

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

**Mid Semester Examination**  
Course No: TVE 4103  
Course Title: Educational Psychology

**Winter Semester (2019-2020)**  
**Time: 90 minutes**  
**Full Marks: 75**

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. (a) Define *Educational Psychology*. (5)  
(b) Write short note on- (20)
  - i. Structuralism, and
  - ii. Behaviorism.
  
2. (a) Which is more important in human development- the 'nature' of an individual or the 'nurture' of environmental contexts? (10)  
(b) Briefly discuss the periods of development. (15)
  
3. (a) How do brain and mind are interrelated? What is the misunderstood concept of brain that people held for a long period of time? What is the current understanding of brain according to *Neuroconstructivist* view? (15)  
(b) List the major structure of brain. How does the *cerebral cortex* of brain control the complex human behavior and mental process? (10)
  
4. (a) What is schema? How does a child develop schema? Discuss with examples. (10)  
(b) Differentiate between assimilation and accommodation. Explain a scenario where both assimilation and accommodation take place to make sense of events in our world. (10)  
(c) List four stages of cognitive development proposed by Jean Piaget. (5)

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

**Mid Semester Examination**

**Course No:** TVE 4111

**Course Title:** Occupational Analysis and Course Construction

**Winter Semester (2019-2020)**

**Time:** 90 Minutes

**Full Marks:** 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) What is Occupation as defined by occupational therapist (OT)? 5  
b) Explain any five areas of occupation as classified by Occupational Therapy Practice Framework. 10  
c) Compare and contrast occupation and profession? 10
2. a) What is Skills Level? 5  
b) Examine the following skills level on the basis of their task's duties, type of skills required for the level and performance competent required. 5  
    I. Skills Level 1, 5  
    II. Skills Level 2, and 5  
    III. Skills Level 3. 5  
c) What is the difference between knowledge and skills?
3. a) With a help of a diagram, describe the 3-stage skills framework for outlining the different stages in which people learn different skills. 15  
b) Explain the concept of lifelong learning on the basis of the Nijhof & Remmers' three layers. 6  
c) What is powerful Skills? 4
4. a) What is instructional design? 5  
b) Write short notes on the following: 5  
    I. Principle of contiguity, 5  
    II. Principle of repetition, and 5  
    III. Reinforcement theory. 5  
c) State five capabilities that instructional designers need to put into consideration 5  
    instructional design.

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

**Mid Semester Examination**

Course No: **HUM 4117**

Course Title: **Islamic Culture & Professional Ethics**

**Winter Semester (2019-2020)**

**Duration:** 90 Minutes

**Full Marks:** 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) Define the term 'Professionalism' both from conventional and Islamic point of view. 9  
b) Discuss the history and development of Professionalism. 8  
c) How to accomplish Professionalism in the current age? 8
2. a) Who is Imam Al Ghazali? Mention his major works/writings. 9  
b) What are the formulas of Integrity according to Al-Ghazali? 8  
c) Discuss the Ethical Values as prescribed by Al-Ghazali. 8
3. a) What is meant by 'Code of Ethics'? 8  
b) Write Objectives and Functions of Ethics. 8  
c) Discuss Different types of Ethics and Morality. 9
4. a) Define the term 'Islam' and 'Islamic Culture'. 8  
b) What are the Characteristics of Aesthetic Expression of Tawhid? 8  
- c) Discuss the Artistic Models of Holy Qur'an. 9

Programme: DTE (1<sup>st</sup> Semester)

Date: March 03, 2020 (Morning)

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

**Mid Semester Examination**

Course No: TVE 4125

Course Title: Methods & Techniques of Teaching

**Winter Semester (2019-2020)**

Time : 90 minutes

Full Marks : 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) Define the term "*learning*" according to Ambrose. 5  
b) "Learning is a process"- Explain that statement with various examples. 15  
c) What do you understand by the word "*teaching*"? 5
2. a) Describe the definition of teaching as suggested by **H C Morrison**. 10  
b) What is the relationship between teaching and learning? 10  
c) Name five (5) principles of teaching. 5
3. a) What is motivation? 5  
b) Why do you need motivation in teaching-learning environment? 10  
c) Elaborate the four (4) importance of motivation in Education. 10
4. a) Explain the following tips to raise motivation from students. 15
  - i. *Attitude influences motivation,*
  - ii. *Value their effort,*
  - iii. *Keep the students involved,*
  - iv. *Use incentives, and*
  - v. *Change things up.*
- b) In order to create motivation in effective classroom, **Helmut N. & Eberhard S.** suggested a series of behavioral measures. Discuss any five (5) of them. 10



Programme: BSc EEE (1<sup>st</sup>Semester)

Date: 25 February, 2020 (Morning)

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

**Mid Semester Examination**

Course No: Hum 4125

Course Title: Islamic History, Culture and Philosophy

**Winter Semester (2019-2020)**

Time : 90 minutes

Full Marks : 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) Evaluate the role of al-Qur'an in the growth of historical consciousness among the Muslims. 5  
b) How was the authority of Sunnah established by the early scholars? 10  
c) What is meant by *Mursāl*? Is it sound or weak? Why? 10
2. a) Discuss the administration of the Prophet (S.M.) related to the revenue and education. 15  
b) Analyze the role of Abu-Bakr (R.) as the savior of the new born Muslim state. 10
3. a) Discuss the wisdom behind the classification of religious obligations and wisdoms. 10  
b) Explain the social and global impacts of *Zakaat* and *Hajj*. 15
4. a) Discuss the merit of *Ibne Qutaiba* as the pioneer of universal history. 10  
b) Analyze the five factors that determine the fate of a given civilization as opined by al-Masudi. 05  
c) Discuss the pitfalls of *Ibne Ishaque* detected by the scholars in his book of *Sirah*. Who amended them and how? 10

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

**Mid Semester Examination**

Course No: TVE 4127

Course Title: Methods & Techniques of Teaching

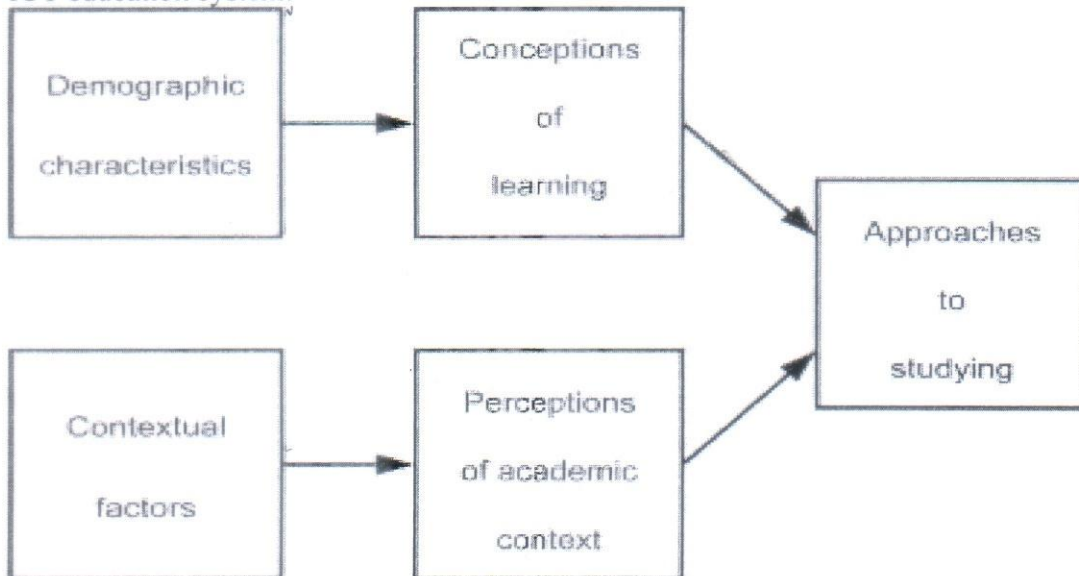
**Winter Semester (2019-2020)**

Time : 90 minutes

Full Marks : 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) Clarify the meaning of each term in relation to technical education: 12  
(i) teacher-centered and student-centered teaching; and  
(ii) surface level and deep level of student learning.
- b) Students' approaches to studying are connected to other components as shown in the diagram. Do you agree with these relationships? Elaborate your answer in relation to IUT education system. 13



(Source: Richardson, 2005, p. 679 )

2. a) Provide guidelines for making an effective lesson plan from your own area of discipline (specialization). 13  
b) In order to get learning interesting and effective, the following three factors are highly desirable: (i) Active involvement of students and teachers, (ii) Can transfer what he/she has learned; and (iii) Participatory and threat free teaching environment; explain these three factors. 12
3. a) Name three components of lesson plan. 03  
b) '*Lesson Plan is based on curriculum*', do you agree with this statement? Clarify your answer with examples. 10  
c) What would be the six best qualities of a *good students* in technical education? Provide supporting reasons of identifying these qualities. 12
4. a) Name six common mistakes in writing Lesson Plans and discuss any three of them. 09  
b) Draw a comparison table that represents different aspects (features) of the following theories of learning: 16
- Cognitivism
  - Constructivism

Programme: BScCSE (1<sup>st</sup> Sem)

Date: Friday, 28 February, 2020 (Afternoon)

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

Mid Semester Examination

Course No: Hum 4147

Course Title: Technology, Environment and Society

Winter Semester (2019-2020)

Time : 90 minutes

Full Marks : 75

**There are 4 (four) questions. Answer any 3 (three).**  
Figures in the right margin indicate marks of the questions.

1. a) What is an ecosystem? What are the biotic and abiotic factors of an ecosystem? 5  
b) Define carrying capacity of an ecosystem. Do you think carrying capacity can be enhanced with the help of science and technology? Clarify your statement with appropriate examples. 10  
c) Describe the functions of an ecosystem and explain the flow of energy. 10
2. a) Write examples of Green House Gas. How are they responsible for trapping temperature in the atmosphere of the Earth? Explain with necessary diagram. 10  
b) Differentiate between CFCs and traditional refrigerants. 5  
c) Differentiate between Weather and Climate. Name the seven theories of climate change. 10
3. a) Explain the term Sustainable Development. Describe measures of sustainable development. 10  
b) What is Biodiversity? Briefly discuss reasons of Biodiversity loss on earth. 10  
c) Uncontrolled population growth is an environmental concern. What is your opinion? Explain with logical reasoning. 5
4. a) Describe Hydrological cycle and name five major pollutants of air. 10  
b) Explain the process of ozone layer depletion with chemical reactions and mention the impacts of ozone layer depletion on human health and ecology. 10  
c) Why "Photochemical smog" is considered as secondary pollutant? 5



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

**Mid Semester Examination**

**Course No:** TVE 4151

**Course Title:** Technical & Vocational Education Ethics & Society

**Winter Semester (2019-2020)**

**Time:** 90 Minutes

**Full Marks:** 75

**There are 4 (Four) questions. Answer any 3 (Three).**  
Figures in the right margin indicate marks of the questions.

1. a) What is a profession, as defined by Socratic philosopher Michael Davis? 5  
b) Discuss five characteristics that are marks of professional status from a sociologist's point of view. 10  
c) Is Engineering a true profession? Justify your answer on a sociological account of profession. 10
  
2. a) Define morals and ethics. 5  
b) What is the difference between preventive ethics and aspirational ethics? 5  
c) Discuss the three types of morality. Give example for each of the three types. 15
  
3. a) Define engineering ethics on the basis of two normative senses. 6  
b) Explain the importance of studying Engineering ethics? 10  
c) Write a short note on the following senses of responsibility: 3\*3  
    i. Accountability  
    ii. Conscientious  
    iii. Blameworthy/praiseworthy
  
4. a) Differentiate between the three ethical decision making frameworks. 10  
b) "Engineer A, an environmental engineer, is retained by a major industrial owner to examine certain lands adjacent to an abandoned industrial facility formerly owned and operated by the owner. Owner's attorney, Attorney X, requests that as a condition of the retention agreement that Engineer A sign a secrecy provision whereby Engineer A would agree not to disclose any data, findings, conclusions, or other information relating to his examination of the owner's land to any other party unless ordered by a court. Engineer A signs the secrecy provision. Engineer A is in a moral dilemma."  
    i. Explain the current moral dilemma? 5  
    ii. Discuss five steps you will adopt to resolve the above Ethical dilemma. 10



Programme: BScEngg CEE, BScTE, DTE 1<sup>st</sup> Sem.

Date: 28<sup>th</sup> February 2020, (Morning)

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

**Mid Semester Examination**

Course No: Hum4157/ 4137

**Winter Semester (2019-2020)**

Time : 90 Minutes.

Course Title: Islamiat

Full Marks : 50

**There are 4 (four) questions. Answer question no. 1 and any two from the rest.**  
Figures in the right margin indicate marks of the questions.

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

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

**Mid Semester Examination**  
 Course No: Hum 4317  
 Course Title: Social Studies & Accounting

**Winter Semester (2019-2020)**  
 Time : 90 minutes  
 Full Marks : 75

**There are two parts; Part 'A' and Part 'B'. Use separate answer scripts for each part. There are 4 (four) questions. Two (2) from Part A and two (2) from Part B. Answer any 3 (three). Figures in the right margin indicate marks of the questions.**

**Part A: Social Studies**

1. a) What is family? Explain the word family in the Islamic perspective. 5
- b) What do you understand by the following terminologies? 10
  - i. Marriage,
  - ii. Traditional concept of family, and
  - iii. Modern concept of family? 10
- c) With explicit examples, discuss any five (5) functions of family.
  
2. a) Define the term "society". 5
- b) Discuss five any (5) key functions of society with examples? 10
- c) How do the various aspects of family growth affect the growth of the society? Elaborate your answer with examples. 10

**Part B: Accounting**

1. a) LG company hired an employee for salary \$800. Will it be a transaction? 5  
 Briefly explain the reason.
- b) On June 1, Jennifer Farrin started Sparkle Creations Co., a company that 20  
 provides craft opportunities, by investing \$15,200 cash in the business. Following are the assets and liabilities of the company at June 30 and the revenues and expenses for the month of June.

Cash	\$13,750
Equipment	10,000
Accounts Receivable	3,000
Craft Supplies	2,000
Accounts Payable	1,200
Notes Payable	9,000
Service Revenue	7,000
Supplies Expense	1,600
Gas and Oil Expense	200
Advertising Expense	400
Utilities Expense	150

Jennifer made no additional investment in June, but withdrew \$1,300 in cash for personal use during the month.

**Required:**

Prepare an **Income Statement** and **Owner's Equity Statement** for the month of June and a **Balance Sheet** at June 30, 2018.

2. a) Sameer Ahmed, a beginning accounting student, believes that double-entry system means each transaction must be recorded twice. Is Sameer correct? Explain. 5
- b) Tony Masasi is a licensed CPA. During the first month of operations of her business, the following events and transactions occurred. 20

**May 1:** Tony invested \$25,000 cash in her business.

**May 2:** Hired a secretary-receptionist at a salary of \$2,000 per month.

**May 3:** Purchased \$2,500 of supplies on account from Barry Supply Company.

**May 7:** Paid office rent of \$900 cash for the month.

**May 11:** Completed a tax assignment and billed client \$2,100 for services provided.

**May 12:** Received \$3,500 advance on a management consulting engagement.

**May 17:** Received cash of \$1,200 for services completed for Max Company.

**May 31:** Paid secretary-receptionist \$2,000 salary for the month.

**May 31:** Paid 40% of balance due Barry Supply Company.

Tony uses the following chart of accounts: No. 101 Cash, No. 112 Accounts Receivable, No. 126 Supplies, No. 201 Accounts Payable, No. 205 Unearned Revenue, No. 301 T. Masasi, Capital; No. 400 Service Revenue, No. 726 Salaries Expense, and No. 729 Rent Expense.

**Required:**

- i) Journalize the transactions.
- ii) Post to the ledger accounts.
- iii) Prepare a trial balance on May 31, 2018.



Programme: MScTE - 1<sup>st</sup> Semester

Date: Tuesday, 25 February 2020, (Afternoon)

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

Mid Semester Examination

Winter Semester (2019-2020)

Course No: TVE 6125

Time: 90 minutes

Course Title: Advanced Method and Techniques of Teaching

Full Mark: 75

There are 4 (four) questions. Answer any 3 (three).

**Figures in right margin indicate marks of the questions.**

- 01 (a) TVET is not preparation for life, TVET is life itself. The TVET is a significant tool to elevate socio-economic status by alleviating level of poverty. And everyone believes that TVET is a master key which open the door of success with innovations, technologies, and ideas. Highlight the importance of "*TVET & Technical Pedagogy*" in light of the concept of TVET. (20)
- (b) "The mediocre teacher tells, the good teacher explains, the superior teacher demonstrates, however the great teacher inspires."- Explain the statement. (05)
- 02 (a) "Knowledge comes with learning, Skills come with practice, Attitude never comes, but changed." – Discuss the statement in light of domain of learning. (20)
- (b) "In the era of IR 4.0, road of gaining knowledge & skills are always under construction and so learning requires every moment to cope up with the change." – How can you be converging knowledge and skills with Life Long Learning (LLL) in the IR 4.0? (05)
- 03 (a) TVET teaching is an art (not just reading from a book and reproducing in the classroom). The teaching is a process intended for learning by inducing a behavioral change in the taught. Moreover, the teaching is a science of communicating innovative message with students effectively. The outcomes of the teaching are to discover something undiscovered. Narrate the nature, objectives and outcomes of TVET teaching. (20)
- (b) Clarify - "If a child can't learn the way you teach, maybe you should teach the way they learn". (05)
- 04 (a) "*Mistakes are proof that you are trying; a person who never made a mistake, never tried anything new*" – Describe the significance of the statement in light of the principle "Learn from Mistake" & "Learn from others Mistake". (20)
- (b) If a child is born on the street and a child is born in a palace, there is no difference in their potential in terms of Medical Science. However, their environment will decide who will do what. How to motivate an underprivileged child by pleasant environment in the classroom? Discuss. (05)

Programme: PhD TVE - 1<sup>st</sup> Semester

Date: Friday, 28 February 2020, (Afternoon)

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

Mid Semester Examination

Winter Semester (2019-2020)

Course No: TVE 6175

Time: 90 minutes

Course Title: Entrepreneurship Education

Full Mark: 75

There are 4 (four) questions. Answer any 3 (three).

**Figures in right margin indicate marks of the questions.**

01. Placement uncertainty and ambiguity is a reality in many countries, therefore, the idea of self-employment has taken a more active role, not only out of necessity, but also because it brings innovation and development to countries as well as societies. In view of this situation, the question arises: how can we strengthen the employability spirit of our students and reduce burden of unemployment imprecation form our society? Suggest your ideas for the answer of that question basis on entrepreneurial concept in education. (25)
02. Our choices, behaviors and habits are influenced by very powerful external forces. To sustain our positive direction toward our goals, we'll need to understand and govern these influences so they will support rather than derail your journey toward success. Give an example on expression "*Slow and steady wins the race*" through write out the five small, seemingly inconsequential steps you can take every day that can take your life in a completely new and positive direction in light of *Compound Effect*. Focus on result what will be the achievement after 1 (one) year. (25)
03. "Every few seconds we all get little thoughts in our heads. All kinds of thoughts are as seeds. It's like a flurry of seeds in our minds. Well everything starts with a thought. A passing thought. Many of us focus on a particular seed, usually a seed associated with a hurt, a struggle or a fear and we grab it and start watering it. And just like that, it begins to grow. One thought becomes an idea, an anxiety, a desire and can eventually become a sadness or a resentment or a regret. Left to grow, it can become an obsession, a phobia, or a dark cloud and the results can be a mess. When we pass on the fruits of these plants, we give these seeds to others and soon there is an amazing garden community. Every thought that runs through your consciousness has the potential to bring you joy, or make you a prisoner. We have the potential to grow anything". How can an entrepreneurial mind contribute him/her in the world of work? Discuss. (25)
04. "A social enterprise is a business that aims to achieve a particular public or community mission, and reinvests the majority of its profits into achieving that mission. You are an entrepreneur in the Social Business Earth. The Business called upon a non-dividend company that is created to address and solve a social problem. In a social business model, the investors/owners can gradually recoup the money invested, but cannot take any dividend beyond that point. Keep in mind that, Patience, Passion and Perseverance are essential traits in a successful social entrepreneur. But you also see unselfishness, an ability to take measured and sometimes reckless risks, and a deep belief in humans". What are the main objectives of a social enterprise? What makes a good social entrepreneur? How is social enterprise different from charity? Discuss. (25)