

Level: Bachelor Semester: Fall Year : 2019  
 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. 15

Stereophonic was given a boost by the introduction of tape recorders in the late 1940s. On tape, it was simple to record two, three, or more recordings side by side. Inventor Marvin Camras of the Armour Research Institute demonstrated one of the first stereophonic tape recorders, this one using three channels (left, right, and center) in 1949. When several manufacturers of home tape recorders began offering two-channel stereo tapes and machines to play them on in the early 1950s, it looked like stereophonic sound had arrived. But, tapes were expensive, and many people had just purchased new equipment to play the LP and 45-rpm records. Once again, stereo had failed to catch on. Stereophonic sound for the home would have to wait, but engineers found ways to reintroduce stereo to the public in movie theaters. Using special equipment, the Walt Disney Film Fantasia was one of the first to feature stereo sound. Disney called it "Fantasound." But it was so expensive to install the playback equipment in theaters that Fantasound was not used again. Only in the 1950s and 1960s would stereo make a return to theaters.

A breakthrough came in 1958 when several record companies, including RCA and Decca, adapted the LP record for stereo playback. They used the two-in-one technology pioneered in the 1930s, where each wall of the groove held one of the channels. Backed by major electronics and record companies, stereo now became a hit. Recording engineers quickly discovered new ways of manipulating stereo technology in the studio. It was originally conceived of as a way of achieving greater fidelity, or realism. But many studios and musicians used it to create entirely new sounds. It was particularly effective in creating the illusion that an

instrument or a voice was moving around the listening room.

Since then, nearly every new music format has been in stereo from the start, including the cassette, the CD, MP3, and others. Although two-channel stereo is the standard form of the technology, "stereo" does not necessarily mean "two." In the late 1960s, many record companies began issuing four-channel "quadraphonic" recordings. It's advanced technology because there were simply remixed versions of the original multi-channel studio tapes, where one or more instruments were moved from the original two channels to the new third or fourth channels. Now, instead of just a "left" and a "right" channel, one also heard music from both front and rear. "Quad" sound was briefly popular, but proved too expensive for average consumers. However, when multi-channel sound returned to theaters in the 1970s, often it had four or more channels, and the current "surround sound" home theater technology has its specialties beyond the quadraphonic systems of the early 1970s, used frequently in the format known as 5.1, with five speakers, including a center front speaker for dialog, and a single sub-woofer to carry deep bass.

### Questions:

- How did engineers reintroduce stereophonic sound despite its failure?
- How did studios and musicians adapt new sound? How was illusion created?
- What are the specialties of home theatre technology?
- When was the quadraphonic recording system applied? Why was it called advanced technology?
- Why did recording engineers manipulate stereo technology in the studio?

2. Answer any three of the following questions: 15

- In what way does the essayist define freedom? Do you agree with the writer's perspective of it? Present your arguments. (What is Freedom?)
- Describe the process of laying the foundations of the road? (Road Foundations)
- "Forgive me, mother. And weep not for me anymore, but ruminate for those living whose wars are now to be feared about." What is the



- poet's message in these lines? (A Letter from the Foreign Grave)
- d) Sontag opines, "There should be a way of saving beauty *from* women and *for* them." What does she mean? Discuss. (Beauty)
  - e) Present a psychological interpretation of the death of Mrs. Mallard in the story. (The Story of an Hour)

3. a) Write a proposal to construct a shopping mall in Pokhara valley. Include the points mentioned below: 8

Introduction, problem, objectives, methodology, budget and output

- b) Prepare a manuscript of technical talk on the topic "Water Resources and their Best Utilization". 7

4. a) Write a précis after reading the following passage. 8

A surface on which the Gaussian curvature  $K$  is everywhere is positive. When  $K$  is everywhere negative a surface is called anticlastic. A point at which the Gaussian curvature is positive is called an elliptic point. Tensile surfaces, that is, surfaces which carry only tension and no compression or bending, rely on double curvature for their stability. Stability is provided by the opposition of two curvatures which enable the surface to be tensioned without losing its form. Tensioning the surface reduces its elasticity and so its tendency to deform under load, and the curvature itself means that the surface will deform less for any given extension. Tensile surfaces can be used in buildings to create thin, long span enclosures, such as roofs for sports stadia, shopping centers, atria and so on. Typically they are constructed using a PVC-coated polyester or PTFE coated glass fabric, typically just 1 mm thick. Synclastic surfaces are those in which the centers of curvature are on the same side of the surface. This is a dome-shape. This can be created with an architectural fabric by inflation – that is, air pressure within the dome maintains the form of the surface when it is tensioned, rather than the opposition of the curvatures. This is opposed to anticlastic surfaces, which are those in which the centers of curvature are located on opposing sides of the surface. This is commonly-described as a saddle shape. A hyperbolic paraboloid is an anticlastic surface

- b) Write a CV/Resume for the post of a software engineer at a manufacturing factory located in Pokhara. 7

- 5. a) Recently, you have bought an Fz motor bike from Kasturi dealer in your city. Unfortunately the bike didn't run smoothly and found in corroded condition. Now you want to return it and have full refunding. Write a letter of complaint/claim letter for the refund. Furnish all the details. 8

- b) Suppose that you are planning to conduct the annual sales meeting at Hotel Kasturi, Chiplendhuga Pokhara. Now write a memorandum to all the Managers and assistant Managers informing about the meeting & asking to prepare a tentative cost planning on travel, boarding and meeting expenses etc. 7

- 6. a) Choose a product or an electrical appliance of any kind and write a technical description about it using the prompts given. (Introduction, application, process, parts, safety measures, conclusion). 8

- b) Write an essay on 'Value of Engineering Studies and its Application' in the present context of Nepal. 7

- 7. a) Transform the following sentences according to the variety labels given in the brackets 5

- i. We proposed that she take the vacation. (BrE)
- ii. One secures good marks if one studies hard. (AmE)
- iii. Prepare the minutes of the meeting. (Tactful)
- iv. Kids are always at the center of the family (Common Core)
- v. Give me your pen. (Polite)

- b) Change the following sentences as directed in brackets. 5

- i. If you speak the truth, you will never regret it. (compound)
- ii. We know the name of the writer who wrote this letter. (simple)
- iii. Her father's death multiplied her problem. (compound)
- iv. You must work hard or you will not pass the exam. (simple)
- v. He pleaded his ignorance of the law. (complex)