

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
Department of Humanities, Arts and Social Sciences
2 Semester BTech and BArch End Semester Examination
Winter Semester 2024 - 2025
MS1001E Professional Communication

Time: 180 minutes

Maximum Marks: 40

(i) Answer all the questions.

(ii) Write complete sentences for fill in the blanks questions.

1) Paraphrase the academic text given below.**(1x3= 3 marks)**

As the capabilities of artificial intelligence (AI) systems accelerate, they increasingly surpass us in several domains—even those once thought exclusively human. From making medical diagnoses to offering jail-or-release decisions, algorithms can outperform human experts in a number of tasks. Given the capability of AI in such tasks, we as users should defer to their guidance to make optimal decisions. However, a growing body of evidence reveals certain biases in how users seek and weigh advice from algorithms compared to that of humans, resulting in sub-optimal decision making. Given the prevalence of these systems and their demonstrated ability to inform high-stakes decisions, it is critical to identify and eliminate such biases.

(Source: "Perceptions of AI Engaging in Human Expression" by Alexander H. Bower and Mark Steyvers)

2) Fill in the blanks choosing from the words given in brackets.**(8x0.5= 4 marks)**

- a) The journalist presented a _____ source to support her investigation into the scandal.
(credible/creditable)
- b) Her speech included an _____ to Shakespeare's Hamlet, highlighting the theme of indecision. (illusion/allusion)
- c) The technician was _____ at repairing smartphones, quickly diagnosing and fixing issues others couldn't. (adept/adapt)
- d) Please be _____ when handling the antique vase; it's very fragile.
(discreet / discrete)
- e) The child's _____ defiance of every instruction made it clear that discipline would be a long-term challenge. (wilful/willing)
- f) Each spring, the villagers gathered at the ancient stone circle to perform a fertility _____ believed to ensure prosperous crops. (right/rite)
- g) Despite his heavy accent, his speech was perfectly _____ to the audience.
(intelligent/intelligible)
- h) The report was filled with _____ details that distracted from the main findings.
(superficial/superfluous)

3) Rewrite the given paragraph with scientific and technical usages.**(1x3=3 marks)**

So, hydro and thermal power are big deals for making electricity. Hydro power works by using moving water, like rivers – they build up big dams to hold the water back, and when it rushes out, it spins these machines to get power going. It's pretty clean, but it can mess things up for nature. Then you've got thermal power, which uses heat to get steam going, and that spins machines too. They often get this heat by burning up stuff like coal or gas. It can churn out loads of power but can also kick out pollution. Both these types help power up our lives every day.

4) Complete the paragraph using suitable transition words from the list below. (4x0.5= 2 marks)**(However, Consequently, Since, Moreover, Subsequently, In contrast, Nevertheless)**

Climate change poses complex challenges to global ecosystems and human societies. (a) _____, many nations continue to struggle with implementing meaningful environmental policies. This reluctance is often due to economic concerns, political resistance, or short-term development goals. (b) _____, the rate of global warming has continued to rise, leading to more frequent and severe weather events. (c) _____, vulnerable communities in low-lying or drought-prone areas are already facing food and water insecurity, forcing migration and placing stress on public resources. (d) _____, some countries have adopted aggressive climate strategies, such as investing in renewable energy and reforestation programmes. Their progress demonstrates that with the right policies and public will, significant environmental improvement is possible.

5) Fill the blanks in the following paragraph with appropriate transition words. (4x0.5= 2 marks)

Evaporation is a key step in the water cycle that transforms liquid water into vapour. (a) _____, the sun heats up water bodies such as lakes, rivers, and oceans, increasing the energy of water molecules. (b) _____, these energized molecules escape into the air as water vapour. (c) _____, factors like temperature, wind, and humidity can influence the rate of evaporation. (d) _____, this vapour rises and contributes to cloud formation, continuing the movement of water through the environment.

6) Read the passage below and answer the questions that follow.

Coral reefs are some of the most vibrant and biologically diverse ecosystems on Earth, often referred to as the "rainforests of the sea." Composed of colonies of tiny animals known as coral polyps, these reefs form massive limestone structures over centuries. Coral polyps live in symbiosis with microscopic algae called zooxanthellae, which reside within their tissues. These algae conduct photosynthesis, providing essential nutrients to the corals while receiving shelter and access to sunlight in return.

One of the most serious threats facing coral reefs today is coral bleaching, a process that occurs when corals are stressed, most often due to elevated sea temperatures. Under such stress, corals expel their zooxanthellae, leading to a loss of colour and vital nutrients. The result is a pale or "bleached" appearance and increased vulnerability to disease and death. Bleached corals are not dead, but they are severely weakened and may die if stressful conditions persist.

Climate change is the primary driver of coral bleaching. Even a temperature rise of just 1–2°C above the seasonal average can trigger mass bleaching events. Other contributing factors include ocean acidification, pollution, overexposure to sunlight, sedimentation, and changes in salinity. Large-scale bleaching events have become more common, notably in 1998, 2010, and between 2014 and 2017. These events have affected reefs across the globe, including the Great Barrier Reef in Australia, which has suffered significant damage.

The ecological consequences of coral bleaching are far-reaching. Coral reefs support nearly one-quarter of all marine species, and their decline disrupts entire marine food chains. In addition, human communities that rely on reefs for food, tourism, and coastal protection are also affected. If bleaching events continue at the current rate, many reef systems may collapse within decades. To combat this crisis, scientists and conservationists are developing innovative solutions. These include identifying heat-tolerant coral species, coral farming, and selective breeding for resilience.

Some regions are implementing marine protected areas and reducing local stressors like fishing and land-based pollution. However, experts agree that mitigating global climate change remains the most crucial step. Without reducing greenhouse gas emissions, these local efforts will have limited long-term impact.

Preserving coral reefs is not only vital for marine biodiversity but also for the well-being of millions of people who depend on these ecosystems. Addressing both local and global threats is essential to ensure their survival for future generations.

- a) What type of algae is expelled during coral bleaching? (0.5 mark)
- b) What is the primary cause of coral bleaching? (0.5 mark)
- c) How does coral bleaching affect marine biodiversity and human communities? (1.5 marks)
- d) Discuss two strategies that scientists are using to protect coral reefs. (1.5 marks)
- e) Prepare notes in outline format based on the passage given above. (2 marks)
- f) Prepare a summary of the passage in 120-140 words. (2 marks)

7) Rewrite the following sentences to remove ambiguity. (4x1= 4 marks)

- a) The statistician recorded the mean responses.
- b) She decided on the train.
- c) She fixed the computer with the latest software.
- d) The ornithologist observed the crane's movements.

8) Write the concluding paragraph for the following passage in 60-75 words following the author's voice. (1x4=4 marks)

Air pollution was once celebrated. Industrialists in Victorian Britain would point to the smoky streets of the Industrial Revolution and see only the signs of wealth and progress. Alerted in the 1960s to the stink of an Alabama paper mill some 30 kilometres away that was reaching the state capital, Governor George Wallace remarked: "Yeah, that's the smell of prosperity."

Public attitudes have changed. Clean air to breathe is widely recognised by the United Nations and others as a universal human right, essential to physical well-being. But a change in mindset about air does little to actually clean it. More than four million people still die each year from exposure to polluted outside air and nine out of ten people live in places where outdoor air pollution exceeds guidelines set by the World Health Organization (WHO). Effectively tackling the causes and effects of air pollution requires a more joined-up approach between environmental scientists and governmental actors.

9) You are a first-year student at NIT Calicut. Recently, many students in your batch have been facing issues accessing the institute Wi-Fi, especially in the library and hostel areas. As a concerned student, write a formal email to the Admin, Computer Networking Centre explaining the issue. Describe how this problem is affecting students' ability to study and complete assignments, and request a prompt resolution. Your email should be polite, professional, and clearly communicate the concern while maintaining a respectful and formal tone. (1x4= 4 marks)

10) Point out at least two specific examples of netiquette violations in the situation described below. Write one suggestion each on how those situations could have been managed more appropriately. (1x2= 2 marks)

Naveen, an avid gamer from Kozhikode, Kerala, sees an advertisement for a second-hand Audeze LCD-GX Audiophile Gaming Headset, originally priced at INR 81,000, listed for INR 3,599 on a relatively new reselling site. He immediately pays for it, believing he has found a significant bargain. However, the package he receives a few weeks later contains a regular headset priced at less than INR 1,000. Feeling cheated, Naveen immediately posts an unfiltered angry rant on his personal Facebook profile (seen by friends and family), his gaming community's Discord server (a space for hobby-related discussions), and creates a highly emotional YouTube video filled with personal insults, accusations and even threats directed at the anonymous seller, and he shares them on all the social media platforms and online groups he is a part of.

11) Describe the following representation of data on gender disparity in the corporate sector in India in 100-120 words. (1x4= 4 marks)


