

Level: Bachelor Semester: Fall Year : 2020
 Programme: BE Full Marks: 100
 Course: Communication Technique Pass Marks: 45
 Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. Read the following passage and answer the questions given below.

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Nanotechnology is going to pave the way for a revolution through different disciplines as materials, information and communication technology, medicine, genetics, etc. as commercialization potential is driving innovation from the research laboratories into real world markets. The use of nano-materials can help to improve products and production processes with better characteristics or new functionalities. In coming years, products based on nanotechnology are expected to impact nearly all industrial sectors and will enter the consumer markets in large quantities. Due to the future potential of nanotechnology, many companies across the world are investing heavily in this sector. There is massive investment in nanotechnology by both governments and corporates across the world.

Nano Technology refers to the particular technological goal of precisely manipulating atoms and molecules for fabrication of macro scale products, also now refers to as molecular technology manipulation of matter with at least one dimension sized from 1 to 100 nanometers. According to the Project on Emerging Nanotechnologies (PEN) 4 over 1,300 manufacturers have been identified who have nanotechnology-enabled products which have entered the commercial marketplace around the world. The positive impacts of nanotechnology are as product and health related manufacturing items, the most recent update to the group's five-year-old inventory reflects the continuing use of the nanosized particles in everything from conventional products like non-stick cookware (based on nano-ceramic coatings) to more unique items such as self-cleaning window treatments (based on electrochromic nanosized metal oxides). Health and fitness items continue to dominate the market with over half of the known products

relating to this sector.

In the modern period engineered nano-materials have attracted a great deal of attention due to their important properties to the customers which have given birth to vast technological and economic growth in a number of industrial sectors. Nano-materials are indeed expected to become the cornerstone of a number of sectors such as microelectronics, materials, textiles, energy, healthcare and cosmetic goods. Nanotechnology applications will give rise to cleaner energy production, lighter and more durable materials, inexpensive clean water production and will benefit medical applications such as smart drugs and diagnostics. However, one has to be mindful of the risks involved concerning potential toxicity and exposure route and the verdict is still out on a number of nano-materials as to the relative dangers to humans and the environment.

Questions:

- What is nanotechnology?
- What are the different disciplines of nanotechnology? How is it related to commercialization?
- What are the risks or dangers of nanotechnology?
- What sort of industrial products have attracted the customer in the modern world?
- What are the positive impacts of nanotechnology?

2. Answer any three of the following questions.

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- How does wisdom help individual to use the knowledge for the betterment of mankind? (Knowledge and Wisdom)
- "For we are the lost citizens of the world, weep not for me, oh my mother." What does the statement imply in the poem? (A Letter from the Foreign Grave)
- What is the conventional attitude about beauty that Susan Sontag seeks to discredit? (Beauty)
- Analyse the story from the feminist point of view (The story of an Hour)

- Imagine that you are the general administrator of SetiKhola Hydropower, Tanahun. Write a memo to all technical and non-technical staff informing about the changes in working hours and duty schedules giving specific reason.
 - Suppose you are director of Begnas Supercomputer Center. You need 200 general and five super computers to compute the high power database. Now write an order letter following its structure and subject

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matter to the Dell Marketing Suppliers company, DarbarMarga, Kathmandu.

4. a) Write a précis after reading the following passage.

Suppose that you are considering whether to become a vegetarian. You might consider this issue for at least two different sets of reasons. On the one hand you might feel this is essentially a moral issue – about the rights and wrongs of treating animals in particular way and eating them. Or you might see it mainly as a health issue – about the benefits and health risks associated with eating meat. Of course, you might think both sets of considerations are relevant, but it is very common for people to adopt one perspective or the other. The point is that you need to be as clear as possible about the background to the decision, the assumption which lies in the background, the context and so on if you are to weigh the case wisely. Although models of good decision making often fail to mention this requirement explicitly, it is implicit and getting clear about why a decision is necessary helps to focus one's thinking. Sometimes being clear about why a decision is necessary means identifying a problem and sometimes it will require you to think carefully about objectives – what you or others want to achieve. So for example, if you are considering which university to attend, you might realize you know very little about the institutions you could attend, so that is a problem. Alternatively someone might advise you could attend, so that is a problem. Alternatively someone might advise you to apply for university A 'because that is the most prestigious place for the subjects in which you are interested', but you may feel that this is not necessarily right for you, so you may need to think carefully about what you want to get from your university education, what you are looking for-what your objectives are.

- b) Write a technical talk or presentation on "Smoking and Health Problems" 7

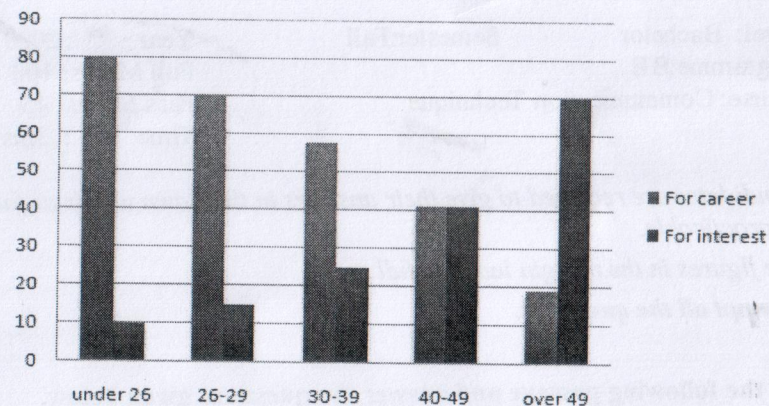
5. a) Suppose that there is a vacancy announcement at the Suhsankhya Tech Pvt. Ltd. for the post of a Project Officer for its new project. Now, write a job application for the post as a qualified and competent candidate. 8

- b) Write a technical description about any product you like with its different technical points, parts and their functions 7

6. a) Study the following charts and describe it in about 150 words. 8
(The first bar-graph is career and second is interest)

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Reasons for study according to age of student



- b) Write a letter to Nilofer Typewriters Pvt. Ltd. Complaining about the damaged condition of the typewriter received from them. 7

7. a) Transform the following sentences as indicated in the brackets. 2×5

- Blinded by a snow storm, they lost their way. (complex)
- Deceived by his friends, he lost all hope. (compound)
- The sea being smooth, we went for a sail. (complex)
- He got up and walked away. (simple)
- I know that he is an honest guy. (compound)

- b) Change the following sentences according to the variety labels in the parentheses.

- One should not ignore the needs of his family. (BrE)
- They insisted that the culprit should be produced before the police within twenty four hours. (AmE)
- I wonder if you would mind lending me your car. (Familiar)
- You must submit all assignments within the stipulated time. (Impersonal)
- Come and tell me about this thing. (Polite)