# **END SEMESTER EXAMINATION - MARCH 2024**

### SEMESTER – 4: ENGLISH II (COMMON COURSE FOR INTEGRATED M.Sc PROGRAMME

# **COMPUTER SCIENCE – DATA SCIENCE)**

# COURSE: 21UP4CCENG02 - ENGLISH LANGUAGE SKILLS FOR ACADEMIC PURPOSES

(For Regular -2022 Admission and Improvement/Supplementary - 2021 Admission) Time: Three Hours Max. Weightage: 30

PART A

#### **Answer any 8 Questions**

- 1. Change the sentence to reported speech: "I'm living the adventure of my life," Banderas said.
- 2. Change the sentence to reported speech: "If I don't win this game, I will retire," Kasparov said.
- 3. Change the given sentence to passive voice: The Chinese discovered acupuncture thousands of years ago.
- 4. Change the given sentence to passive voice: The guide will show us the Natural History Museum in the afternoon.
- 5. Read the text about the biological clock. Some of the lines are correct while some have an incorrect word. Write the incorrect word along with the correction. If the line is correct, put a tick.
  - 1. Humans have biological clocks that control their daily rhythms. Some
  - 2. functions, like sleeping and waking yourself up have a 24-hour rhythm.
  - 3. Others, especially the illnesses, have a yearly rhythm. Cold and flus, for
  - 4. example, often happen in winter. While most people get measles during
  - 5. the spring and summer.
  - 6. When traveling by plane you should often cross many time zones. During
  - 7. such trips your internal clocks don't seem to work always properly. We
  - 8. call this jet lag. It makes you feel tired and it may take your body's
  - 9. biological clock several days to get it used to the new place.
  - 10. People who work night shifts can also have problems with their
  - 11. biological clocks. In general, they may not be as alert or active as such
  - 12. people who work during the daytime. They also have more accidents
  - 13. during the work. In some cases, they experience more health and
  - 14. sleeping problems than other people.
  - 15. By using the right medicine you can even fight off problems that are
  - 16. connected with different times of day. When heart attacks and strokes
  - 17. often happen in the morning-between the time you may get up
  - 18. and noon. Asthma often just occurs between midnight and the morning
  - 19. hours. So when people with weak a heart disease take their medicine
  - 20. right after waking up it might prevent a heart attack.
  - 21. Biological clocks control over many rhythms of life. We are constantly

- 22. learning more and even more about these rhythms. Doctors are looking
- 23. for new ways to make traveling more than comfortable and medical
- 24. treatment more effective.
- 6. Give the correct form of tenses.

When I (live) in London, a strange thing — (happen) to me. At that time, I — (have) a job as a receptionist in a hotel. I — (apply) for the job before I — (arrive) in London, which — (make) things a bit easier. The hotel — (be) in the centre, and — (be) always busy. One day, as I — (work) I — (hear) someone call my name. The voice was familiar – I — (think) I — (hear) it before. I — (look) up and — (see) to my surprise that the person standing in front of me — (be) was John, my childhood friend.

- 7. Two thirds of the test —-----is/are about Sigmund Frued and Carl Jung. (Follow the rules of the subject verb agreement).
- 8. The police —----was/were called immediately after the accident (Follow the rules of the subject verb agreement.)
- 9. Give the meaning of the phrasal verb "stir in" and use it in a sentence.
- 10. Add an appropriate suffix for the following word "fair".

(1 x 8 = 8 Weight)

#### PART-B

#### Answer any 6 Questions.

- 11. You had an unpleasant travel experience from Vistara Airways enroute to your flight to London on account of turbulence and poor service. Write a letter of complaint to the airline authorities stating the issues.
- 12. Write a formal letter of appreciation to your mentor or guide, thanking him or her for all the support and guidance offered to you during your graduate years.
- 13. You are planning to study abroad and would like to know about the IELTS Certification Courses, the procedures and the eligibility criteria. Write a letter of enquiry to the Director of Santa Monica Languages Academy, seeking information regarding the same.
- 14. Read the passage given below and answer the questions.

Artificial artists: Can computers really create works of art?

The Painting Fool is one of a growing number of computer programs, which, so their makers claim, possess creative talents. Classical music by an artificial composer has had audiences enraptured, and even tricked them into believing a human was behind the score. Artworks painted by a robot have sold for thousands of dollars and been hung in prestigious galleries. And software has been built which creates are that could not have been imagined by the programmer.

Human beings are the only species to perform sophisticated creative acts regularly. If we can break this process down into computer code, where does that leave human creativity? 'This is a question at the very core of humanity,' says Geraint Wiggins, a computational creativity researcher at Goldsmiths, University of London. 'It scares a lot of people. They are worried that it is taking something special away from what it means to be human.'

# 24U403

To some extent, we are all familiar with computerized art. The question is: where does the work of the artists stop and the creativity of the computer begin? Consider one of the oldest machine artists, Aaron, a robot that has had paintings exhibited in London's Tate Modern and the San Francisco Museum of Modern Art. Aaron can pick up a paintbrush and paint on canvas on its own. Impressive perhaps, but it is still little more than a tool to realize the programmer's own creative ideas.

Simon Colton, the designer of the Painting Fool, is keen to make sure his creation doesn't attract the same criticism. Unlike earlier 'artists' such as Aaron, the Painting Fool only needs minimal direction and can come up with its own concepts by going online for material. The software runs its own web searches and trawls through social media sites. It is now beginning to display a kind of imagination too, creating pictures from scratch. One of its original works is a series of fuzzy landscapes, depicting trees and sky. While some might say they have a mechanical look, Colton argues that such reactions arise from people's double standards towards software-produced and human-produced art. After all, he says, consider that the Painting Fool painted the landscapes without referring to a photo. 'If a child painted a new scene from its head, you'd say it has a certain level of imagination,' he points out. 'The same should be true of a machine.' Software bugs can also lead to unexpected results. Some of the Painting Fool's paintings of a chair came out in black and white, thanks to a technical glitch. This gives the work an eerie, ghostlike quality. Human artists like the renowned Ellsworth Kelly are lauded for limiting their colour palette – so why should computers be any different?

Researchers like Colton don't believe it is right to measure machine creativity directly to that of humans who 'have had millennia to develop our skills'. Others, though, are fascinated by the prospect that a computer might create something as original and subtle as our best artists. So far, only one has come close. Composer David Cope invented a program called Experiments in Musical Intelligence, or EMI. Not only did EMI create compositions in Cope's style, but also that of the most revered classical composers, including Bach, Chopin and Mozart. Audiences were moved to tears, and EMI even fooled classical music experts into thinking they were hearing genuine Bach. Not everyone was impressed however. Some, such as Wiggins, have blasted Cope's work as pseudoscience, and condemned him for his deliberately vague explanation of how the software worked. Meanwhile, Douglas Hofstadter of Indiana University said EMI created replicas which still rely completely on the original artist's creative impulses. When audiences found out the truth they were often outraged with Cope, and one music lover even tried to punch him. Amid such controversy, Cope destroyed EMI's vital databases.

But why did so many people love the music, yet recoil when the discovered how it was composed? A study by computer scientist David Moffat of Glasgow Caledonian University provides a clue. He asked both expert musicians and non-experts to assess six compositions. The participants weren't told beforehand whether the tunes were composed by humans or computers, but were asked to guess, and then rate how much they liked each one. People who thought the composer was a computer tended to dislike the piece more than those who believed it was human. This was true even among the experts, who might have been expected to be more objective in their analyses.

Where does this prejudice come from? Paul Bloom of Yale University has a suggestion: he reckons part of the pleasure we get from art stems from the creative process behind the work. This can give it an 'irresistible essence', says Bloom. Meanwhile, experiments by Justin Kruger of New York University have shown that people's enjoyment of an artwork increases if they think more time and effort was needed to create it. Similarly, Colton thinks that when people experience art, they wonder what the artists might have been thinking or what the artist is trying to tell them. It seems obvious, therefore, that with computers producing art, this speculation is cut short – there's nothing to explore. But as technology becomes increasingly complex, finding those greater depths in computer art could become possible. This is precisely why Colton asks the Painting Fool to tap into online social networks for its inspiration: hopefully this way it will choose themes that will already be meaningful to us.

Answer the questions in not more than two sentences.

- 1. What is the writer suggesting about computer-produced works in the first paragraph?
- 2. According to Geraint Wiggins, why are many people worried about computer art?
- 3. What is a key difference between Aaron and the Painting Fool?
- 4. What point does Simon Colton make in the fourth paragraph?
- Does the following statement agree with the claims of the writer in the passage? Justin Kruger's findings cast doubt on Paul Bloom's theory about people's prejudice towards computer art.
- 15. You are on a train journey and decide to strike up a conversation with the person sitting next to you. Write a conversation on the same.
- 16. Describe a place that you loved as a child.
- 17. A talented young man's deepest fear is holding his life back. Use this story prompt to prepare characterization, setting and a point of view or narration for a short story.
- 18. Summarize or paraphrase the entire reading passage, giving the central idea.

**A.** Learning Theory is rooted in the work of Ivan Pavlov, the famous scientist who discovered and documented the principles governing how animals (humans included) learn in the 1900s. Two basic kinds of learning or conditioning occur, one of which is famously known as the classical conditioning. Classical conditioning happens when an animal learns to associate a neutral stimulus (signal) with a stimulus that has intrinsic meaning based on how closely in time the two stimuli are presented. The classic example of classical conditioning is a dog's ability to associate the sound of a bell (something that originally has no meaning to the dog) with the presentation of food (something that has a lot of meaning to the dog) a few moments later. Dogs are able to learn the association between bell and food, and will salivate immediately after hearing the bell once this connection has been made. Years of learning research have led to the creation of a highly precise learning theory that can be used to

understand and predict how and under what circumstances most any animal will learn, including human beings, and eventually help people figure out how to change their behaviors.

**B.** Role models are a popular notion for guiding child development, but in recent years very interesting research has been done on learning by examples in other animals. If the subject of animal learning is taught very much in terms of classical or operant conditioning, it places too much emphasis on how we allow animals to learn and not enough on how they are equipped to learn. To teach a course of mine, I have been dipping profitably into a very interesting and accessible compilation of papers on social learning in mammals, including chimps and human children, edited by Heyes and Galef (1996).

**C.** The research reported in one paper started with a school field trip to Israel to a pine forest where many pine cones were discovered, stripped to the central core. So the investigation started with no weighty theoretical intent, but was directed at finding out what was eating the nutritious pine seeds and how they managed to get them out of the cones. The culprit proved to be the versatile and athletic black rat,(Rattus rattus), and the technique was to bite each cone scale off at its base, in sequence from base to top following the spiral growth pattern of the cone.

**D.** Urban black rats were found to lack the skill and were unable to learn it even if housed with experienced cone strippers. However, infants of urban mothers cross-fostered by stripper mothers acquired the skill, whereas infants of stripper mothers fostered by an urban mother could not. Clearly the skill had to be learned from the mother. Further elegant experiments showed that naive adults could develop the skill if they were provided with cones from which the first complete spiral of scales had been removed;. rather like. our new photocopier which you can work out how to use once someone has shown you how to switch it on. In the case of rats, the youngsters take cones away from the mother when she is still feeding on them, allowing them to acquire the complete stripping skill.

**E.** A good example of adaptive bearing we might conclude, but let's see the economies. This was determined by measuring oxygen uptake of a rat stripping a cone in a metabolic chamber to calculate energetic cost and comparing it with the benefit of the pine seeds measured by calorimeter. The cost proved to be. less than 10% of the energetic value of the cone. An acceptable profit margin.

**F.** A paper in 1996, Animal Behaviour by Bednekoff and Baida, provides a different view of the adaptiveness of social learning. It concerns the seed caching behaviour of Clark's. Nutcracker (Nucifraga columbiana) and the Mexican Jay (Aphelocoma ultramarina). The former is a specialist, caching 30,000 or so seeds in scattered locations that it will recover over the months of winter; the Mexican Jay will also cache food but is much less dependent upon this than the Nutcracker. The two species also differ in their social structure: the Nutcracker being rather solitary while the Jay forages in social groups.

# 24U403

**G**. The experiment is to discover not just whether a bird can remember where it hid a seed but also if it can remember where it saw another bird hide a seed. The design is slightly comical with a cacher bird wandering about a room with lots of holes in the floor hiding food in some of the holes, while. watched by an observer bird perched in a cage. Two days later, cachers and observers are tested for their discovery rate against an estimated random performance. In the role of cacher, not only the Nutcracker but also the less specialized Jay performed above chance; more surprisingly, however, jay observers were as successful as jay cachers whereas nutcracker observers did no better than chance. It seems that, whereas the Nutcracker is highly adapted at remembering where it hid its own seeds, the social living Mexican Jay is more adept at remembering, and so exploiting, the caches of others.

### (2 x 6 = 12 Weight)

### PART C Answer any 2 Questions.

19. With reference to the advertisement prescribed below, prepare a CV and a covering letter.

**Role: Advertising Sales** 

Industry Type: Advertising & Marketing (Digital Marketing)

Department: Sales & Business Development

Employment Type: Full Time, Permanent

Role Category: Enterprise & B2B Sales

Education

UG: Any Graduate

About the Company

We are a trustworthy provider of digital marketing services, offering affordable and world class digital marketing solutions to a variety of industries. Send your resumes to <u>kishan@gmail.com</u>.

Contact Details.

www.brandsoul.co.in WhatsApp Number: 8100600214 Company Info Website:https://brandsoul.co.in/

### Address:KOLKATA

20. Imagine that you have been selected for a specialization course that you applied for in University of Hyderabad. Write a conversation between you and the university officials or the authorities (the conversation should be structured in three parts consisting of a conversation asking for directions in the university, along with a conversation with the Principle, Dean of Admissions and a Student representative conversing about the life in the university, academic and social life.

21. Viva-Voce

(5 x 1 = 5 Weight)