


Set A

Name:		 UNIVERSITY WITH A PURPOSE	
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2019			
Course: English Program: B.Sc (All branch) Course Code: HUMN1011		Semester: II Time 03 hrs. Max. Marks: 100	
Instructions: Attempt all question. Write answers in your own words as far as possible.			
SECTION A			
		Marks	CO
Q 1	Draft proper subject lines for the following email drafts: <ol style="list-style-type: none">1. Mailing to the Head of your department at college, informing him or her about the progress of your major project at a student exchange program.2. Mailing to the Editor of a newspaper informing him/her about your interest in reading a column that was taken off last week.3. Email on behalf of your college to inform students about their selection in official sports team.4. Email your bank manager informing him about a house loan you are interested in, seeking details of documentation and formalities.	12	CO3
SECTION B			
Q 2	Read the passage given below and develop a Precis` in 80 words. Indicate the rough draft and column draft clearly: Scientists at the Centre for Cellular & Molecular Biology (CCMB) have discovered a new enzyme which helps in breaking cell walls of bacteria and hence, offers a potential for a new drug delivery route to arrest the anti-bacterial resistance through existing antibiotic drugs. At a press conference here on Tuesday, CCMB director Rakesh Mishra and senior scientist Manjula Reddy explained that it is crucial to know how cells grow in bacteria to understand the anti-bacterial resistance to currently available antibiotics. Scientists all over the world are trying to understand this	15	CO2

	<p>phenomenon and the lab of Dr. Reddy has been working on how e. coli bacteria cells function, divide and grow to understand diseases like cholera, leprosy, tuberculosis and so on for the past decade.</p> <p>Dr. Reddy and her research scholar Ch. Pavan Kumar have been working on how the cell governs the synthetic machinery to build the cell wall in the first place, identified the principal players behind the process and discovered the new mechanism or enzyme through which the cell regulates growth of its wall.</p> <p>Other bacteria, too, have the same enzyme working on cell division as the cell wall is fundamental for bacterial growth and division. Therefore, by blocking this ‘scissors enzyme’ from functioning, new ways to target microbes could be found, leading to a new wave of antibiotic drugs.</p> <p>In contrast, the classical antibiotic drugs target the last stage of cell synthesis to prevent cell growth like penicillin that hits the machinery that creates the cell wall — a mesh-like structure of cross-linked sugars and peptides.</p> <p>“What has been found is very novel. Now the next step is to find out the molecule of the enzyme endo-pepcidine and it has to be followed by the drug trials to unravel a new combination of drugs to replace existing antibiotics though it is difficult to forecast a time frame,” said Dr. Mishra and Dr. Reddy.</p>		
<p>Q 3</p>	<p>Write an abstract based on the given excerpt taken from a research paper. Clearly indicate the purpose of research, problem, context and findings if any. Do not exceed 250 words:</p> <p>Scaffolds can be called “the beating heart” of the tissue engineering field. Without the appropriate scaffold, the growth of cells in an artificial environment is not possible. Among all the various cells of the human body, bone cells are one of the most critical types that require a well-designed scaffold to allow engineered living bone. There is a growing need to repair damaged tissues such as bones or replace them with new healthy ones. Research into new approaches to create such scaffolds has been intensified in recent years, and tissue engineering combined with nanotechnology is now looked upon as a promising alternative to the existing conventional repair strategies [1], [2]. This multidisciplinary science is a novel approach to the restoration and reconstruction of damaged tissues. It aims to grow specific and functional tissue that can behave as well (or even better) than natural tissue [3]. Basic science (chemistry, physics and engineering) is combined with life sciences (biology and medicine) in order to enhance the function of damaged tissue [4]. Kidney was the first organ to be transplanted between identical twin brothers. Ronald Herrick conducted this transplant in 1954. In this procedure the donor and recipient were genetically identical which avoided adverse immune response (rejection) [5]. According to recent statistics from the US Department of Health and Human Services, 22 people die each day while waiting for a</p>	<p>20</p>	<p>CO3</p>

	<p>transplant [6]. The aim of tissue engineering is to overcome existing transplant bottlenecks by modeling biological structures with the eventual aim to construct artificial organs. Engineers working in the field of tissue engineering utilize natural or synthetic materials to fabricate scaffolds. Scaffolds should be biocompatible without any stimulation of excessive inflammation, or response by the immune system. Furthermore, scaffolds should be compatible with tissue-specific cell types and with the environments found in the body of the individual who will receive the tissue [7], [8]. Bone is unique amongst tissue engineering targets, since mechanical strength becomes of paramount importance, in addition to good biocompatibility and satisfactory biological function. Some studies have been undertaken to investigate the use of carbon-based nanomaterials for bone tissue engineering <i>in vivo</i>. For instance, Sitharaman et al. utilized CNT/biodegradable polymer nanocomposites for bone tissue engineering in a rabbit model. They utilized single-walled carbon nanotubes (SWCNTs), especially ultra-short SWCNTs (US-SWCNTs) to fabricate polymeric scaffold materials. Their results showed the significant effects of the scaffold composition on the cell behavior and the growth rate in the microenvironment of the scaffold surface. In their report, the CNT scaffolds that did not possess the appropriate surface chemical composition did not perform well for cell growth. Their results indicated that a suitable chemical composition played a critical role in bone cell proliferation and growth [9]. Therefore, the exact influence of the scaffold surface chemical composition requires further broad studies. Nanomaterials such as carbon-based, metallic and metalloid nanoparticles play a pivotal role in tissue engineering [10], [11], [12], [13], [14], [15], [16]. Nowadays, nanocarbon materials have been used extensively in energy transfer and energy storage applications. Fullerenes, graphene and CNTs are some of the most widely studied nanocarbon structures [17], [18]. These nanomaterials have diameters ranging from tens of nanometers to hundreds of nanometers [19]. They possess unique structures and properties which make them promising candidate materials for use in biomedical applications, such as tissue engineering and regenerative medicine. Moreover, carbon nanomaterials have been used as secondary structural reinforcing agents to enhance the mechanical properties of two- and three-dimensional cell culture scaffolds such as hydrogels and alginate gels [20].</p>		
<p>Q 4</p>	<p>Create a mind map on the given central idea. Use systematic colour scheme:</p> <p>Mental health in India is approached from a variety of aspects that just treatment or reconciliation. There are instances when patients are not ready to accept what problems they are going through. Mostly because of the social stigma associated with mental illness. At other times, family members are in complete denial of any kind of mental health problem. Denial is harder to treat than actual</p>	<p>20</p>	

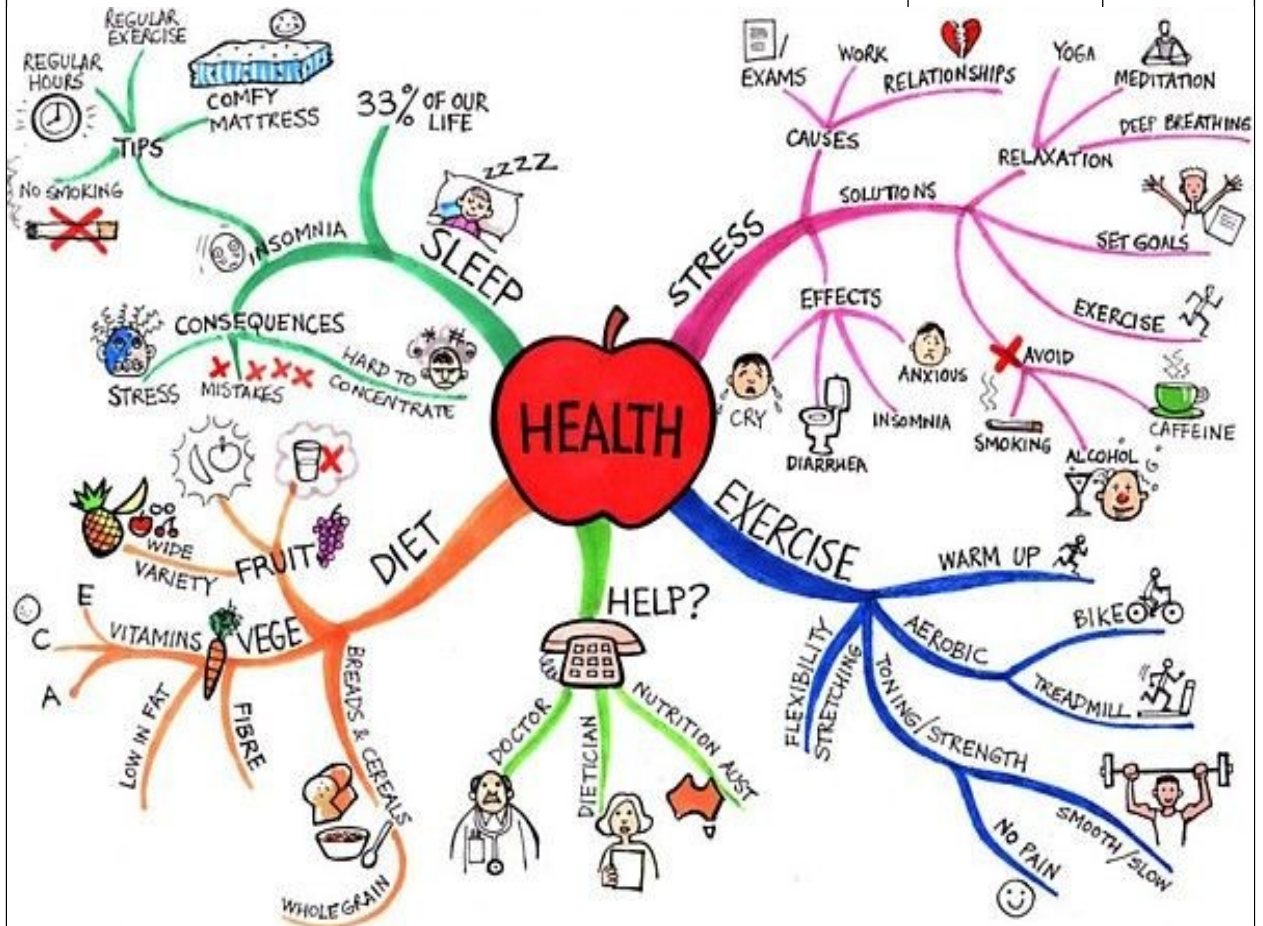
	illness. There is also a lot of insensitivity around mental health problems. It is not just about the treatment through medicine that can heal the patient, but also the way one is treated and brought into mainstream afterwards.		
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SECTION-C

Q 5	<p>Draft an email in response to the one given below:</p> <p>Company, Inc. 123 Alphabet Drive Los Angeles, California 90002</p> <p>15 October 2016</p> <p>Mr. John Doe Customer Service Representative Widgets Galore, Inc. 987 Widget Street Miami, Florida 33111</p> <p>Dear Mr. Doe:</p> <p>I am writing you concerning a recent purchase of widgets. Approximately two weeks ago, on October 1, I ordered a total of 50 widgets for Company, Inc. via the Widgets Galore client webpage. I received an email notification two days later confirming the receipt of payment and the shipment of the widgets. According to your website, shipments should reach their destination within 3-5 business days of being sent, but I have yet to receive the widgets. Do you have any information on what may have happened to delay the shipment or where the shipment is currently?</p> <p>I have worked with Widgets Galore, Inc. in the past and have the greatest confidence in your products and customer service. We need the shipment of widgets soon, however, and I hoped you might be able to provide me with an idea of when I can expect them. Thank you in advance for any help you might be able to offer.</p> <p>Sincerely,</p> <p>Sam Brown Vice President of Company, Inc. 555-555-5555</p>	15	CO2
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Q.6

Study the given mind map and answer the questions that follow:



1) Analyze the role of the following in Health : [8]

- a) Caffeine
- b) Fruit juice

2) Develop a DEDUCTIVE paragraph indicating the contribution of Sleep in our Health. Do not exceed 150 words. [10]

18

CO3

Set B

Name: Enrolment No:	
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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2019

Course: English
Program: B.Sc (All branch)
Course Code: HUMN1011

Semester: II
Time 03 hrs.
Max. Marks: 100

Instructions:

Attempt all question. Write answers in your own words as far as possible.

SECTION A

		Marks	CO
Q 1	<p>Draft proper subject lines for the following email drafts:</p> <ol style="list-style-type: none"> 1. Mailing to the Head of your department, informing him or her about the progress of your outdoor project. 2. Mailing to the Editor of a newspaper informing him/her about a factual error printed in last week's copy of newspaper. 3. Email parents about the attendance shortage of their ward on behalf of the college. 4. Email your bank manager informing him about a withdrawal made on your account outside of your knowledge. 	12	CO3

SECTION B

Q 2	<p>Read the passage given below and develop a Precis' in <u>80 words</u>. Indicate the rough draft and column draft clearly:</p> <p>At the fork of two roads leading to Sathanur, 62 km from Tiruchi, a rusty signboard stating "Kalmaram Poonga (Fossil Tree Park) points up to the sky. A woman farmer stacking dried cornstalks on her two-wheeler sets us on the right path to the celebrated petrified tree, a protected monument of the Geological Survey of India (GSI).</p> <p>Just a few minutes earlier, we had exited the Tiruchi-Chennai highway and stopped by the roadside in Kozhakalnatham village to admire its badlands topography — land formations marked by ravines, steep gullies and jagged towers of sand and rock. These other-worldly outcrops are actually a vast marine graveyard dating back millions of years to the Cretaceous era and the first markers of the wealth of natural</p>	15	CO2
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	<p>history in this area that is spread across at least four districts — Ariyalur, Perambalur, Tiruchi and Cuddalore.</p> <p>“This region is now regarded as a site museum of palaeo-zoology because of its well-preserved fossils and corals,” says K Ramamoorthy, former Head of Department, Geology, National College, Tiruchi, who has written several research papers on the region. “Like the Grand Canyon in Colorado, US, Ariyalur is considered as Cretaceous Park of South India by the geological community.”</p> <p>The busy Tiruchi-Chennai highway appears to have been a seashore 220 million years ago, when the Indo-Pacific Sea (today’s Bay of Bengal) transgressed and regressed (flooded and evaporated) over the expanse of land covering modern-day Ariyalur, Kallagudi, Dalmiapuram, Kattupirinjam, Mela Palur, Kunnam, Kozhakalnatham, Uttathur, Karai, Anaipadi and Kallankurichi. In the Cretaceous era, a sudden regression in the area exposed the submerged floor of the sea and possibly caused the extinction of the marine flora and fauna that lived in these waters.</p>		
<p>Q 3</p>	<p>Write an abstract based on the given excerpt taken from a research paper. Clearly indicate the purpose of research, problem, context and findings if any. Do not exceed 250 words:</p> <p>Hepatitis D or delta is caused by the hepatitis delta virus (HDV), a human pathogen first identified in 1977 [1]. HDV is a defective RNA virus that does not encode its own envelope proteins and depends on the expression of the hepatitis B virus (HBV) surface antigen (HBsAg) in the same cell to complete its life cycle. HDV can enter hepatocytes not expressing HBsAg and efficiently replicate its genome and express the hepatitis delta antigen (HDAg); however, no secretion of infectious particles occurs. Hepatitis D is hence the result of either an acute coinfection by HBV and HDV or a HDV superinfection of patients chronically infected with HBV. Chronic hepatitis D (CHD) is arguably the most aggressive type of viral hepatitis and is associated with an increased risk of cirrhosis, liver decompensation and hepatocellular carcinoma (HCC) [2], but the management of HDV has evolved little during the past years. The main treatment remains pegylated interferon-alpha (IFN-alpha), with unsatisfactory results. Nucleos(t)ide analogues specific for HBV have no effect on HDV replication. However, several host-targeting molecules with a specific impact on HDV life cycle are currently under development.</p> <p>Worldwide, ~248–292 million people are chronically infected with HBV [3], [4]. Based on these estimations, ~15-20 million of these patients were initially thought to be also affected by HDV [5]. These figures were challenged by a recent meta-analysis, proposing that a staggering 62–72 million people may live with HDV worldwide [6], a prevalence almost two-times greater than that of human immunodeficiency virus (HIV) infection (estimated to infect 36.9 million persons in 2017, according to the World Health Organization). These estimates imply a disease burden much higher than previously considered and one that is still debated [7]. Indeed, the exact global prevalence of HDV infection remains unknown because of heterogeneous and non-standardised screening practices and the inaccessibility to testing in many endemic areas.</p> <p>In Mongolia, HDV infects ~60% of the HBsAg-positive individuals, corresponding to the highest reported prevalence worldwide [8]. Other highly affected areas include the Amazon basin [9], West Africa [10], [11], the Mediterranean basin [12] and Eastern Europe [13].</p> <p>In Western Europe, although high prevalence rates were described in Italy early after</p>	<p>20</p>	<p>CO3</p>

	<p>HDV identification, a subsequent decrease was documented as consequence of improved socio-economic conditions and mass vaccination campaigns against HBV [14], [15]. HDV prevalence now seems to be very low in some European countries, and in close association with intravenous drug use (IVDU) [16]. However, no decrease has been observed in other areas, likely because of migration from endemic regions [17], [18].</p> <p>In the United States, HDV infection has for long been considered rare and screening recommendations are limited to high-risk populations [19]. Unfortunately, several recent studies highlight the presence of suboptimal testing rates and suggest that the prevalence may be much higher than previously considered [20], [21], [22].</p> <p>As HBV, HDV can be transmitted by blood and blood-derived products and sexual contact. Vertical transmission is however rare. In highly endemic populations, transmission occurs mainly through intrafamilial and iatrogenic spread [23] in association with poor hygiene conditions [24]. In low endemicity regions in the northern hemisphere, iatrogenic and intrafamilial transmission, while accounting for infections occurred in the past, are no longer common and IVDU is now the main transmission route [6]. Sexual transmission, although less frequent than for HBV or HIV, seems to be important in regions where HBV infection is endemic, such as Taiwan [25], [26].</p>		
<p>Q 4</p>	<p>Create a mind map on the given central idea. Use systematic colour scheme:</p> <p>Social media has its own benefits and loopholes. On the one hand it enables us to get in touch with long lost friends who are geographically separated from us. On the other hand it segregates us from the people around us. Come to think of it, there are so many social media platforms for the millennials- facebook, twitter, Instagram and many more. Each one offers a separate value to the user. Privacy, however, has come up as a major concern associated with Social media apart from social isolation and health problems.</p>	<p>20</p>	
<p>SECTION-C</p>			
<p>Q 5</p>	<p>Draft an email in response to the following mail:</p> <p>John Bravo ABC Education Inc. 1234 – 123 Street</p>	<p>15</p>	<p>CO2</p>

New York, NY 01218

Date: May 21, 2018

Sarah Geenie
XYZ Company Inc.
6789 – 789 Street
New York, NY 04851

Re: Updated Billing Frequency

Dear Ms. Geenie,

I am writing to inform you of our new pricing model effective February 1, 2019. On the first of February, we will be switching from an annual billing cycle to a quarterly billing cycle and this letter contains important information that may impact your organization.

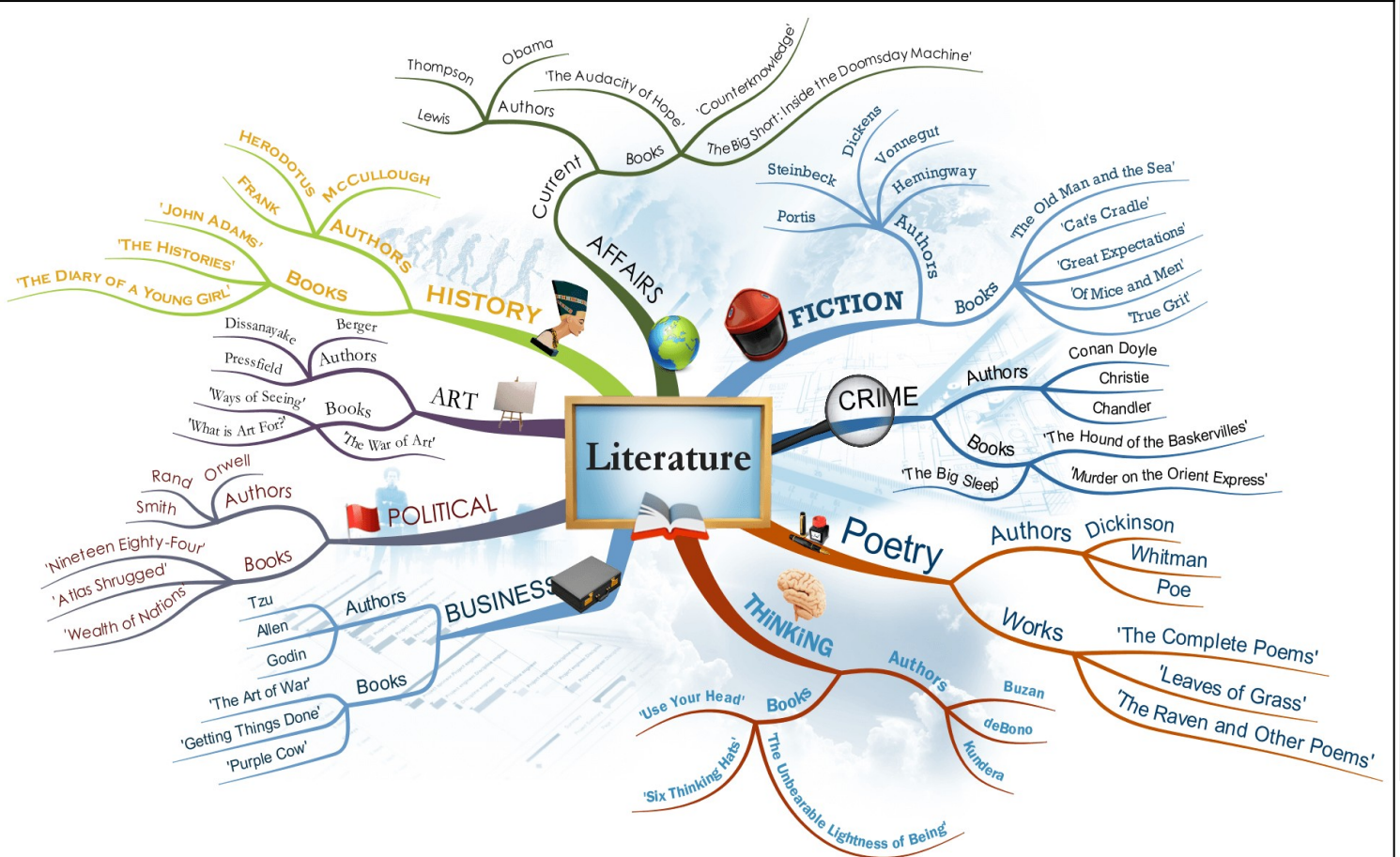
After conducting extensive research and receiving feedback from our customers, we have determined that most customers strongly prefer a quarterly billing cycle rather than an annual one. In order to best suit your needs, we have decided to offer this benefit, which will take effect on February 1, 2019.

This letter is simply to notify you of the upcoming changes. We need a response from your end to continue with the plan of action. Kindly do the needful. We thank you for your continued business.

Sincerely,
John Bravo

Q.6

Study the given mind map and answer the questions that follow.



	<ol style="list-style-type: none">1) Comment on the contribution of Business writing in Literature. [8]2) Develop a DEDUCTIVE paragraph indicating the contribution of world affairs in Literature. Do not exceed 150 words. [10]	18	CO3
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