

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
B.Sc., Summer 2017-18 Examination

Semester: 2
Subject Code: 11193151
Subject Name: Communication Skills-II

Date: 18/05/2018
Time: 10:30am to 1:00pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as directed.

A) Answer one word for the description given (Any 14 out of 16)

(07)

1. Examination of living tissue
2. Dissection and examination of a corpse to determine the cause of death
3. Science of the heavens
4. Science of the development of mankind
5. Branch of Physics dealing with the composition of celestial bodies
6. Pertaining to the Science of group cultures, conventions, etc...
7. Pertaining to the Science of Linguistics
8. Study of insects
9. One who physically travels in space
10. Part that represents the whole
11. Student of the meaning and psychology of the words
12. Student of plant life
13. Lover and collector of books
14. A Russian space scientist.
15. Self isolated from contact with people
16. Pertaining to charitable activities

B) Select correct answers from the bracket given and complete the Cloze Test for 1 to 16.

(13)

(then processed, through, Nano-filtration, dissolved, driving, with, reduce, one side, planning stages, reverse osmosis, large, improve, and, Currently, in which, the other side)

Water desalination processes separate 1. _____ salts and other minerals from water. Feedwater sources may include brackish, seawater, wells, surface, wastewater, and industrial feed and process waters. Membrane separation requires 2. _____ forces including pressure, electric potential, and concentration to overcome natural osmotic pressures and effectively force water through membrane processes. As such, the technology is energy intensive and research is continually evolving to 3. _____ efficiency and 4. _____ energy consumption.

Seawater desalination has the potential to reliably produce enough potable water to support 5. _____ populations located near the coast. Numerous membrane filtration seawater desalination plants are currently under construction or in the 6. _____ up and down California's parched coast, with the 50 million gallons per day (mgd) Carlsbad Desalination plant scheduled to be operational by 2016.

7. _____ and 8. _____ are the leading pressure driven membrane processes. Membrane configurations include spiral wound, hollow fiber, and sheet with spiral being the most widely used. Contemporary membranes are primarily polymeric materials 9. _____ cellulose acetate still used to a much lesser degree. Operating pressures for RO and NF are in the range of 50 to 1,000 psig (3.4 to 68 bar, 345 to 6896 kPa).

Electrodialysis (ED) and Electrodialysis Reversal (EDR) processes are driven by direct current (DC) in which ions (as opposed to water in pressure driven processes) flow 10. _____ ion selective membranes to electrodes of opposite charge. In EDR systems, the polarity of the electrodes is

reversed periodically. Ion-transfer (perm-selective) anion 11. _____ cation membranes separate the ions in the feed water. These systems are used primarily in waters with low total dissolved solids (TDS).

Forward osmosis (FO) is a relatively new commercial desalting process 12. _____ a salt concentration gradient (osmotic pressure) is the driving force through a synthetic membrane. The feed (such as seawater) is on 13. _____ of the semi permeable membrane and a higher osmotic pressure "draw" solution is on 14. _____. Without applying any external pressure, the water from the feed solution will naturally migrate through the membrane to the draw solution. The diluted solution is 15. _____ to separate the product from the reusable draw solution.

Membrane Distillation (MD) is a water desalination membrane process 16. _____ in limited commercial use.

17 to 26: Select appropriate answer to make the sentence correct in terms of use of degree.

17. He is _____ than his neighbors. (a) rich (b) richer (c) richest
18. He is too _____ to be taught. (a) intelligent (b) more intelligent (c) most intelligent
19. He is _____ than I thought to be. (a) clever (b) cleverer (c) cleverest
20. He is much _____ now. (a) good (b) better (c) best
21. The offer was too _____ to be true. (a) good (b) better (c) best
22. He fishes with _____ success than I do. (a) great (b) greater (c) greatest
23. Shakespeare is the _____ playwright in English. (a) great (b) greater (c) greatest
24. The pain was _____ than he could bear. (a) much (b) more (c) most
25. The _____ thing of all was that his son was rude to him. (a) bad (b) worse (c) worst
26. Jane was the _____ player of the two. (a) good (b) better (c) best

Q.2 Answer in Detail in around 150 words. (Any two out of three) (12)

1. Applied sciences a better choice than Engineering.
2. We are losing real sense of socializing because of virtual socializing. Suggest solutions to fight with this contemporary problem.
3. Write a review on a book of your choice.

Q.3 Do as directed.

A) Reading comprehensions.

(05)

Petroleum products such as gasoline, kerosene, home heating oil, residual fuel oil, and lubricating oils come from one source – crude oil found below the earth's surface, as well as under large bodies of water, from a few hundred feet below the surface to as deep as 25,000 feet into the earth's interior. Sometimes crude oil is secured by drilling a hole into the earth, but more dry holes are drilled than those producing oil. Either pressure at the source or pumping forces crude oil to the surface.

Crude oil wells flow at varying rates, from about ten to thousands of barrels per hour. Petroleum products are always measured in forty-two-gallon barrels. Petroleum products vary greatly in physical appearance: thin, thick, transparent, or opaque, but regardless, their chemical composition is made up of only two elements: carbon and hydrogen, which form compounds called hydrocarbons. Other chemical elements found in union with the hydrocarbons are few and are classified as impurities. Trace elements are also found, but in such minute quantities that they are disregarded. The combination of carbon and hydrogen forms many thousands of compounds which are possible because of the various positions and unions of these two atoms in the hydrocarbon molecule.

The various petroleum products are refined by heating crude oil and then condensing the vapors. These products are the so called light oils, such as gasoline, kerosene and distillate oil. The residue remaining after the light oils are distilled is known as heavy or residual fuel oil and is used mostly for burning under boilers. Additional complicated refining processes rearrange the chemical structure of the hydrocarbons to produce other products, some of which are used to upgrade and increase the octane rating of various types of gasoline.

Questions

1. How is crude oil brought to the surface?
2. What are the principal components of all petroleum products?
3. What is heavy oil?
4. All of the following are listed as light oils EXCEPT
a. distillate oil b. gasoline c. lubricating oil d. kerosene
5. The word 'upgrade' in the last but one line is closest in meaning to
a. improve b. counteract c. charge d. unite

B) Applying your creative sense of visual representation and knowledge comprehension skills make notes of the passage given in Q.3 A. You may use enumeration, bulleting, table, process chart, diagram, figure to convert provided paragraph in the form of notes. (04)

C) Write a Précis of a passage given in Q.1. (B) Cloze Test (05)

Q.4 A) Describe given picture in around 150 words. (any one) (05)



1.



2.

B) Answer the following questions. (Any two out of three) (09)

1. Describe the characteristics of note making.
2. Group Discussion helps to identify team roles and leadership skills
3. How does book review writing help in enhancing communication skills?