



GAYATRI VIDYA PARISHAD COLLEGE OF ENGINEERING

(Autonomous)

Madhura, Visakhapatnam

Affiliated to Andhra University, Visakhapatnam.

B.Tech I-Semester Regular & Supplementary Examinations February 2024
Communicative English[Common to CSE, CSE (AI & ML), CSE (Data Science) & IT, EEE,
Mechanical Engineering & Mechanical (Robotics)]

Date: 19-02-2024

Time: 3 Hours

Max. Marks: 70

1. Answer ONE Question from each UNIT
2. All parts of a Question must be answered in one place to get valued.
3. All questions carry equal marks.

UNIT 1

- 1 a) Read the following text and answer the *True/False* questions given below.

7 Marks

The integration of robotics in the medical field has revolutionized healthcare practices, offering a spectrum of applications that enhance precision, efficiency, and patient outcomes. One prominent use is in minimally invasive surgeries, where robotic systems assist surgeons with improved dexterity and precision, resulting in smaller incisions and faster recovery times for patients. Additionally, robotics plays a pivotal role in telemedicine, enabling remote surgeries and consultations, especially in challenging geographical locations.

Robotic prosthetics have become a beacon of hope for amputees, providing them with enhanced mobility and functionality. In diagnostics, robotic systems facilitate precise imaging and biopsies, aiding healthcare professionals in accurate disease detection. The automation of routine tasks, such as medication dispensing and patient monitoring, allows healthcare providers to focus on more complex aspects of patient care.

However, challenges persist, including the high costs associated with implementing robotic systems and the need for specialized training for medical professionals. Striking a balance between technological advancements and accessibility remains crucial for maximizing the benefits of robotics in the medical realm.

Identify whether each of the statements given is *True* or *False* based on the text above.

1. Robotics in the medical field primarily focuses on maximizing incision sizes during surgeries.
2. Minimally invasive surgeries assisted by robotic systems contribute to faster patient recovery.
3. Telemedicine is not mentioned as an application of robotics in the medical field.
4. Robotic prosthetics have no impact on enhancing mobility for amputees.
5. Robotic systems are not involved in diagnostics or disease detection.
6. Automation in medication dispensing is not considered an application of robotics in healthcare.
7. The text implies that the integration of robotics in the medical field eliminates the need for specialized training for healthcare professionals.

- b) Read the text below, and fill in the gaps choosing the correct word from the options given in brackets. 7 Marks

Ensuring accessibility for the physically (1) _____ (incapable, challenged, dependent) in public transport is imperative for fostering inclusivity in our communities. Many cities are taking steps to

(2) _____ (eliminate, endorse, enforce) barriers by implementing features like wheelchair ramps, priority seating, and auditory announcements. These measures aim to create a more

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(3) _____ (inaccessible, welcoming, burdensome) environment for all passengers. While progress has been made, challenges persist. Some commuters remain (4) _____ (indifferent, sympathetic, absurd), and refuse to yield priority seats, hindering the (5) _____ (comfort, inconvenience, enhancement) of those with mobility issues. Advocacy groups stress the need for on-going education to raise awareness and promote a culture of empathy. Efforts to (6) _____ (diminish, enhance, cause) accessibility are not solely about compliance; they are about building a society where public transport is genuinely (7) _____ (inclusive, exclusive, elusive) for everyone, regardless of physical abilities.

7 Marks

2 a) Read the following text and answer the questions given.

In the hustle and bustle of modern life, art has emerged as a beacon of tranquillity and a powerful antidote to stress. Engaging with artistic activities, be it visual arts, music, or dance, has proven to have profound effects on mental well-being. Studies show that creating art triggers the release of dopamine, the brain's feel-good chemical, promoting a sense of pleasure and reward. Whether it's painting, sculpting, or playing a musical instrument, the act of artistic expression provides a therapeutic outlet for individuals to channel their emotions and reduce stress levels.

Art therapy, a form of psychotherapy, utilizes creative processes to improve mental health. It has been particularly effective in aiding individuals dealing with trauma, anxiety, and depression. The non-verbal nature of art allows individuals to communicate and explore their emotions in a safe and expressive way.

In our fast-paced lives, taking the time to engage with art, whether as creators or appreciators, can serve as a mindful pause. Whether it's visiting a gallery, listening to music, or participating in a dance class, the arts offer a sanctuary for individuals to recharge and find solace amidst life's challenges.

1. What does engaging in artistic activities trigger in the brain, according to the text?
 - a) Stress hormones
 - b) Negative emotions
 - c) Release of cortisol
 - d) Release of dopamine
2. How does art therapy contribute to improving mental health?
 - a) By promoting stress
 - b) By discouraging creativity
 - c) By providing a non-verbal expressive outlet
 - d) By providing linguistic expressions of creativity
3. What is the primary focus of the text?
 - a) The history of art
 - b) Provide an opportunity for career growth
 - c) The therapeutic benefits of engaging with art
 - d) The negative effects of stress
4. According to the text, what is the role of the arts in our fast-paced lives?
 - a) Create more time but can be stressful
 - b) Offering a chance to recharge
 - c) Promote fast-paced living
 - d) Encourage creativity at the cost of routine tasks
5. Pick one word from the first paragraph of the above text that means "countermeasure".
6. Provide an appropriate title for the text given.
7. Summarize the main points of the given passage in one or two sentences.

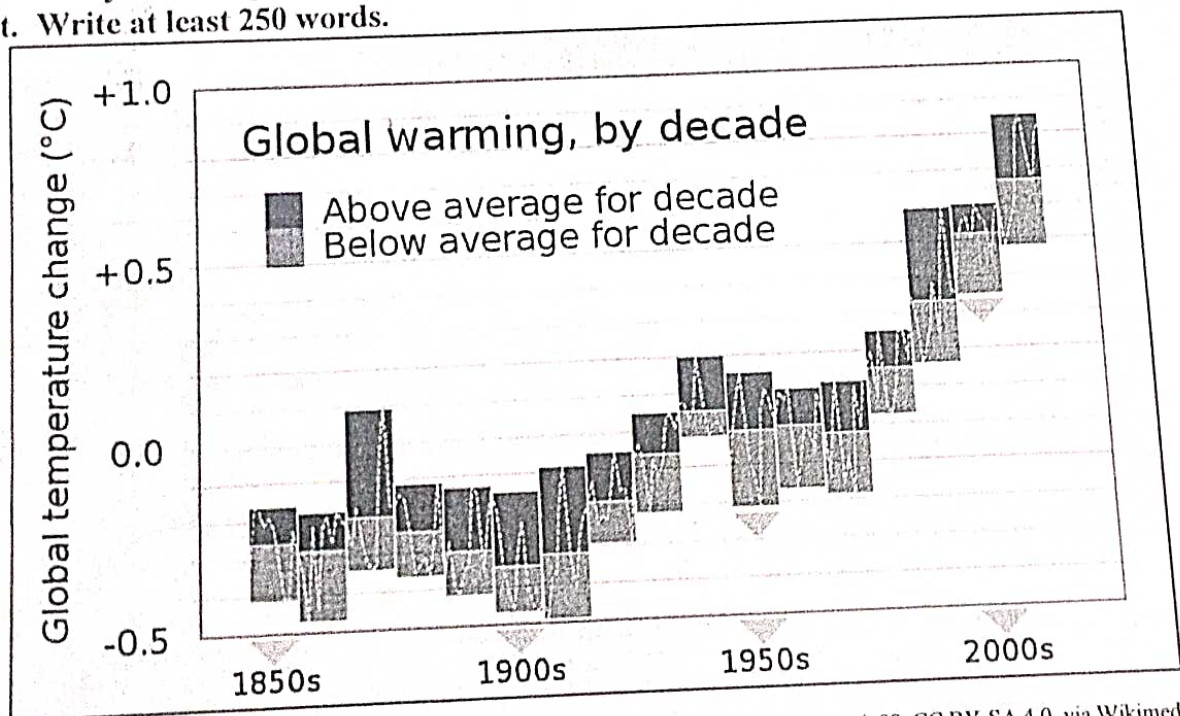
Read the statement below and, based on the same, state whether each of the following statements given below is *True* or *False*. 7 Marks

In the realm of quantum computing, where probabilistic phenomena govern computational processes, researchers are unravelling the complexities of quantum entanglement to propel the development of robust and secure quantum communication protocols.

1. Quantum computing operates in a realm where probabilistic phenomena play a crucial role in computational processes.
2. Quantum computing primarily relies on deterministic phenomena for its computational processes.
3. Researchers are actively unravelling the complexities of quantum entanglement in the field of quantum computing.
4. The complexities of quantum entanglement have no relevance to the development of quantum communication protocols.
5. The goal is to propel the development of robust and secure quantum communication protocols through research efforts.
6. Quantum communication protocols are not a focus in the realm of quantum computing.
7. Quantum entanglement is a key aspect researchers are investigating to enhance quantum communication protocols.

UNIT-II

a) The bar graph below shows the data regarding Global Warming, by decade. Summarize the information by selecting and reporting the main features and make comparisons where relevant. Write at least 250 words.



(Source: RCraig09, CC BY-SA 4.0, via Wikimedia Commons)

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The pie-chart below shows the data regarding energy sources – use in a particular country.

Summarize the information by selecting and reporting the main features and make comparisons where relevant. Write at least 250 words.

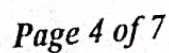
Reg. No:

Energy sources – use in a particular country

Energy sources – use in a particular country

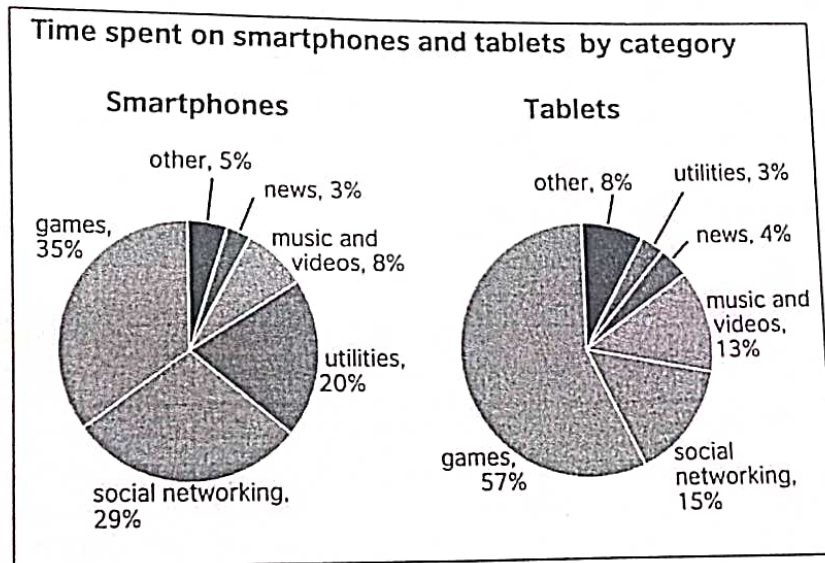
Energy Source	Percentage
Coal	37%
Natural gas	30%
Hydroelectric power	20%
Wind	7%
Geothermal energy	3%
Solar	3%

The line graph below shows the data regarding the number of poor in India, 1973-2012. Summarize the information by selecting and reporting the main features and make comparisons where relevant. Write at least 250 words.



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- b. The pie-charts below show the data regarding the time spent on smart-phones and tablets by category. Summarize the information by selecting and reporting the main features and make comparisons where relevant. Write at least 250 words. 7 Mark:



UNIT-III

- 5 a) Write a well-structured paragraph in about 200 words on *Environmental Conservation* using the hints given: (biodiversity-sustainable practices-renewable energy-plastic reduction-conservation initiatives-climate action) 7 Mark
- b) Write a well-structured paragraph on the following topic *Psychological Benefits of Team Sports for College Students* in 200 words. 7 Mar
- 6/a) Rearrange the following sentences to create a coherent paragraph by mentioning the correct order using the letters "a – g" representing each sentence. 7 Ma
- Despite its unassuming appearance, nestled within this tiny shell lies the potential for an entire forest.
 - Yet, within this seemingly inert object, a silent drama unfolds, governed by the intricate machinery of life.
 - Sunlight and water weave their magic, coaxing the embryo from its slumber, its roots reaching desperately for purchase.
 - Witnessing this transformation, one cannot help but be awestruck by the sheer force of life unleashed from such a humble origin.
 - The journey begins with a gentle breeze, carrying the seed on its travels, a fragile traveller entrusted to the whims of wind and fate.
 - From a single point of green defiance, a stem shoots skyward, defying gravity and claiming its place in the tapestry of life.
 - This seemingly mundane object, a mere speck in the vast canvas of nature, embodies the indomitable spirit of life's constant renewal.
- b) Write a well-structured paragraph in about 200 words on the following topic *Positive impact of social media on interpersonal communication in today's society*.

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UNIT-IV

7 a) Write a précis of the passage given below:

7Marks

In today's technologically driven world, the digital divide remains a significant challenge, creating disparities in access to information and opportunities. This gap is not merely about possessing or lacking digital devices; it extends to the ability to effectively use and leverage technology for personal and professional growth. Consider a student in a rural area with limited internet connectivity, unable to access online educational resources available to their urban counterparts.

Symbolically, the digital divide can be seen as a bridge connecting two shores — one illuminated with information and opportunities, the other obscured in darkness. However, avoid using clichés like "bridging the gap" or "crossing the divide" when crafting a précis. Instead, strive for precision in summarizing the central ideas without relying on overused metaphors. A well-crafted précis should convey the essence of the digital divide issue without resorting to commonplace expressions.

b) Assume that you are a team lead who needs to gather weekly progress updates from your team members. Write an email reminding them about the upcoming project progress meeting and highlight the key points for discussion. Sign the email as Kiran, Project Lead – Team B, SofTech.

7 Marks

8 a) Write a short essay on the following topic: "Gender Equality in the Workplace"

7 Marks

b) Assume that you are a student organizing an event at your university. Write a formal letter to your professor seeking permission to invite a reputed start-up founder for a motivational guest lecture.

7 Marks

UNIT-V

9 a) Fill in the blanks with suitable forms of the verbs given in brackets.

7 Marks

1. Every winter, they _____ (go) skiing in the mountains.
2. She _____ (never/be) to Paris so far.
3. At the moment, I _____ (write) an essay for my English assignment.
4. He _____ (live) in this city since 2010.
5. When I arrived, they _____ (finish) baking cookies.
6. While I _____ (walk) to the store, it began to rain.
7. They _____ (play) tennis for two hours before it started getting dark.

b) i) Fill in the blanks with suitable articles:

7 Marks

1. We visited _____ ancient castle during our trip to Scotland, and it was a remarkable experience.
2. _____ new laptop he bought recently is working perfectly.
3. He completed his postgraduate studies at _____ university renowned for its medical research.
4. Last summer I visited _____ European city along with my parents.

ii) Fill in the blanks with appropriate prepositions:

1. After graduating, he applied _____ admission to a Master's program.
2. We congratulated our friends _____ the success of their band.
3. The members of the team have a lot _____ common irrespective of the differences in age and gender.

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10. a)

i) Fill in the blanks choosing the most appropriate word from the options given in brackets.

7 Marks

1. As she read the intricate details of the contract, she took the time to _____ (*pour/pore*) over each clause to ensure a thorough understanding.
2. Don't let your negative emotions _____ (*affect/effect*) your performance; focus on the positive.
3. The company's decision to expand internationally was a _____ (*bold / bald*) move that paid off in the long run.
4. The athlete's _____ (*commitment/diffidence*) to six hours of training every day is a true reflection of his desire to excel.

j) For the underlined word in each of the following sentences, choose the most appropriate synonym from the options given in brackets.

1. His artistic creations are a testament to his innovation in merging traditional techniques with modern concepts. (*invention / reproduction*)
2. The ambassador's ability to navigate complex negotiations showcased his diplomatic acumen. (*naiveté/ astuteness*)
3. The environmentalist passionately advocates for the responsible use of resources to ensure the survival of endangered species. (*supports / critiques*)

o) Match the following idioms with their meanings:

7 Mark

1. Bite the bullet	i. Be extremely expensive
2. Break the ice	ii. Initiate a conversation in a social setting
3. Hit the hay	iii. Join a popular trend or activity
4. Cost an arm and a leg	v. Work late into the night
5. Cut to the chase	v. Go to bed or sleep
6. Burn the midnight oil	vi. Get to the main point without wasting time
7. Jump on the bandwagon	vii. Face a difficult situation with courage