psychomotor, affective, and interpersonal domains can be acquired with the help of the cognitive domain. (15) [CO3]

 4.
 - a) Write short notes on the following: (03) [CO3]
 - i. Learning styles
 - ii. Learning theories
 - iii. Learning domains
 - b) Explain the VARK learning styles and provide examples in every case. (12) [CO3]
 - c) Of the four learning styles in **4) b)**, which style or styles do you prefer for your own studies and why? How will your learning style or styles will be helpful in your future (further studies or employment)? (10) [CO3]

- 5 Muhammad Harun, the CEO of Al-Azraj Engineering Ltd., is an experienced engineer who has been on the field for more than 30 years. With business growing at an excellent rate, the need to generate more useful information about the market and secure it becomes just as important. For that, Al-Azraj Engineering Ltd. has advertised a position of IT expert who will be in charge of all computer related activities of the company. Consequently, he or she will attend meetings with the board of directors and present a report about IT department of the company. Based on the above scenario, answer the following questions:
- a) During interviews, how will Mr. Harun test the cognitive and psychomotor capabilities of the candidates who have applied for the vacancy? Support your answers with relevant examples. (10) [CO3]
 - b) If the selected candidate is to be successful during board meetings, which domain or domains of learning will Mr. Harun focus the most during the interviews? Elaborate your answers with explicit examples. (15) [CO3]
- 6 Ahmad Ali has completed a B.Sc. (ME) at Kololo University (Zambia) with the highest CGPA in his batch. As a result, he was offered the opportunity to become a lecturer at that department. But due to his lack of teaching experience, he found it difficult to keep his students motivated and engaged during his first few weeks at work. With that description in mind, answer the following questions:
- a) Describe the concept of motivation to Mr. Ali and explain him the important role it plays in a teaching learning context. (10) [CO4]
 - b) Propose to Ahmad Ali 5 (five) techniques which he can use in his classroom to ensure his students are always motivated throughout his entire sessions. [Hint: The benefits of every tip should be clearly explained to Ahmad Ali]. (15) [CO4]
- 7
- a) In your own words, describe what is meant by classroom management. (05) [CO4]
 - b) Is classroom management the same as discipline? Clarify your answer with clear examples. (05) [CO4]
 - c) Amina Akter is a first-year master's student in the EEE department of SIU. Due to a shortage of teachers, she has been appointed as a Teaching Assistant (TA) to support her supervisor Prof. Dr. Zaheer Hasan Khan. Given that this is her first teaching experience, Mrs. Akter faces a challenging task of ensuring discipline in the classroom as most of the students still view her as one of them. As a BScTE graduate, what advice would you give to Mrs. Akter to ensure good classroom discipline in her classes? (Hint: Discuss five (5) possibilities). (15) [CO4]
- 8
- a) Many people argue that the social networking sites is more harmful to students in their academic endeavor. Do you agree with them? Why? (05) [CO5]
 - b) Express your view regarding communication between teachers and students in the various social media platforms. (05) [CO5]
 - c) Mr. Nice, a young and active social media fan, has been appointed as a lecturer in UKB. To ensure frequent communication with his students, he uses his Facebook as a means of communication. What would you advise Mr. Nice to do so that his interaction with students always remains professional? (Hint: Discuss five (5) possibilities). (15) [CO5]

Programme: BTHT 2nd Semester
Semester : Summer

Date: 12 April 2022
Time: 10:00 am – 01:00 pm

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

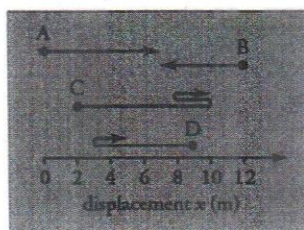
Semester Final Examination
Course No: SCI 4211
Course Title: General Science

Academic Year: 2020-2021
Time : 3 Hours
Full Marks: 150

There are 7 (seven) Questions. Answer any six (6) of them.

Use the graph paper wherever necessary. Marks in the Margin indicate the full marks.

1. a) Discuss De Broglie equation. Explain its application for microscopic substances. 08
b) Define quantum number. Describe four quantum numbers of an electron in an atom. 08
c) Draw the shape of d-orbital. The red spectral line of lithium occurs at 671 nm. Calculate the energy of one photon of this light. 09
2. a) Define K_c and K_p . Derive a relationship between K_c and K_p . 08
b) Derive Henderson equation relating the pH and pK_a of an acid. 08
c) Arrange the following acids according to their strength and explain the corresponding reasons. H_2SO_4 , H_3PO_4 , $HClO_4$, and HNO_3 07
3. a) Calculate the pH of a buffer solution made from 0.20 M $HC_2H_3O_2$ and 0.50 M $C_2H_3O_2^-$ that has an acid dissociation constant for $HC_2H_3O_2$ of 1.8×10^{-5} . 07
b) Define electron affinity. Describe electron affinity as a periodic property. 09
c) Classify the elements based on their electronic configurations. 09
4. a) Define ionic bonds. Discuss about the factors that are favoring for the formation of ionic bonds. 10
b) Discuss octet rule and its limitation. 08
c) Define hydrogen bond, intramolecular and intermolecular hydrogen bond along with suitable example. 07
5. a) Describe Valence Shell Electron Pair Repulsion (VSEPR) theory. 13
b) Explain the shape of the following molecules according to VSEPR theory. 12
i. SF_4 ,
ii. XE_4 ,
iii. IBr_5 , and
iv. PO_4^{3-} .
6. a) A student writes, "A bird that is diving for prey has a speed of -10 m/s ." What is wrong with the student's statement? What has the student actually described? Explain. 06
b) 12



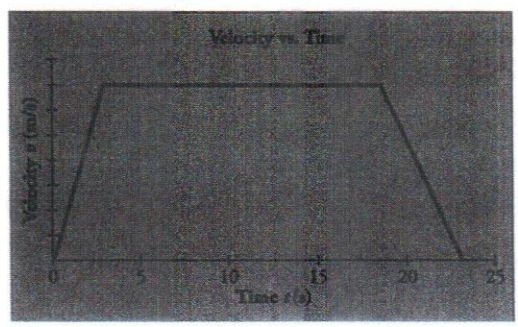
Find the following for path A, B, C, and D in the above figure:

- i. The distance travelled.
 - ii. The magnitude of the displacement from start to finish.
 - iii. The displacement from start to finish.

- c) A helicopter blade spins at exactly 100 revolutions per minute. Its tip is 5.00 m from the center of rotation. 07
 - i. Calculate the average speed of the blade tip in the helicopter's frame of reference.
 - ii. What is its average velocity over one revolution?

- 7. a) Is it possible for speed to be constant while acceleration is not zero? Give an example of such a situation. 05

- b) Consider the velocity vs. time graph of a person in an elevator shown in Figure. Suppose the elevator is initially at rest. It then accelerates for 3 seconds, maintains that velocity for 15 seconds, then decelerates for 5 seconds until it stops. The acceleration for the entire trip is not constant so we cannot use the equations of motion from Motion Equations for Constant Acceleration in One Dimension for the complete trip. (We could, however, use them in the three individual sections where acceleration is a constant.) Sketch graphs of : 20
 - i. Position vs. time and
 - ii. Acceleration vs. time for this trip.



Program: BTHT- 2nd Semester
Semester: Summer

Date: 07 April 2022
Time: 10:00 am – 01:00 pm

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

Final Semester Examination
Course Number: Hum 4211
Course Title: English II

Academic Year: 2020 - 2021
Full Marks: 100
Time: 3 Hours

Answer any 6 (six) questions including the question number 8(eight). The question number 8 (eight) is compulsory for you. All questions carry equal marks.

1.

CO3

Read the text carefully and answer the questions that follow:

Advertising has become a very specialised activity in modern times. In the business world of today, supply is usually greater than demand. There is great competition between different manufacturers of the same kind of product to persuade customers to buy their own particular brand. They always have to remind the customer of the name and the qualities of their product. They do this by advertising. The manufacturer advertises in the newspapers and on posters. He sometimes pays for songs about his product in commercial radio programmes. He employs attractive sales-girls to distribute samples of it. He organises competitions, with prizes for the winners. He often advertises on the screens of local cinemas. Manufacturers often spend large sums of money on advertisements. We buy a particular product because we think that it is the best. We usually think so because of the advertisements that say so. Some people never pause to ask themselves if the advertisements are telling the truth.

- a) Answer the following questions briefly in your own words. 6
- i. How many kinds of advertisements are mentioned in the passage?
What are they?
 - ii. Why do manufacturers spend so much money on advertising?
 - iii. Do you think that we buy goods because they are advertised? Why do you think so or not?

- b) Give antonyms of the following words:

spend, manufacturer, supply, winner, buy, important 6

- c) Change the words as directed and make sentences with the changed ones:


Attractive (verb) 4
Advertisement(verb)
Truth (adjective)
Particular (adverb)

2. a) Transcribe the following words phonemically (any 10): 10 CO1

school, library, university, college, father, mother, breakfast, examination, student, subject, medicine, television, remember, understand

- b) Instruct a stranger on mobile how to get from Saudi Arabia to your university 6
- 3. a) 'Listening is the cornerstone of effective communication.' Elucidate. 8 CO2
- b) Discuss the guidelines for effective speaking. 8
- 4. a) What was Albert Edward Foreman's reply to the question of the bank manager? What does his answer reflect? 8 CO4
- b) Explain the following quote spoken by the old man "But man is not made for defeat. A man can be destroyed but not defeated" 8 CO2
- 5 a) Read the advertisement carefully and respond to it. 8

Job Opportunity


 ABC Ltd., an international company in Dhaka, invites application for the post of Tourist Guide. **B.Sc. Degree holders in Tourism and Hospitality Technology** with 1 to 5 years job experience in relevant fields are encouraged to apply. Interested candidates are requested to apply to The HR Manager, ABC Ltd. Company, Dhaka along with CV.

- b) Write a tourism brochure on the Rampura Hatir Jhil or any tourism place in Bangladesh. 8 CO1
- 6 a) Summarize the following text carefully in about 100 words. 8

Freedom to learn, to speak, and to publish are among the basic elements of a democratic way of life. In the seventeenth century, these freedoms were restricted throughout most of Europe. Many of the colonial leaders brought negative thoughts about these freedoms along with them to the New World. From the earliest days, they had misgivings about the growing spirit of independence among the settlers. These leaders believed that it was dangerous to educate men and women or even to allow them to read freely.

In fact, one such leader, William Berkeley, Governor of Virginia went so far as to boast that while he was governor, there were neither free schools nor printing presses in his colony. On the other hand, many colonists held an opposing view. They believed that people should be free to learn, to think and to express their opinions. They also believed that printers should be free to print and distribute their own thoughts and the thoughts of others.

- b) Write a short story in 200-250 words using the following clues. Provide your story with a title: 8

Travelling in Dhaka by bus to attend the marriage ceremony of a friend.....
got stuck in a traffic jam..... reached the railway station late..... boarded a
wrong train.... realised after two hours.... now you.....

- 7 a) Construct questions to which the following may be the answers. **5 CO4**
- i. The University opens at 8 am.
 - ii. Tourism is my favourite subject.
 - iii. I have one brother and one sister.
 - iv. Bangladesh became independence on 26 March 1971.
 - v. I was born in Dhaka.
- b) Write an essay on 'the Scope of Tourism and Hospitality' in Bangladesh. **11**
- 8 a) Present the layout of a long formal report. **6 CO4**
- b) Suppose you are the Senior Manager of Human Resource Division at Parjoton Corporation, Dhaka. Now, write the annual assessment report for the Assistant Manager (HR) for 2020-2021. Write the necessary details. **14**

Program: BTHT-2nd Semester
Semester: Summer

Date: 05 April 2022
Time: 10:00 am – 01:00 pm

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

Final Semester Examination
Course Number: TVE 4215
Course Title: Fundamentals of Accounting

Academic Year : 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8 (eight)** questions. Answer **6 (six)** questions. The symbols have their usual meaning.

1. Selected transactions for D. Reyes, an interior decorator, in her first month of business, are as follows. CO1,
CO2
 - Jan. 2 Invested \$10,000 cash in business.
 - 3 Purchased used car for \$4,000 cash for use in business.
 - 9 Purchased supplies on account for \$500.
 - 11 Billed customers \$1,800 for services performed.
 - 16 Paid \$200 cash for advertising.
 - 20 Received \$700 cash from customers billed on January 11.
 - 23 Paid creditor \$300 cash on balance owed.
 - 28 Withdrew \$1,000 cash for personal use by owner.

Required:
For each transaction indicate the following.

 - (a) The basic type of account debited and credited (asset, liability, owner's equity). 8
 - (b) The specific account debited and credited (cash, rent expense, service revenue, etc.). 12
 - (c) Whether the specific account is increased or decreased. 5

2. Slowhand Services was formed on May 1, 2021. The following transactions took place during the first month. 25 CO1,
CO2
 - May 1 Eric Clapton invested \$50,000 cash in the company, as its sole owner.
 - 1 Hired two employees to work in the warehouse. They will each be paid a salary of \$2,800 per month.
 - 2 Signed a 2-year rental agreement on a warehouse; paid \$24,000 cash in advance for the first year.
 - 4 Purchased furniture and equipment costing \$30,000. A cash payment of \$10,000 was made immediately; the remainder will be paid in 6 months.
 - 7 Purchased basic office supplies for \$2,000 cash.
 - 10 Total revenues earned were \$20,000—\$8,000 cash and \$12,000 on account.
 - 15 Paid \$400 to suppliers for accounts payable due.
 - 18 Received \$3,000 from customers in payment of accounts receivable.
 - 20 Received utility bills in the amount of \$200, to be paid next month.

Required:
Prepare journal entries to record each of the events listed. (Omit explanations.)

3. Selected transactions for Tina Cordero Company during September 2021 in business are presented below. CO1,
CO2
 - Sept. 1 Invested \$10,000 cash in the business.

- 5 Purchased equipment for \$12,000 paying \$5,000 in cash and the balance on account.
- 25 Paid \$3,000 cash on balance owed for equipment.
- 30 Withdrew \$500 cash for personal use.

Cordero's chart of accounts shows: No. 101 Cash, No. 157 Equipment, No. 201 Accounts Payable, No. 301 Tina Cordero, Capital; No. 306 Tina Cordero, Drawing.

Required:

- (a) Post the transactions using the standard account form. 15
- (b) Prepare a trial balance as on September 30, 2021. 10

- 4. (a) Givens Graphics Company was organized on January 1, 2020, by Sue Givens. At the end of the first 6 months of operations, the trial balance contained the accounts. 18 CO1, CO2

Debits		Credits	
Cash	\$ 9,500	Notes Payable	\$ 20,000
Accounts Receivable	14,000	Accounts Payable	9,000
Equipment	45,000	Sue Givens, Capital	22,000
Insurance Expense	1,800	Graphic Revenue	52,100
Salaries Expense	30,000	Consulting Revenue	6,000
Supplies Expense	3,700		
Advertising Expense	1,900		
Rent Expense	1,500		
Utilities Expense	1,700		
Total	<u>\$109,100</u>		<u>\$109,100</u>

Analysis reveals the following additional data.

- (i) The \$3,700 balance in Supplies Expense represents supplies purchased in January. At June 30, \$1,300 of supplies was on hand.
- (ii) The note payable was issued on February 1. It is a 9%, 6-month note.
- (iii) The balance in Insurance Expense is the premium on a one-year policy, dated March 1, 2020.
- (iv) Consulting fees are credited to revenue when received. At June 30, consulting fees of \$1,500 are unearned.
- (v) Graphic revenue earned but unrecorded at June 30 totals \$2,000.
- (vi) Depreciation is \$2,000 per year.

Required:

Journalize the adjusting entries at June 30. (Assume adjustments are recorded every 6 months.)

- (b) The trial balance of Ronald Fabrics at December 31, 2021 shows Merchandise inventory \$50,000, Sales \$340,000, Sales discounts \$5,600, Cost of goods sold \$250,000, Freight-out \$2,500, Prepaid expense \$ 15,000, Rent expense \$12,800, Salaries and wages expense \$42,000, Supplies \$ 8,000, Supplies expense \$ 2,000. 7

Required:

Prepare the closing entries for the above accounts.

5. The trial balance of Khaled Ltd. at December 31, 2021, is as follows:

25 CO3

Trial Balance
As of December 31, 2021

Account Titles	Debit	Credit
Merchandise Inventory, January 1	\$225,000	
Purchase	755,000	
Purchase Returns & Allowances		\$12,000
Purchase Discounts		20,000
Sales		1,260,000
Sales Returns & Allowances	70,000	
Sales Discounts	17,500	
Cash	31,000	
Office Supplies	4,000	
Accounts Receivable	40,000	
Notes Receivable	100,000	
Insurance	10,500	
Land	170,000	
Building	410,000	
Accumulated Depreciation—Building		80,000
Office Equipment	106,500	
Accumulated Depreciation—Office Equipment		26,500
Accounts Payable		95,000
Common Stock		806,000
Transportation-in	41,000	
Sales Salaries	138,000	
Advertising	30,500	
Transportation-out	39,000	
Office Salaries	111,500	
Dividends	50,000	
Taxes	75,000	
Postage & Telephone	25,000	
Retained Earnings		150,000
	<u>\$ 2,449,500</u>	<u>\$ 2,449,500</u>

The following information is available at December 31:

- (i) Merchandise inventory \$225,000.
- (ii) Office Supplies on hand \$1,000.
- (iii) Prepaid insurance \$7,000.
- (iv) Depreciate building @15% per annum and Office equipment @ 17.5% per annum.
- (v) Outstanding sales salaries \$2,500 and office salaries \$2,000.

Required:

Prepare a classified income statement for year ended December 31, 2021. Of the insurance expense, postage & telephone expenses, and depreciation expenses on

building, 75% is treated as selling expense and 25% is treated as administrative expenses.

6. The adjusted trial balance for Jack and Rosie at December 31, 2021 contains the following accounts: 25 CO3

<u>Debits</u>		<u>Credits</u>	
Insurance Expenses	\$ 1,000	Accumulated Depreciation-Equipment	\$20,720
Depreciation Expenses	5,360	Interest Payable	2,000
Interest Expenses	2,000	Service Revenue	24,180
Building	130,000	Jack & Rosie, Capital	114,480
Accounts Receivable	16,000	Accumulated Depreciation-Building	50,000
Prepaid Insurance	4,780	Accounts Payable	16,000
Cash	22,840	Mortgage Payable	95,000
Equipment	60,400		
Land	<u>80,000</u>		
Total	<u>\$322,380</u>		<u>\$322,380</u>

Required:

Prepare a classified balance sheet assuming that \$16,500 of the mortgage payable will be paid in 2022.

7. Selected account balances for the year ended December 31, 2021 are provided below for Superior Company: CO3

Selling and administrative salaries	\$110,000
Purchases of raw materials	\$290,000
Direct labor	?
Advertising expense	\$80,000
Manufacturing overhead	\$270,000
Sales commissions	\$50,000

Inventory balances at the beginning and end of the year were as follows:

	<u>January 1, 2021</u>	<u>December 31, 2021</u>
Raw materials	\$40,000	\$10,000
Work in process	?	\$35,000
Finished goods	\$50,000	?

The total manufacturing costs for the year were \$683,000; the goods available for sale totaled \$740,000; and the cost of goods sold totaled \$660,000.

Required:

- (a) Prepare a schedule of cost of goods manufactured and the cost of goods sold section of the company's income statement for the year. 20
- (b) Assume that the dollar amounts given above are for the equivalent of 40,000 units produced during the year. Compute the average cost per unit for direct materials used and the average cost per unit for manufacturing overhead. 5
8. Menlo Company distributes a single product. The company's sales and expenses for last month follow: CO4

	<u>Total</u>	<u>Per Unit</u>
Sales	\$450,000	\$30
Variable expenses	<u>180,000</u>	<u>12</u>
Contribution margin	270,000	<u>\$18</u>
Fixed expenses	<u>216,000</u>	
Net operating income	<u>\$54,000</u>	

Required:

- (a) What is the monthly break-even point in unit sales and in dollar sales? 10
- (b) Without resorting to computations, what is the total contribution margin at the break-even point? 2
- (c) How many units would have to be sold each month to earn a target profit of \$90,000? Use the formula method. 6
- (d) Refer to the original data. Compute the company's margin of safety in both dollar and percentage terms. 7

Program: BTHT 2nd Semester
Semester: Summer

Date: 29 March, 2022
Time: 10:00 am – 01:00 pm

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

Final Semester Examination
Course Number: TVTH 4221
Course Title: Tourism Planning and Development

Academic Year: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8 (eight)** questions. Answer any **6 (six)** questions. The symbols have their usual meaning.

- | | | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| 1. | a) Discuss the necessary efforts for planning cultural and historical attractions. | 10 | CO2 |
| | b) What are the goals you will consider for planning heritage attractions? Explain these goals in the context of the Bangladesh context. | 15 | CO3 |
| 2. | a) Why natural areas are important in outdoor recreation? How do you plan for tourism development in agricultural areas? | 15 | CO2 |
| | b) What is the importance of women in tourism development? | 10 | CO1 |
| 3. | a) What is sustainable tourism? Why is sustainable tourism important for destinations? | 10 | CO1 |
| | b) Examine and elaborate the baseline issues for sustainable destinations and sites. | 15 | CO3 |
| 4. | a) Explain the key indicators for sustainable destinations and sites. | 10 | CO2 |
| | b) Demonstrate the destination value chain activities in Bangladesh. | 15 | CO3 |
| 5. | a) State the guidelines for developing a park management plan. | 15 | CO1 |
| | b) How do you develop goals and objectives for protected areas in Bangladesh? | 10 | CO3 |
| 6. | a) Describe the characteristics of protected area planning. | 15 | CO2 |
| | b) Who are the involving stakeholders in the protected area? What are their roles in planning for the protected area? | 10 | CO1 |
| 7. | a) Define strategic directions for destinations and sites. | 10 | CO1 |
| | b) Discuss the sustainable planning process for destinations and sites. | 15 | CO2 |
| 8. | a) Identify the tourism contributions for sustainable development goals achievement in Bangladesh. | 15 | CO2 |
| | b) State the main features of 'The Tourism Policy 2010'. | 10 | CO1 |

Program: B.Sc. EEE 4th Semester

Date: 31st March, 2022

Semester : Summer

Time: 10:00 am – 01:00 pm

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)

ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Semester Final Examination

Academic Year: 2020 - 2021

Course Number: Hum 4421

Full Marks: 100

Course Title: Science, Technology and Islam

Time: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. Question number 1 (one) is compulsory.

- | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------|----|-------------|
| 1. | a) Explain the importance of faith and surrender in Islam as the main two fold nature of Islam. | 10 | CO1,
CO3 |
| | b) Was spread of Islam due to the might of sword? | 05 | |
| | c) Explain the compatibility of religion with science with special reference to Islam. | 10 | |
| 2. | a) How do you perceive the salah as abundant resource for plentiful excellences in the life apart from a mere ritualistic ibadah? | 10 | CO1,
CO2 |
| | b) How Islam looks towards knowledge and science? | 05 | |
| 3. | a) How modern chemistry originated as a pure scientific field in the hand of Muslim scientists in early medieval period? | 10 | CO2 |
| | b) Why Jabir Ibn Haiyan is called the father of modern chemistry? | 05 | |
| 4. | a) Describe ten Muslim inventions that shaped the modern world. | 10 | CO2 |
| | b) Expose the contribution of Muhammad Ibn Musa al-Khwarizmi as the father of algebra. | 05 | |
| 5. | a) Scientific miracles are vividly evident in the Quran as it describes some characteristics of the mountain. Explain? | 10 | CO3,
CO2 |
| | b) Why Al-Biruni is considered as one of the greatest scientist of Muslim civilization? | 05 | |
| 6. | a) Does Quranic concept of creation of the universe match with the modern big bang theory? | 10 | CO3 |
| | b) How the scientific miracles of the Quran is observed in the different flows and wares of the seas? | 05 | |
| 7. | a) Define the Pentateuch as the nucleus of Hebrew and Christian Bible. | 10 | CO1 |
| | b) How The Rabbinic Tradition has acquired an important space in Judaism? | 05 | |
| 8. | a) Describe the nature of conflict between the Eastern and the Western Christianity. | 10 | CO1 |
| | b) How Reformation and Counter Reformation made the shape of modern Christianity? | 05 | |

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
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DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Final Semester Examination

Summer Semester: 2020 - 2021

Course Number: Hum 4225

Full Marks: 150

Course Title: Professional Ethics and Legal Issues

Time: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. The symbols have their usual meaning.

1. It has been observed that some of the engineering graduates tend to work as consulting engineers and they are compensated by fees for the services they render. Discuss their responsibilities related to Contingency Fees and Safety and Client Needs. 25 CO₃
2. Discuss the following in light of the notion of Shared Responsibility and Control of technology: CO₃
 - a) Einstein regretting his initial support for the nuclear arsenal. 10
 - b) Creation of the tomato harvester that has negative impact on the small farmers and the nature of the tomato. 15
3.
 - a) Why do you think that engineers should not depend on the minimal standard introduced by the law? 15 CO₁
 - b) Analyze as to what should be the appropriate stance of the law regarding the engineering research and innovation. 10 CO₂
4.
 - a) Explain the pros and cons of the industrial standard. 15 CO₁
 - b) Analyze with example how the industrial standard could be exploited to create monopoly in the market. 10 CO₂
5.
 - a) Analyze the engineers' refusal to give a go to the Challenger for its first flight in 1986 in light of the Right of Conscientious Refusal. 10 CO₃
 - b) Elaborate the widely applicable principles for conflict resolution. 15 CO₂
6.
 - a) Discuss with criticism the measures taken by some varities and corporations to ensure equal opportunity. 15 CO₃
 - b) Explain the substitutes of the job quotation system as it may hamper quality engineering. 10 CO₃
7.
 - a) Elaborate the value of the informed consent as an integral part of research in light of the Challenger disaster. 10 CO₂
 - b) Define the dissimilarities between engineering and standard experiment. 15 CO₁
8. Write short notes on the following
 - a) Quick Fix and Social Engineering 8 CO₃
 - b) Computer and job elimination 7 CO₂
 - c) Weapon Decommissioning 10 CO₃

Programme: BsTE 2 year (2nd Semester)
Semester: Summer

Date: 5th April, 2022
Time: 10:00AM – 01:00 PM

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

Semester Final Examination
Course Number: Hum 4229
Course Title: Engineering Management

Summer Semester: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8 (eight)** questions. Answer **6 (six)** questions. The symbols have their usual meaning.

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1. a) What is engineering management? | CO1 |
| b) Is engineering a profession? Justify your answer from a Socratic point of view. [Choose an engineering occupation (e.g. Computer Engineer, electrical engineer, etc.) in your specialization and use it as an example to justify your claim.] | 05
12 |
| c) Mr. Muhammad has been recently assigned a duty of a foreman at ABC Company LTD in Boardbazar. IUT has given ABC Company LTD a contract to build a female canteen (shop). The company has instructed Mr. Muhammad and his crew (non-managers) to start construction by following the plan and design as given by the company's engineer. Identify the basic managerial responsibilities of Mr. Muhammad to his crew and to his manager (company engineer). | 08 |
| 2. a) What is planning? Discuss the decision-making process that you would use, as engineering managers, to solve complex problems. | CO3
10 |
| b) Due to COVID-19 pandemic, TVE department wishes to introduce LMS for its online classes. Using SWOT analysis, examine the key factors of LMS's success to TVE department. | 10 |
| c) Differentiate between official goals and operational goals. | 05 |
| 3. a) Before the late 18th century, majority of families engaged in small scale cotton business. But due to growing demands, in the last 18th century, a series of eight inventions changed society irretrievably. Briefly discuss any four of the inventions of the 18th century. | CO1,CO2
15 |
| b) The development of cotton and woolen mills in the mill cities of England, and later New England, caused tremendous sociological change. These new innovations came with challenges that lead to the rise of different scientific management theories. Discuss the challenges faced by the managers in the new factory system. | 10 |
| 4. a) Charles Babbage's work is considered to be far ahead of its time. Discuss this statement with examples. | CO1,CO2
10 |
| b) Elaborate Relay Assembly Test Room Experiment that took place at the Hawthorne Works and what factors could explain the regular productivity increases observed in these experiments? | 15 |

5. a) The words *leadership* and *management* are often used interchangeably, yet they describe two different concepts. Describe the main differences and similarities of a leader and manager. CO3
15

b) Write a short note on to the following:

I. Emergent leaders

II. Titular leaders

10

6. SAMSUNG gadgets LTD branch in Dhaka has recent recruited you as its new CEO. One of the main agenda of you recruit is to help them make a forecast of their expected sales in next 5 years. You have been provided with their annual sales of SAMSUNG product for the past decade below: CO4

Year	Sales (Millions)
2012	40
2013	30
2014	20
2015	25
2016	25
2017	30
2018	20
2019	30
2020	40
2021	35

15

I. Calculate the simple exponential smoothing taking $\alpha = 0.3$ for the above data. [where $F_{t+1} = F_t + \alpha(A_t - F_t)$]

II. Using simple moving average, forecast the sales for 2022 and 2024. [Where $n=10$].

10

7. a) With a continued extension of conventional classes amidst COVID-19 pandemic, most institutions including IUT have been greatly affected both financially and academically. While TVE department has taken an initiative to design LMS to support online learning, a number of teachers have expressed their disapproval. By using Edward de Bono's six thinking Hats method, brainstorm the implication of online learning to IUT. CO2,
CO4
12

b) State the guideline principles of Edward de Bono's six thinking Hats used to ensure a structured brainstorming session.

08

c) Briefly explain the Pareto's 80/20 principle.

05

8. a) Write a short note onto the following qualitative forecasting method :

I. Weighted Moving Average (WMA)

II. Jury of executive opinion

III. Sales force composite.

CO3, CO4

15

b) If 3D-Printer company has sales for years 2019, 2020, 2021, 2022, $n = 4$ were 1,600; 1,200; 1,300; and 1,100 respectively. Using a simple Moving Average forecast the company's sales for 2023. 10

Programme: B.Sc.TE 2-Yr 4th Sem. &
 B.Sc.TE 1-Yr 2nd Sem.
Semester: Summer

Date: 4th April 2022, Monday
Time: 10:00 AM to 1:00 PM

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF TECHNICAL & VOCATIONAL EDUCATION (TVE)

Semester Final Examination

Academic Year: 2020-2021

Course No: TVE 4229

Time : 3 Hours

Course Title: Instructional Technology and Communication **Full Marks** : 150

Skills

There are (8) eight questions. Answer any 6 (six).
Figures in the right margin indicate marks of the questions

- | | | | |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------|
| 1. | a) Define instructional technology. How does it help the instructor and learner in the task of instruction and learning? | 15 | CO1 |
| | b) Describe in detail the different steps of instructional technology used in the teaching-learning process. | 10 | CO2 |
| 2. | a) State the characteristics of Good Teaching Aids. | 10 | CO2 |
| | b) Discuss briefly different criteria to choose effective teaching aids for effective classroom teaching. | 15 | CO3 |
| 3. | a) What is classroom communication? Discuss it in relation to verbal and non-verbal communication. | 10 | CO1
CO2 |
| | b) How can you achieve effectiveness in classroom communication? Discuss in brief, the different barriers to communication. | 15 | CO3 |
| 4. | a) Define Computer-Aided Instruction (CAI). Discuss briefly the basics assumptions of CAI for its use as a method of instruction. | 15 | CO3 |
| | b) Explain briefly the advantages and limitations of using CAI as a Teaching Instruction. | 10 | CO2 |
| 5. | a) What do you mean by instructional objectives? Explain briefly in what ways, instructional objectives differ from the teaching aims and objectives. | 15 | CO2 |
| | b) Describe the taxonomies of educational or instructional objectives in the cognitive and affective domain as given by Bloom and his associates. | 10 | CO1 |
| 6. | a) Define the concept of e-learning. What steps would you like to take for the upgrade and organization of e-learning in your educational institutions? | 15 | CO1
CO4 |
| | b) Discuss briefly the delivery methods of e-learning in terms of Teaching and Learning. | 10 | CO4 |
| 7. | a) Discuss briefly how the learning paradigm shifted from a traditional system to Open Distance Learning (ODL) System. | 15 | CO3 |
| | b) Explain in brief, the various functions of the Resource Centre of Educational Institutions. | 10 | CO4 |
| 8. | a) What do you understand by the term programmed learning or program instruction? Discuss the nature and fundamental characteristics of programmed learning. | 15 | CO1 |
| | b) Explain the basic assumptions and procedure of branching programming. | 10 | CO2 |

Programme: DTE (2nd Sem.)

Date: 13 April 2022, Wednesday
Time: 10:00 am – 1.00 pm

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

Semester Final Examination

Course No: TVE 4235

Course Title: Educational Measurement and Evaluation

Summer Semester (2020-2021)

Time : 3 hours

Full Marks : 150

There are 8 (eight) questions. Answer any 6 (six).

Figures in the right margin indicate marks of the questions.

(Necessary formulas and statistical table of critical values are attached)

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 1. a) Briefly discuss the following terms with examples in light of educational Measurement: | 16 CO1 |
| i. Placement assessment | |
| ii. Formative assessment | |
| iii. Diagnostic assessment | |
| iv. Summative assessment. | |
| b) Define and differentiate among the following four scales of measurement with examples. | 9 CO1 |
| i. Nominal | |
| ii. Ordinal | |
| iii. Scale and | |
| iv. Ratio. | |
| 2. a) What are the criteria for selecting appropriate learning objectives? Discuss. | 12 CO2 |
| b) Explain the comparative advantages of Objective Test items and Performance Assessment Tasks. | 13 CO4 |
| 3. a) Define <i>Validity</i> and describe its characteristics in assessment. | 10 CO3 |
| b) Describe how the following factors influence <i>Validity</i> of a test result: | 15 CO3 |
| i. Factors in the test or assessment itself | |
| ii. Factors in administration and scoring and | |
| iii. Factors in students' responses. | |
| 4. a) What is <i>Table of Specifications</i> ? Construct a <i>Table of Specifications</i> for any of your courses considering total marks as 150, total content as 10 chapters and total number of learning domains as 3. | 15 CO2 |
| b) Write two questions from each subdomain of the cognitive domain using appropriate active verbs for each question. | 10 CO2 |
| 5. Describe the following methods of estimating reliability of a test. Mention the type of reliability measured by each method and the procedure to measure that type. | 25 CO3 |
| i. Test-retest | |
| ii. Equivalent-forms | |
| iii. Test-retest with equivalent forms | |
| iv. Split-half | |
| v. Interrater. | |
| 6. a) "Reliability is necessary but not sufficient condition for validity"- Do you agree with this statement? Justify your answer with examples. | 8 CO3 |
| b) What is <i>Usability</i> of a test? What strategies are recommended to maintain the <i>Usability</i> of a test? | 7 CO3 |
| c) Explain the strategies to avoid unintended clues in the Objective Test items. | 10 CO4 |

7. a) The following distribution represent the achievement of a group of students in a test. Calculate the mean, median and mode of the following distribution. 15 CO5
 b) Calculate the Percentile scores of the following points: P₀, P₃₀, P₆₀, P₉₀, P₁₀₀. 5 CO5
 c) Determine the Percentile rank of the student who scored 50. 5 CO5

Scores	Frequency, f
79 – 83	6
74 – 78	7
69 – 73	8
64 – 68	10
59 – 63	12
54 – 58	15
49 – 53	23
44 – 48	16
39 – 43	10
34 – 38	12
29 – 33	6
24 – 28	3

8. a) In Sample A (N=150), M=120 and $\sigma = 20$; in Sample B (N=75), M=126 and $\sigma = 22$. What are the mean and SD of A and B when combined into one distribution of 225 cases? 7 CO5
 b) A student ranks 6th in a class of 30 in mathematics and 6th in a class of 50 in English. Compare his PR's in the two subjects. What would the student's rank in mathematics need to be in order for his PR in mathematics to equal his PR in English? 8 CO5
 c) In an achievement test, 20 students of a class have scored as below: 10 CO5

12, 20, 25, 15, 8, 32, 28, 35, 22, 44, 36, 17, 29, 13, 9, 37, 40, 21, 10, 42

Find you the percentile rank of the score 25.

NECESSARY FORMULAS

Serial no.	Formula
1.	$M_{dn} = l + \left(\frac{\frac{N}{2} - F}{f_m} \right) i$
2.	$P_p = 1 + \left(\frac{p^N - F}{f_N} \right) \times i$
3.	$M_d = 3M_{dn} - 2M$
4.	$M_{comb} = \frac{N_1M_1 + N_2M_2 + \dots + N_nM_n}{N_1 + N_2 + \dots + N_n}$
5.	$PR = 100 - \frac{100R - 50}{N}$
6.	$PR = \frac{100}{N} \left[F + \left(\frac{X - L}{i} \right) f \right]$



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

Final Semester Examination
Course Number: Hum 4237
Course Title: Islamic History, Science and Culture.

Summer Semester: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8 (eight)** questions. Answer any **6 (six)** questions.

-
- | | | | |
|----|--------------------------------------------------------------------------------------------------------|----|-------------------|
| 1. | a) Discuss scientific indications in the Holy Quran on the use of Molten Copper. | 10 | CO ₂ |
| | b) What is the Miracle of Molten Copper and the formation of Petrol? Discuss in the light of Al Quran. | 15 | |
| 2. | a) What kinds of emphasis is given in Islam to acquire Knowledge on Science and Technology. | 10 | CO ₂ |
| | b) Write The Contribution of Early Muslim Scholars. | 15 | |
| 3. | a) How Allah (SWT) created Men and Women. Discuss it in the light of Al Quran. Sura 23 Verses 12-14. | 10 | CO ₁ |
| | b) Write Quranic indications on Zoology and Veterinary Science. | 15 | |
| 4. | a) Describe the importance and role of Astronomy in Islam. | 10 | CO _{2,1} |
| | b) Write the Biography of Mohammad Bin Musa Al-Khawarizmi. | 15 | |
| 5. | a) Illustrate the role of Muslim Scholars on Chemistry. | 10 | CO ₂ |
| | b) Who is Al- Biruni? Write his Contributions in various Brunches of knowledge. | 15 | |
| 6. | a) Give an outline of the transfer of Islamic Science and Technology to the west. | 10 | CO ₁ |
| | b) What do you know about Abu- Al- Qasim Al- Zahrawi. Write his contributions to the modern world. | 15 | |
| 7. | a) Discuss Muslim contributions on Medicine. | 10 | CO ₁ |
| | b) What is the impact of Islamic Civilizations on Western Civilization? | 15 | |
| 8. | a) Describe the "Golden Age of Islamic Civilizations" and the emphasis on the pursuit of knowledge. | 10 | CO _{1,2} |
| | b) State the story of Abu-Ali-Al-Husain Ibn Abdallah Ibn Sina (980-1037) | 15 | |

Program: BSc.Engg. CSE 2nd Semester
Semester: Summer

Date: 13th April 2022
Time: 10:00 am – 01:00 pm

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

Final Semester Examination **Summer Semester: 2020 - 2021**
Course Number: Hum 4241 **Full Marks: 100**
Course Title: Islamic History, Science and Culture **Time: 3 Hours**

There are **8 (eight)** questions. Answer **6 (Six)** questions. The symbols have their usual meaning.
Question **3 and 6** are **compulsory**.

-
- | | | | |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----|
| 1 | a) Discuss scientific indications in the Holy Quran about the Big Bang Theory.
b) What are the Quranic indications on Force of Expansion? | 10
05 | CO3 |
| 2 | a) Describe the Mass Energy Theory and Matter of Transmission, in the light of Al-Quran.
b) What are the Scientific indications in the Holy Quran on $H_2+O_2=H_2O =$ Life. | 05
10 | CO3 |
| 3 | a) Write an essay on importance of Science and Technology in Islam.
b) How does Quran describe the concept of Anatomy and Embryology. Write in the light of Quranic verses. | 10
10 | CO4 |
| 4 | a) Describe the contributions of the Muslim scientist in Engineering.
b) Who is Abbas Bin Firnas and Badi Al-Zaman Abull-Ezz Ibn Ismail Ibn Al-Razzaz Al-Jazari. Write their contributions on Engineering. | 5
10 | CO2 |
| 5 | a) Discuss the contributions of the Muslim scientist in Mathematics and Chemistry.
b) State the story of Mohammad Bin Musa Al-Khawarizmi. | 10
5 | CO2 |
| 6 | a) What is the role of the Muslim scientist in Astronomy? Write Muslim Scholars' contributions on Astronomy.
b) Write the biography of Al-Biruni and Jabir Ibn Hayyan. | 10
10 | CO3 |
| 7 | a) Illustrate the contributions of the Muslim scientists in Medicine.
b) Write the name of the Muslim contributors on Pharmaceutical Sciences and their contributions. | 05
10 | CO3 |
| 8 | a) Describe Engineering ethics in the light of Islam.
b) What is your goal of life and how you will execute your role as Muslim Computer Engineer to the modern world? Write codes of ethics of IEB. | 5
10 | CO4 |

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

Semester Final Examination**Course Number: Hum 4249****Course Title: Technology, Environment and Society****Summer Semester: 2020 - 2021****Full Marks: 150****Time: 3 Hours**

There are **8 (eight)** questions. Answer **6 (six)** questions. Question **2** and **5** are compulsory. The symbols have their usual meaning.

-
- | | | | |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|
| 1 | a) Write short notes on the following: <ul style="list-style-type: none"> i. Environment, ii. Technology, iii. Society, and iv. Development. | (10) | CO1 |
| | b) Do you think that there is a relationship between society, environment, technology, and development? Justify your answer with examples. | (10) | CO2 |
| | c) What is ecosystem? Describe the structure of ecosystem. | (05) | CO1 |
| 2 | a) Although the biosphere is the most dominant component in the earth system, it relies on the remaining parts of the earth system for its own survival. Illustrate the interaction between the biosphere and the other spheres of the earth system both positively and negatively. | (18) | CO3 |
| | b) With the help of a diagram, explain how energy flows among living beings of an ecosystem through the 4 (four) trophic levels. | (07) | CO2 |
| 3 | a) Briefly describe the following terminologies: <ul style="list-style-type: none"> i. Weather, ii. Climate, iii. Climate change, iv. Global climate change. | (08) | CO1 |
| | b) If it is true that greenhouse gases are important to our existence on the earth, why are they now being accused of causing global warming on the planet earth? | (10) | CO2 |
| | c) State 7 (seven) causes of climate change. | (07) | CO1 |
| 4 | a) Explain 3 (three) human causes that may lead to global climate change. | (12) | CO2 |
| | b) State 6 (six) techniques that can be used to prevent global warming. | (06) | CO1 |
| | c) What is your understanding of soil degradation? Why is soil degradation considered as an environmental problem? Justify your answer. | (07) | CO2 |
| 5 | a) Explain 5 (five) renewable energy resources that can be used as alternative to fossil fuel. | (20) | CO4 |
| | b) Would you recommend the national wide implementation of biomass in a country like Bangladesh? Provide supporting reasons. | (05) | CO4 |

- 6 a) What do you understand by “air pollution”? Compare and contrast air toxic with criteria pollutants. (08) CO2
b) Explain the impact of air pollution to human health. (05) CO2
c) As an industrial area, Gazipur city has experienced so much air pollution over the years. Produce a report with 3 (three) suggestions to improve the air in Gazipur city. (12) CO4
- 7 a) What is water pollution? Explain three (3) causes of water pollution. (10) CO2
b) While some think that the water of the Turag River (Tongi-Abdullahpur) is beyond treatment for drinking, several experts believe otherwise. With reference to water pollution prevention and cleaning methods, demonstrate how the water of that river can be made useful again. (15) CO4
- 8 a) What is a “waste disposal method”? (03) CO1
b) In an area like Board Bazar, which waste disposal method could you advise the authority to implement? Provide Justification. (05) CO3
c) “**Ocean dumping**” is considered as one of the easiest ways to dispose of waste. Why would you not recommend it in Board Bazar? (05) CO4
d) Name 3 (three) advantages and 3 (three) disadvantages of landfilling. (12) CO2

Program: B.Sc.T.E 2 Years -4th Semester & B.Sc.T.E 1 Year-2nd Semester
Semester :Summer

Date: 11th April, 2022
Time: 10:00AM to 01:00PM

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

DEPARTMENT OF TECHNICAL & VOCATIONAL EDUCATION (TVE)

Semester Final Examination

Summer Semester (2020 – 2021)

Course Number: TVE 4251

Time: 3 hours

Course Title: Sociology of Education

Full Marks: 150

There are 8 (eight) questions. Answer any 6 (six).

All questions carry equal marks. Figure in the right margin indicates marks and corresponding CO.

1. a) What is sociology of education? Explain the roles of family in education and socialization. 10 CO₁
 b) Explain the importance of Sociology of education. 10
 c) Mention the three mainstreams of education. 05
2. a) How should a modern teacher look like? What are the Importance of Teachers in our society? 10 CO₂
 b) Explain the Characteristics of an effective Teacher. 10
 c) State the effect of social groups, their interrelation and dynamics on individuals. 05
3. a) Describe the sociological perspectives on education. 10 CO₂
 b) Explain the problems that conflicts theory seen in education. 10
 c) What is meant by a curriculum? 05
4. a) Describe the political characteristics of social development. 10 CO₃
 b) Explain in details the social indicators of development. 10
 c) Define the term social development. 05
5. a) Education and society are complimentary. Explain with appropriate examples. 10 CO₃
 b) Describe the concept of social interactions. 05
 c) Bowcock (1972) noted that societies undergoing rapid social change have special problems in adapting the educational system to the manpower needs of the world. How? Justify your answer with examples. 10
6. a) What are the common conceptions of social class? 05 CO₃
 b) Research reveals that **the higher the social class, the higher the levels of educational achievement are likely to be.** Do you agree with the statement? Justify with examples. 10
 c) Explain the types of social class in American system. Educational inequality is one factor that perpetuates the class divisions across generations. Narrates with examples. 10
7. a) At what extent the state needs to provide the resources that are required for education, and how those resources should be distributed (Guttman 1999)? 10 CO₄
 b) Can a conception of equality of educational opportunity accommodate those with cognitive and physical disabilities? 10
 c) Narrate the needs for equality in education. 05
8. a) Describe the measures for Equalisation of Educational opportunity? 10 CO₄
 b) What are the problems of Equality of Educational Opportunities? 10
 c) What is meant by Gender disparity? 05

Program: BSc. CEE 2nd Semester
Semester: Summer

Date: 06 April, 2022
Time: 10:00 am – 01:00 pm

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

Semester Final Examination

Summer Semester: 2020 - 2021

Course Number: Hum 4257

Full Marks: 150

Course Title: Islamic History, Science and Culture

Time: 3 Hours

There are **8 (eight)** questions. Answer **6 (Six)** questions. The symbols have their usual meaning.

1	a) What does the Quran say about Physics?	05	CO3
	b) Write Quranic Indications on Chemistry.	10	
	c) Discuss Meteorology and Medical Embryology in the light of Al Quran.	10	
2	a) Discuss the significance of knowledge in Quran.	05	CO3
	b) What is the importance of Science in Islam?	10	
	c) Write the contributions of early Muslim Scholars on Astronomy.	10	
3	a) Describe the Muslim contribution on Chemistry.	05	CO4
	b) State the story of Mohammad Bin Musa Al- Khawarizmi.	10	
	c) Who is the Father of Islamic Alchemy? Write his contributions to the modern world.	10	
4	a) Illustrate Muslim contributions to Engineering.	05	CO2
	b) Who is considered the Father of modern Engineering? Write is contributions to the modern world.	10	
	c) Who designed the first flying apparatus? Write few translated books names on Engineering.	10	
5	a) Choose five of the important Muslim Scholars contributions on Medicine.	10	CO2
	b) Write the name of the Muslim Contributors and their contributions on pharmaceutical Sciences.	10	
	c) Explain the impact of Islamic Civilization on Western Civilization.	05	
6	a) Discuss Muslim contributions on Mathematics.	10	CO3
	b) Explain Abu Bakr Muhammad Ibn Zakariya ar Razi's contributions to modern world.	10	
	c) Who is Taqi Al-Din? Write his contributions on Engineering.	05	
7	a) Describe emphasis on languages in early Islamic Period.	05	CO3
	b) Write the emphasis on Science under the Umayyads.	10	
	c) What is Bayt Al-Hikma? Describe the role of Abbasids on the orbit of Sciences and the development of various disciplines.	10	
8	a) Describe Engineering ethics in the light of Islam.	05	CO4
	b) Define moral Reasoning and codes of ethics.	10	
	c) Explain we will be rewarded or punished in the Day of Judgment regarding our good deeds or bad deeds.	10	

Program: B.Sc. CEE 4th Semester
Semester : Summer

Date: 31st March, 2022
Time: 10:00 am – 01:00 pm

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

Semester Final Examination
Course Number: Hum 4459
Course Title: Science, Technology and Islam

Academic Year: 2020 - 2021
Full Marks: 100
Time: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. Question number 1 (one) is compulsory.

- | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
| 1. | a) Explain the importance of faith and surrender in Islam as the main two fold nature of Islam. | 10 | CO1 |
| | b) How does salah as the most auspicious gift from ALLAH swt to develop mental and spiritual state of your religious and worldly life? | 15 | |
| 2. | a) Describe ten Muslim inventions that shaped the modern world. | 10 | CO2 |
| | b) Assert the roots to the western world that had been used to transfer of knowledge and science from the Muslim world in medieval period. | 05 | |
| 3. | a) Explain how Mohammad Ibn Zakariya Al-Razi's contribution was famous in different scientific fields. | 10 | CO2, CO1 |
| | b) Are Islamic beliefs compatible with science? | 05 | |
| 4. | a) Expose the life and contribution of Ibn Sina as the father of early modern medicine. | 10 | CO2 |
| | b) Why Muhammad Ibn Musa al-Khwarizmi is called the father of algebra? | 05 | |
| 5. | a) How ancient chemistry turned from superstition into a pure scientific field in the hand of Muslim scientists? | 10 | CO1, CO3 |
| | b) Explain the Islamic viewpoints of knowledge and science within the spectrum of incorporation. | 05 | |
| 6. | a) Embryonic phases of a fetus described in the Quran certainly indicate to the scientific miracle of the Holy Quran. Narrate this statement. | 10 | CO3 |
| | b) Explain the scientific miracle of the Quran in honey bee. | 05 | |
| 7. | a) Define the Pentateuch as the nucleus of Hebrew and Christian Bible. | 10 | CO1 |
| | b) Outline the both prophetic lines in the Semitic religions. | 05 | |
| 8. | a) Describe a summary of the Old Testament and the New Testament. | 10 | CO1 |
| | b) What is the movement of reformation in the Christian theology? | 05 | |

B.Sc.M.E. 4th Semester
Semester: Summer

Date: 4th April, 2022
Time: 10:00 am – 01:00 pm

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

Semester Final Examination
Course Code: Hum 4417
Course Title: Sustainability in Technology,
Environment & Society

Academic Year: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are **8 (eight)** questions. Answer **6 (six)** questions. Questions **2, 7 and 8** are compulsory.
The symbols have their usual meaning.

- | | | | | |
|----|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| 1. | a) | Write short notes on the following: | 10 | CO1 |
| | | i. Environment, | | |
| | | ii. Technology, | | |
| | | iii. Society, and | | |
| | | iv. Development. | | |
| | b) | The defenders of environment claim that: “ Society uses environment to develop technology ”. What is your understanding of that statement? Use relevant examples to support your argument. | 10 | CO2 |
| | c) | What is the atmosphere? State the 4 components of the atmosphere in their order from the lowest to the highest. | 05 | CO1 |
| 2. | a) | Despite it being the most dominant component of the earth system, the biosphere still relies significantly on the remaining parts of the earth system for its survival. Illustrate the interaction between the biosphere and the other spheres of the earth system both positively and negatively. | 18 | CO2 |
| | b) | What is ecosystem? With the help of a diagram, explain the energy flow among living beings of an ecosystem through the 4 (four) trophic levels. | 07 | CO2 |
| 3. | a) | Define biodiversity and explain 4 (four) primary drivers that may lead to loss of biodiversity. | 15 | CO2 |
| | b) | Why do scientists consider loss of biodiversity as an environmental concern? Give suitable examples to support your explanation. | 05 | CO2 |
| | c) | Compare and contrast climate change with global climate change? | 05 | CO1 |
| 4. | a) | Describe the difference between weather and climate using examples. | 05 | CO1 |
| | b) | If it is true that greenhouse gases always existed in the atmosphere since the very beginning, why have they suddenly been accused, in recent times, of causing global warming on the planet earth? | 10 | CO2 |
| | c) | Briefly discuss the effects of global climate change on humans, oceans and biodiversity. | 10 | CO3 |

- 5 a) What is pollution? List 5 (five) types of pollution in relation with the field of environment. 07 CO1
- b) What are air pollutants? Explain the various types of pollutants that can potentially cause harm to our atmosphere. 03 CO1
- c) Dhaka city, as is common to most of the big cities in South East Asia, experiences high air pollution in some regions. As a student of **Hum 4417**, explain the reasons that may have led to this phenomenon. 15 CO3
- 6 a) Despite making numerous pledges to reduce the consumption of fossil fuel, most developed countries have so far been unwilling to make the drastic change that was expected. Why is this the case? 10 CO4
- b) If Bangladesh wanted to reduce their fossil fuel consumption for more environmentally friendly alternatives, which options do you think would be appropriate for the whole country and why? 15 CO4
- 7 a) What is water pollution? Explain the effects of water pollution on the environment and human health. 10 CO1
- b) While some think that the water of the Turag River (Tongi-Abdullahpur) is beyond treatment for drinking, several experts believe otherwise. With reference to water pollution prevention and cleaning methods, demonstrate how the water of that river can be made useful again. 15 CO4
- 8 a) Is “**environmental health hazards**” the same as “**environmental risks**”? Use real life examples to justify your answer. 05 CO1
- b) One of the main reasons why the Kyoto protocol failed to yield its expected results is the pulling out of the USA from the agreement. Would you blame them for that? Why? 10 CO4
- c) What is “**Green Building**”? State eight (8) features of green building that you know of. 10 CO4

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Program: B.Sc. EEE 4th Semester

Date: 31st March, 2022

Semester : Summer

Time: 10:00 am – 01:00 pm

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)

ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION (TVE)

Semester Final Examination

Academic Year: 2020 - 2021

Course Number: Hum 4421

Full Marks: 100

Course Title: Science, Technology and Islam

Time: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. Question number 1 (one) is compulsory.

- | | | | |
|----|-----------------------------------------------------------------------------------------------------------------------------------|----|----------|
| 1. | a) Explain the importance of faith and surrender in Islam as the main two fold nature of Islam. | 10 | CO1, CO3 |
| | b) Was spread of Islam due to the might of sword? | 05 | |
| | c) Explain the compatibility of religion with science with special reference to Islam. | 10 | |
| 2. | a) How do you perceive the salah as abundant resource for plentiful excellences in the life apart from a mere ritualistic ibadah? | 10 | CO1, CO2 |
| | b) How Islam looks towards knowledge and science? | 05 | |
| 3. | a) How modern chemistry originated as a pure scientific field in the hand of Muslim scientists in early medieval period? | 10 | CO2 |
| | b) Why Jabir Ibn Haiyan is called the father of modern chemistry? | 05 | |
| 4. | a) Describe ten Muslim inventions that shaped the modern world. | 10 | CO2 |
| | b) Expose the contribution of Muhammad Ibn Musa al-Khwarizmi as the father of algebra. | 05 | |
| 5. | a) Scientific miracles are vividly evident in the Quran as it describes some characteristics of the mountain. Explain? | 10 | CO3, CO2 |
| | b) Why Al-Biruni is considered as one of the greatest scientist of Muslim civilization? | 05 | |
| 6. | a) Does Quranic concept of creation of the universe match with the modern big bang theory? | 10 | CO3 |
| | b) How the scientific miracles of the Quran is observed in the different flows and wares of the seas? | 05 | |
| 7. | a) Define the Pentateuch as the nucleus of Hebrew and Christian Bible. | 10 | CO1 |
| | b) How The Rabbinic Tradition has acquired an important space in Judaism? | 05 | |
| 8. | a) Describe the nature of conflict between the Eastern and the Western Christianity. | 10 | CO1 |
| | b) How Reformation and Counter Reformation made the shape of modern Christianity? | 05 | |

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)
DEPARTMENT OF MECHANICAL AND PRODUCTION ENGINEERING

Semester Final Examination
Course No. IPE 4439
Course Title: Principles of Economics
and Cost Accounting

Summer Semester, A.Y. 2020-2021
Time : 3 hours
Full Marks : 150

**Question 1 is alternative to question 2. Answers to 6 questions are compulsory.
Marks in the margin indicate the full marks.**

1. a) Supreme Door Company sells pre-hung doors to home builders. The doors are sold for \$60 each. Variable costs are \$42 per door, and fixed costs total \$450,000 per year. The company is currently selling 30,000 doors per year. 10

Required:

Prepare a contribution format income statement for the company at the current level of sales, and compute the degree of operating leverage.

- b) Hogle Company is a manufacturing firm that uses job-order costing. On January 1, the beginning of its fiscal year, the company's inventory balances were as follows: 15

Raw materials	\$20,000
Work in process.	15,000
Finished goods.	30,000

The company applies overhead cost to jobs on the basis of machine-hours worked. For the current year, the company estimated that it would work 75,000 machine-hours and incur \$450,000 in manufacturing overhead cost. The following transactions were recorded for the year:

- a. Raw materials were purchased on account: \$410,000.
- b. Raw materials were requisitioned for use in production: \$380,000 (\$360,000 direct materials and \$20,000 indirect materials).
- c. The following costs were incurred for employee services: direct labour, \$75,000; indirect labour, \$110,000; sales commissions, \$90,000; and administrative salaries, \$200,000.
- d. Sales travel costs were incurred: \$17,000.
- e. Utility costs were incurred in the factory: \$43,000.
- f. Advertising costs were incurred: \$180,000.
- g. Depreciation was recorded for the year: \$350,000 (80% relates to factory operations, and 20% relates to selling and administrative activities).
- h. Insurance expired during the year: \$10,000 (70% relates to factory operations, and the remaining 30% relates to selling and administrative activities).
- i. Manufacturing overhead was applied to production. Due to greater than expected demand for its products, the company worked 80,000 machine-hours during the year.
- j. Goods costing \$900,000 to manufacture according to their job cost sheets were completed during the year.
- k. Goods were sold on account to customers during the year at a total selling price of \$1,500,000. The goods cost \$870,000 to manufacture according to their job cost sheets.

Required:

- i. Prepare journal entries to record the preceding transactions.
- ii. Post the entries in (i) above to T-accounts (don't forget to enter the opening balances in the inventory accounts).

Or,

2. a) Home Entertainment, a retailer of CDs and DVDs, provided the following information for the month of June: 05

Sales	\$150,000
Selling expenses	40,000
Administrative expenses	25,000
Merchandise inventory, beginning balance	12,000
Merchandise inventory, ending balance	22,000
Merchandise purchases	90,000

Required:

Prepare an income statement for the company for the month

- b) Logan Products computes its predetermined overhead rate annually on the basis of direct labour-hours. At the beginning of the year, it estimated that its total manufacturing overhead would be \$586,000 and the total direct labour would be 40,000 hours. Its actual total manufacturing overhead for the year was \$713,400 and its actual total direct labour was 41,000 hours. 10

Required:

Compute the company's predetermined overhead rate for the year, calculate the total overhead applied, and determine the amount of under- or overapplied overhead in the year.

- c) Data concerning a recent period's activity in the Mixing Department, the first processing department in a company that uses process costing, appear below: 10

	Materials	Conversion
Cost of work in process inventory at the beginning of the period . .	\$2,700	\$380
Equivalent units of production in the ending work in process inventory	800	200
Equivalent units of production required to complete the beginning work in process inventory	400	700
Cost per equivalent unit for the period	\$4.40	\$1.30

A total of 8,000 units were completed and transferred to the next processing department during the period. Beginning work in process inventory consisted of 1,000 units, and ending work in process inventory consisted of 2,000 units.

Required:

Compute the FIFO cost of the units transferred to the next department during the period.

3. Crydon Inc. manufactures an advanced swim fin for scuba divers. Management is now preparing detailed budgets for the third quarter, July through September, and has assembled the following information to assist in preparing the budget: 25

a. The Marketing Department has estimated sales as follows for the remainder of the year (in pairs of swim fins):

July.....	6,000
August.....	7,000
September.....	5,000
October.....	4,000
November.....	3,000
December.....	3,000

The selling price of the swim fins is \$50 per pair.

b. All sales are on account. Based on past experience, sales are expected to be collected in the following pattern:

40% in the month of sale
50% in the month following sale
10% uncollectible

The beginning accounts receivable balance (excluding uncollectible amounts) on July 1 will be \$130,000.

c. The company maintains finished goods inventories equal to 10% of the following month's sales. The inventory of finished goods on July 1 will be 600 pairs.

d. Each pair of swim fins requires 2 pounds of grelco compound. To prevent shortages, the company would like the inventory of grelco compound on hand at the end of each month to be equal to 20% of the following month's production needs. The inventory of grelco compound on hand on July 1 will be 2,440 kilograms.

e. Grelco compound costs \$2.50 per kilogram. Crydon pays for 60% of its purchases in the month of purchase; the remainder is paid for in the following month. The accounts payable balance for grelco compound purchases will be \$11,400 on July 1.

Required:

i. Prepare a sales budget, by month and in total, for the third quarter. (Show your budget in both pairs of swim fins and dollars.) Also prepare a schedule of expected cash collections, by month and in total, for the third quarter.

ii. Prepare a production budget for each of the months July through October.

iii. Prepare a direct materials budget for grelco compound, by month and in total, for the third quarter. Also prepare a schedule of expected cash disbursements for grelco compound, by month and in total, for the third quarter.

4. a) Explain how the managerial accounting plays a vital role in basic management activities. 08

- b) At the Kicher Company's current activity level of 8,000 units per month, the costs of producing and selling one unit of the company's only product are as follows: 12

Direct materials.	\$2.50
Direct labour.	\$3.00
Variable manufacturing overhead	\$0.50
Fixed manufacturing overhead.	\$4.25
Variable selling and administrative expenses	\$ 1.50
Fixed selling and administrative expenses	\$2.00

The normal selling price is \$15 per unit. The company's capacity is 10,000 units per month. An order has been received from a potential customer overseas for 2,000 units at a price of \$12.00 per unit. This order would not affect regular sales.

Required:

- i. If the order is accepted, by how much will monthly profits increase or decrease? (The order would not change the company's total fixed costs.)
- ii. Assume the company has 500 units of this product left over from last year that are inferior to the current model. The units must be sold through regular channels at reduced prices. What unit cost is relevant for establishing a minimum selling price for these units? Explain.

- c) Write difference between weighted average method and FIFO method for calculating equivalent unit. 05

- 5. a) In March, Mitchell Limited had sales of \$250,000 (50,000 units), total variable expenses of \$190,000, and total fixed expenses of \$36,000. 10

Required:

- i. What is the company's CM ratio?
- ii. Using the CM ratio, calculate the break-even level of sales in dollars.
- iii. Estimate the change in the company's operating income if it increased its total sales by \$20,000.

- b) Power Company passes its product through several departments, the last of which is the Finishing Department. Conversion costs are added evenly throughout the process in this department. One-fourth of direct materials is added at the beginning of the process, and the remaining three-fourths is added when the process is 50% complete with respect to conversion costs. During June, 475,000 units of product were transferred to finished goods. Of these units, 100,000 units were 40% complete with respect to conversion costs at the beginning of the period and 375,000 were started and completed during the period. At the end of June, the work in process inventory comprised 225,000 units that were 30% complete with respect to conversion costs. Total costs to account for include \$949,375 for conversion costs and \$616,250 for direct materials. 15

Required:

- i. Determine the equivalent units of production with respect to conversion costs and with respect to direct materials for the Finishing Department.
- ii. Compute the conversion cost and the direct materials cost per equivalent unit.
- iii. Compute the amount of conversion cost and the amount of the direct materials cost assigned to the units completed and to the ending work in process inventory.

6. a) On February 1, 2015, Davis Company signed an 18-month lease with Kelly Leasing Company. The lease payments begin immediately. Calculate the present value of the lease, assuming that \$2,000 is paid each quarter and that the annual interest rate is 8%. 05
- b) Show a T-account model of process costing flows. 05
- c) Electric Scooter Co. makes motorized scooters for city commuters. The scooters can be charged using a regular household plug, and the batteries hold their charge for 24 hours. The manufacturing plant is currently operating at 70% capacity. The plant manager is considering manufacturing headlights for the scooters, which are currently being produced by an outside company and purchased by Electric Scooter for \$11 each. Electric Scooter has the equipment and the workforce to produce the headlights. The engineers have suggested a variable cost of \$3 in direct labour and \$4 in direct materials. The plant overhead rate is 200% of direct labour dollars, and 40% of the overhead is fixed cost. 15

Required:

Should Electric Scooter make the headlights in-house?

7. a) In a joint processing operation, Nolen Company manufactures three grades of sugar from a common input, sugar cane. Joint processing costs up to the split-off point total \$80,000 per year. The company allocates these costs to the joint products on the basis of their total sales value at the split-off point. These sales values are as follows: raw sugar, \$40,000; brown sugar, \$40,000; and white sugar, \$42,000. Each product may be sold at the split-off point or processed further. Additional processing requires no special facilities. The additional processing costs and the sales value after further processing for each product (on an annual basis) are shown below: 10

Product	Additional Processing Costs	Sales Value
Raw sugar	\$42,000	\$80,000
Brown sugar	\$28,000	\$70,000
White sugar.	\$12,000	\$82,000

Required:

Which product or products should be sold at the split-off point, and which product or products should be processed further? Show computations

- b) The management of Deitrich Inc., a civil engineering design company, is considering an investment in a high-quality blueprint printer with the following cash flows: 05

Year	Investment	Cash Inflow
1.	\$28,000	\$2,000
2.	\$ 4,000	\$ 4,000
3.		\$6,000
4.		\$8,000
5.		\$9,000
6.		\$8,000

Required:

- i. Determine the payback period of the investment.
- ii. Would the payback period be affected if the cash inflow in the last year was several times as large?

- c) Scotia Family Health Team is investigating purchasing an ultrasound machine for use in its patient clinic. The machine would cost \$97,900, including invoice cost, freight, and the training of employees to operate it. Scotia has estimated that the new machine would increase the company's cash flows, net of expenses, by \$17,000 per year. The machine would have a nine-year useful life with no expected salvage value. 10

Required:

Ignore income taxes.

- i. Compute the machine's IRR rounded to one decimal place.
- ii. Compute the machine's net present value using a discount rate of 10%. Why do you have a zero net present value?
- iii. Suppose that the new machine would increase the company's annual cash flows, net of expenses, by only \$15,000 per year. Under these conditions, compute the IRR rounded to one decimal place.

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Program: B.Sc. CEE 4th Semester
Semester : Summer

Date: 31st March, 2022
Time: 10:00 am – 01:00 pm

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

Semester Final Examination
Course Number: Hum 4459
Course Title: Science, Technology and Islam

Academic Year: 2020 - 2021
Full Marks: 100
Time: 3 Hours

There are 8 (eight) questions. Answer 6 (six) questions. Question number 1 (one) is compulsory.

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------|----|----------|
| 1. | a) Explain the importance of faith and surrender in Islam as the main two fold nature of Islam. | 10 | CO1 |
| | b) How does salah as the most auspicious gift from ALLAH swt to develop mental and spiritual state of your religious and worldly life? | 15 | |
| 2. | a) Describe ten Muslim inventions that shaped the modern world. | 10 | CO2 |
| | b) Assert the roots to the western world that had been used to transfer of knowledge and science from the Muslim world in medieval period. | 05 | |
| 3. | a) Explain how Mohammad Ibn Zakariya Al-Razi's contribution was famous in different scientific fields. | 10 | CO2, CO1 |
| | b) Are Islamic beliefs compatible with science? | 05 | |
| 4. | a) Expose the life and contribution of Ibn Sina as the father of early modern medicine. | 10 | CO2 |
| | b) Why Muhammad Ibn Musa al-Khwarizmi is called the father of algebra? | 05 | |
| 5. | a) How ancient chemistry turned from superstition into a pure scientific field in the hand of Muslim scientists? | 10 | CO1, CO3 |
| | b) Explain the Islamic viewpoints of knowledge and science within the spectrum of incorporation. | 05 | |
| 6. | a) Embryonic phases of a fetus described in the Quran certainly indicate to the scientific miracle of the Holy Quran. Narrate this statement. | 10 | CO3 |
| | b) Explain the scientific miracle of the Quran in honey bee. | 05 | |
| 7. | a) Define the Pentateuch as the nucleus of Hebrew and Christian Bible. | 10 | CO1 |
| | b) Outline the both prophetic lines in the Semitic religions. | 05 | |
| 8. | a) Describe a summary of the Old Testament and the New Testament. | 10 | CO1 |
| | b) What is the movement of reformation in the Christian theology? | 05 | |

Program: B.Sc.Engg.(EEE) 6th Semester
Semester: Summer

Date: 01 April, 2022
Time: 10:00 Am -- 01:00 Pm

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

Semester Final Examination

Academic Year: 2020 - 2021

Course Number: Hum 4621

Full Marks: 150

Course Title: Technology, Environment and Society

Time: 3 Hours

There are **8 (eight)** questions. Answer any **6 (six)** questions. (Sequence must be maintained in answering all parts of a single question). The symbols have their usual meaning.

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|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|
| 1. | a) Distinguish between science and technology. Discuss the core ideas that relate to science and technology. | 15 | CO1,
CO2 |
| | b) Explain how science and technology effect on society and the environment. | 10 | |
| 2. | What do you mean by interdependence of science? Describe the interaction among technology, environment, and society by explaining the model of sustainable solutions. | 25 | CO1,
CO2 |
| 3. | a) How does technology influences on human development and economic growth? Discuss. | 10 | CO2 |
| | b) Illustrate the potentials of technology in 21 st century. Briefly discuss several areas of new development and how the organizations may adopt new strategies to adjust to these changes. | 15 | |
| 4. | a) In what way does technology effects global human system? Describe the specific effects of the technology upon the environment with appropriate examples. | 15 | CO3 |
| | b) Discuss different types of technological hazards and its remedies. | 10 | |
| 5. | Define climate change and global warming. What causes global warming? Illustrate the overall impact of climate change on human earth. | 25 | CO4 |
| 6. | a) What is environmentally friendly technology? Mention the innovations of eco-friendly technology. | 15 | CO4 |
| | b) Discuss the patterns of green technology and narrate how it recover nonferrous metals from e-waste. | 10 | |
| 7. | a) Do you think that renewable energy is a potential solution to environmental problems? Give logic of your answer. | 15 | CO4 |
| | b) Narrate the environmental and ecological effects of ocean renewable energy development. | 10 | |
| 8. | Define sustainable development. What are the essential factors of sustainable development? Describe the necessity of improving working conditions in the industry to ensure sustainable and positive change. | 25 | CO5,
CO3 |

Program: BSc. Engg(CEE) 6th Semester
Semester : Summer

Date: 07th April, 2022
Time: 10:00 Am to 01:00 Pm

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
 ORGANISATION OF ISLAMIC COOPERATION (OIC)
 DEPARTMENT OF TECHNICAL & VOCATIONAL EDUCATION (TVE)

Semester Final Examination

Course Number: Hum 4659

Course Title: Technology, Environment & Society

Summer Semester (2020 – 2021)

Time: 3 hours

Full Marks: 150

There are 8 (eight) questions. Answer any 6 (six).

All questions carry equal marks. Figure in the right margin indicates marks and corresponding CO.

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|
| 1. | a) How industrialized countries are maintaining environmental quality? | 05 | CO2 |
| | b) How will you analyze impact of technology on environment? Describe the approaches you have to follow to perform this analysis. | 10 | |
| | c) Write a short diagram - show different forms of responses of human due to environmental change. | 10 | |
| 2. | a) What are the conditions that a green technology has to full –fill? | 05 | CO3 |
| | b) Assume you are preparing LCA for an industry. The type of industry is similar to a ‘new generation industry’. After describing different methods to achieve ‘minimum or zero’ waste condition, select a method that you think is suitable for the industry of your concern. Show reasons for your selection. | 10 | |
| | c) List out the consequences of Global warming on Earth. What are the actions that can be taken in order to reduce its impact? | 10 | |
| 3. | a) Municipal waste management is generally accepted as one of ways of fighting pollution. Which approach would you suggest to Board, Bazar authorities to deal with their solid wastes? Point out the pros and cons of the suggested approach. | 10 | CO4 |
| | b) These days a popular slogan in Dhaka is “SAVE THE BURIGANGA” After describing different environmental protection methods, select the method most suitable to solve this complicated problem. Show a reason behind selecting the suggested method. | 05 | |
| | c) The government of Bangladesh through the Dhaka municipality wants to implement a plan to make Dhaka a clean city. As a private contractor, draw up a proposal that will convince the government to award you the contract. | 10 | |
| 4. | The Bandarban is a mountainous place where the highest peak of Bangladesh is located. In addition there are small to medium mountains. Due to the height above Mean Sea Level, the characteristic of the region is sustained wind over the mountains in the valleys with an average speed of 30km/h. Although there are high demands of habitable and cultivable lands, the mountains are relatively barren. The three hilly rivers flowing through the district are the Sangu, Matamuhuri and Bakkhali. Any interventions in the rivers is politically sensitive due to the Kaptai hydroelectric project in the neighboring district Rangmati and any extraction of forest product is strictly prohibited. Agricultural wastes are not significant and are mainly consumed | 25 | CO3 |

locally. The local hill geology makes any kind of geological survey expensive and no space available to dump any waste. The district gets very little electricity from the national grid. Being a tourist place and also ecologically sensitive region, there is high demand of producing electricity from the alternative sources. As an energy specialist, using information given above, you have to decide: Describe the alternative source from which electricity can be produced? You have to answer the question after analyzing all the alternatives under the prevailing conditions of the area and have to select only the best one.

5. a) You have two types of materials to be consumed, Material 1 is toxic heavy metal and Material 2 can be recycled several times. Mention the mode of consumption for these two different types of materials. Which of the materials will generate residual? 10 CO₄
- b) Would recycling be a good municipal waste management approach in Bangladesh? Justify your answer. 05
- c) Define risk, hazard, vulnerability and coping capacity in the face of natural disaster. Give example of each terminology from your understanding and Describe different approaches to analyze environmental issues. What is the most complicated but detailed approach among them? 10
6. a) Name and explain five (5) issues that are believed to have emerged due to global climate change in your own country. 10 CO₄
- b) In order to reduce the emission of greenhouse gases in Dhaka, which type of green energy would you recommend the government to enforce and why? 10
- c) Environmentalists claim that climate change can result to the emergence of new diseases. State any five (5) of such illness. 05
7. a) What is Air pollution? Describe the Categories of air pollutants with appropriate examples 05 CO₂
- b) What is ozone hole? Explain the process of ozone layer depletion with chemical reactions. Mention the impacts of ozone layer depletion on Human health and Ecology. 15
- c) Explain Hydrological cycle with necessary illustration. 05
8. a) What are the biotic and abiotic factors of an Ecosystem? 05 CO₁
- b) Define carrying capacity of an Ecosystem. Do you think carrying capacity can be enhanced with the help of science and technology? Clarify your statements with appropriate example. 10
- c) Differentiate between CFCs and traditional refrigerants. Name the seven theories of Climate Change. 10

Program: BSc. EEE 8th semester
Semester: Summer Semester

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Date: 01 April, 2022
Time: 10:00 am – 01:00 pm

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

Final Semester Examination

Summer Semester: 2020 - 2021

Course Number: Hum 4823

Full Marks: 150

Course Title: Sociology and Financial Accounting

Time: 3 Hours

There are **8 (eight)** questions. Answer **6 (six)** questions. Attempt 3 in each section.
The symbols have their usual meaning.

Section A: Sociology

- | | | | | |
|----|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------------------------|
| 1. | a) | What do you mean by 'social organization'? Mention the basic features of a social group. | 08 | CO ₁ ,
CO ₂ |
| | b) | Elaborate, with examples, the features of the primary social group, secondary group, and quasi-social group. | 08 | CO ₃ |
| | c) | Examine the differences between social status and social role. How would you differentiate between ascribed social status and achieved social status? | 09 | CO ₂ ,
CO ₃ |
| 2. | a) | Mention and discuss the four key concepts developed by symbolic interactionists to analyze the nature of social interaction in everyday life. | 12 | CO ₁ ,
CO ₂ |
| | b) | Differentiate between intra-social and inter-social role conflicts. Explain cases of, if any, inter-social role and intra-social role conflicts you have entertained (as you have different statuses role in society). | 06 | CO ₂ ,
CO ₃ |
| | c) | Why do you think social control is necessary? | 07 | CO ₃ |
| 3. | a) | What are social processes? Discuss various modes of social processes. | 09 | CO ₁ , |
| | b) | How is social stratification created? Explain the necessity of social stratification in society? | 08 | CO ₂ ,
CO ₃ |
| | c) | What do you mean by social mobility? Elaborate on the various forms of social mobility. | 08 | CO ₃ |
| 4. | a) | Discuss some fundamental theories of social change. | 08 | CO ₂ |
| | b) | Do you think that there are diseases individuals suffer from that are the results of social stratification? If yes mention and discuss some of them. | 08 | CO ₃ |
| | c) | What do you understand by the terms 'social pathologies' and 'social problems'? Discuss some of the main social pathologies that appear to be universally occurring in all societies? | 09 | CO ₁ ,
CO ₂ |

Section B: Financial Accounting

5. The following transactions relating to Ousman Ltd. were occurred during January, 2022: CO₁,
CO₂
- | | | | |
|---------|----|-----------------------------------------------------------------------|--|
| January | 1 | Ousman started his business with \$3,00,000 in cash as capital. | |
| | 2 | Deposited cash into Bank \$1,50,000. | |
| | 5 | Purchased office furniture for \$40,000 & paid cheque. | |
| | 5 | Purchased goods with \$60,000 cash & \$40,000 on credit. | |
| | 8 | Sold goods for cash and on credit \$45,000 and \$25,000 respectively. | |
| | 12 | Paid \$40,000 for goods purchased on credit. | |
| | 15 | Received \$15,000 for goods sold on 8 January. | |
| | 20 | Paid office rent \$20,000. | |

Required:

- | | | | |
|-----|----------------------------------------------------------|----|--|
| (a) | Journalize the January transactions (Omit explanations). | 14 | |
| (b) | Post to the ledger accounts. | 06 | |
| (c) | Prepare a trial balance on January 31, 2022. | 05 | |
6. (a) Cox's Bazar Beach Motel adjusts and closes its accounts once a year on December 31. Most guests of the motel pay at the time they check out and the amounts collected are credited to 'rental revenue'. A few guests pay in advance for rooms and these amounts are credited to 'unearned rental revenue' at the time of receipt. The following information is available as a source for preparing adjusting entries at December 31, 2021. 18 CO₁,
CO₂
- (i) A one-year bank loan in the amount of \$80,000 has been obtained on November 1. No interest has been paid and no interest expense has been recorded. The interest accrued at December 31 is \$ 1,600.
 - (ii) On December 16, a suite of rooms was rented to a corporation for 6 months at a monthly rental of \$ 3,200. The entire 6 months' rent of \$ 19,200 was collected in advance and credited to unearned rental revenue. At December 31, the amount of \$1,600 representing one-half months' rent was considered to be earned and the remainder of \$ 17,600 was considered to be unearned.
 - (iii) As of December 31, the motel has earned \$ 18,090 rental revenue from current guests who will not be billed until they are ready to check out.
 - (iv) Salaries earned by employees at December 31, but not yet paid to \$ 11,640.
 - (v) Depreciation on the motel for the year was \$ 51,250.
 - (vi) Depreciation on the station wagon owned by the motel was based on a 4-year life. The station wagon was purchased on September 1 of this current year at a cost of \$12,600. Depreciation for four months should be recorded at December 31.
 - (vii) On December 31, Cox's Bazar beach motel entered into an agreement to host the national shooter society's convention in June of next year. The motel expects to earn rental revenue of at least \$30, 000 from the convention.

Required:

For each of the numbered paragraphs, draft separate adjusting entries if required. One or more of the above paragraphs may not require any adjusting entry.

- (b) The trial balance of Khalid Fabrics at December 31, 2017 shows Merchandise inventory \$50,000, Sales \$340,000, Sales discounts \$5,600, Cost of goods sold \$250,000, Freight-out \$2,500, Prepaid expense \$ 15,000, Rent expense \$12,800, Salaries and wages expense \$42,000.

07

Required:

Prepare the closing entries for the above accounts.

- 7. The trial balance of Terry Manning Fashion Center contained the following accounts at November 30, the end of the company's fiscal year.

CO3

TERRY MANNING FASHION CENTER
Trial Balance
November 30, 2020

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 28,700	
Accounts Receivable	30,700	
Merchandise Inventory	44,700	
Store Supplies	6,200	
Store Equipment	85,000	
Accumulated Depreciation—Store Equipment		\$ 22,000
Delivery Equipment	48,000	
Accumulated Depreciation—Delivery Equipment		6,000
Notes Payable		51,000
Accounts Payable		48,500
Terry Manning, Capital		110,000
Terry Manning, Drawing	12,000	
Sales		755,200
Sales Returns and Allowances	8,800	
Cost of Goods Sold	497,400	
Salaries Expense	140,000	
Advertising Expense	24,400	
Utilities Expense	14,000	
Repair Expense	12,100	
Delivery Expense	16,700	
Rent Expense	24,000	
Totals	<u>\$992,700</u>	<u>\$992,700</u>

Adjustment data:

- (i) Store supplies on hand totaled \$2,500.
- (ii) Depreciation is \$9,000 on the store equipment and \$5,000 on the delivery equipment.
- (iii) Interest of \$4,080 is accrued on notes payable at November 30.
- (iv) Merchandise inventory actually on hand is \$44,400.

Required:

Prepare a multiple-step income statement and an owner's equity statement for the year, and a classified balance sheet as of November 30, 2020. Notes payable of \$30,000 are due in January 2021. 25

8. Fontana Co. began operations on July 1. It uses a perpetual inventory system. During July the company had the following purchases and sales. CO₄

<u>Date</u>	<u>Purchases</u>		<u>Sales Units</u>
	<u>Unit Cost</u>	<u>Unit Cost</u>	
July 1	5	\$120	
July 6			4
July 11	7	\$136	
July 14			3
July 21	8	\$147	
July 27			6

Required:

- (a) Determine the ending inventory and cost of goods sold under a perpetual inventory system using (i) FIFO, (ii) moving-average cost, and (iii) LIFO. 21
- (b) Which cost flow method produces the highest ending inventory for the balance sheet and the highest cost of goods sold for the income statement? 04

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

Semester Final Examination
Course No: TVE 6213
Course Title: Advanced Educational Psychology

Summer Semester (2020-2021)
Time: 3 hours
Full Marks: 150

There are six (6) questions. Answer all of them.
Figures in the right margin indicate marks of the questions.

1. a) Sandra Chapman was determined to add to her range of teaching skills as she entered her second year of teaching. Her first year as a high school teacher proved to be more of a challenge than she expected. Her school, located in the heart of the city, drew students from all walks of life and economic circumstances. Last year, she initially hoped that all her students would master the history curriculum that she had inherited, but by mid-year several of her students were not attending class on a regular basis. To increase attendance, she took points off students' grades when they missed class and intentionally ignored them when they returned. She believed that by not taking an interest in where they were, she would not reinforce their "skipping" behavior. She also thought that by continually reminding students of how much they did not know; she would encourage them to study. Sadly, these methods did not work well, and attendance only further declined. She is now in the process of designing some new strategies. (15) CO1, CO4
 - i) Identify the techniques Sandra Chapman uses to encourage attendance and explain why these methods might have been unsuccessful.
 - ii) What advice would you offer Sandra Chapman as she prepares to develop new methods?
- b) As a university student, you are no doubt concerned about the grades that you earn while completing your coursework. If you wanted to know how overall GPA is related to success in life after graduation, how would you choose to approach this question and what kind of resources would you need to conduct this research? (10)
2. a) Differentiate between working memory and long-term memory? (7) CO2,
- b) Reflecting on his first year as a teacher, Mr. Beech was a little embarrassed at how little he understood the teaching and learning process when he began teaching. He remembered handing back a math test and admonishing his students with the following words. "Everybody in this room knew the test was today. I can't believe not one of you passed it. All I can say is, you had better master these concepts before we get into the testing season. Thirty percent of the standardized test is on algebra. I know we did several chapters quickly this time, more than you were used to, but we have to finish this book. And, no, I will not let you retake this test." (18) CO4
 - i) Explain the three types of knowledge Mr. Beech's students had to use while taking the math test.
 - ii) In addition to not overloading his students with new information, how else can Mr. Beech assist his students in understanding and remembering in the future?
3. a) What is perception? (5) CO2
- b) Define Gestalt principles of perception. (10)
- c) Based on the pictures shown below, explain how we see patterns in the world around us and how it helps developing the perception of an object. (10)



4. a) Discuss *organization* and *adaptation* during the thinking process of a child considering Piaget's theory of cognitive development. (12) CO2, CO3
- b) What is zone of proximal development? Discuss its educational implications. (13)

Programme: MScTE (2nd Semester)

Date: 31 March 2022

Time: 10.00 am to 1.00 pm

5. a) Draw and label the information processing model of human brain. (5) CO2
b) List the incoming stimuli that our sensory memory receives from the environment? (5)
c) What are propositions? Explain with an example how the propositional networks help to represent the meaning of sentences and pictures in our memories? (15)
6. a) Discuss with an example how the social sources form individual thinking and learning. (12) CO2,
a) There are three types of cognitive load that make demands during learning, with different causes and effects. Briefly discuss them (13) CO3

Programme: : M.Sc.TE, 2nd Semester
Semester: Summer

Date: 31st March 2022
Time: 10:00 AM – 01:00 PM

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

Semester Final Examination
Course Number: TVE 6271
Course Title: Educational Guidance and Counselling

Academic Year: 2020 - 2021
Full Marks: 150
Time: 3 Hours

There are 7 (seven) questions. Answer any 6 (six).

Figures in the right margin indicate full marks of the question.

- | | | |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1 | a) Define the term "Guidance" according to Crow & Crow and Hamrine & Erickson. | (15) |
| | b) State and explain the main characteristics of guidance and the principles of guidance philosophy. | (10) |
| 2 | a) State the main functions of guidance & counselling. Why guidance and counselling services are needed in educational institutions. | (15) |
| | b) What are the functions of educational guidance and vocational guidance? | (10) |
| 3 | a) An effective guidance program is to be organized in the form of a series of services. Describe the 'Orientation Service' in detail that is usually provided at educational institutions? | (15) |
| | b) Collecting essential data about students is essential for providing the Student Information Service. Illustrate how essential data about student are collected. | (10) |
| 4 | a) 'Everybody, who comes into contact with the student, contributes in one way or the other in his/her growth and development'. Discuss the role of the administrator, the counselling officer, and the teacher in implementing effective guidance program in educational institutions. | (15) |
| | b) Remedial Service should be provided to those students who are in need in educational institutions. Describe How and To Whom this service should be offered. | (10) |
| 5 | a) On the basis of the nature of the counselling process the counselling techniques can be classified into: i) directive or prescriptive, ii) non-directive or permissive and iii) eclectic. Describe each of the above-mentioned counselling processes. | (15) |
| | b) Interview is one of the tools used for individual counselling. Describe the interview procedure in detail. | (10) |
| 6 | a) What is meant by occupational information? Why is it needed for guidance and counselling? | (15) |
| | b) Describe the clinical approach of guidance and counselling? | (10) |
| 7 | a) What is a psychological test? You have been assigned to develop a psychological test which will be used for counselling the students of your institute. Describe the essential characteristics you would consider when you design and develop it. | (15) |
| | b) Discuss the limitations of psychological tests. "Interpretation of test scores plays a significant role in counselling", discuss the above statement. | (10) |

Programme: MScTE 2-Yr, 2nd Sem.
Semester : Summer

Date: 12 April 2022, Tuesday
Time: 10:00 AM to 1:00 PM

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

Semester Final Examination	Academic Year (2020-2021)
Course No: TVE 6273	Time : 3 Hrs
Course Title: Management and Administration in Technical & Vocational Education	Full Marks : 150

There are 8 (eight) questions. Answer any 6 (six).
Figures in the right margin indicate marks of the questions.

1. a) Define the meaning of Management and Administration in the context of Technical and Vocational Education (TVE). 10 CO1
b) Explain briefly different *styles of management*. 15 CO2
2. a) Discuss the concept of educational administration. Explain briefly the major *functions of principal/administrators* in the context of TVE. 15 CO2
b) What are the skills necessary to play a role of an administrator and why? 10 CO3
3. a) What is meant by organization in administration? Explain briefly the characteristics of an organization. 15 CO1
b) Explain how manager differ from non-managerial employees to achieve the organizational goal? 10 CO3
4. a) Define the concept of supervision. Discuss briefly different types of supervision of educational institutions. 15 CO1
b) Discuss in brief the nature and characteristics of modern supervision. 10 CO3
5. a) Define the meaning and concept of Human Resource Management. Explain briefly different functions of Human Resource Management in the context of Technical and Vocational Education. 10 CO2
b) Suppose, you are working as a Principal of an educational organization, urgently you need to recruit full-time teachers in your institutions, for that reason as an administrator what is the procedure you will apply to select suitable teachers for that particular post? - Explain the procedures in detail. 15 CO4
6. a) What are the basic concepts of '*Management of change*'? Explain briefly, what are the factors of resistance to change in the organization. 10 CO2
b) Explain briefly the different features of organizational development. In line with that elaborate the process of organizational development in Technical and Vocational Educational institutions. 15 CO3
7. a) Explain briefly *how motivation influence in teaching-learning process?*. 10 CO2
b) Describe briefly the *Theories of Motivation* with examples. What are the motivational factors and how it impacts Administration and Management? 15 CO4
8. What is Leadership? Discuss in detail the *Seven Habits of Highly Effective People* in educational organizational performance and development. 25 CO2