

**Goa Vidyaprasarak Mandal's  
GOPAL GOVIND POY RAITURKAR COLLEGE OF COMMERCE AND  
ECONOMICS, PONDA-GOA  
B.C.A. CBCS (SEMESTER-IV) END EXAMINATION, APRIL 2024  
DATA COMMUNICATIONS (CAC-114)**

**Duration: 2 Hours**

**Marks: 60**

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*Instructions: 1) Figures to the right indicate Full Marks.  
2) All Questions are compulsory.*

- Q.1.A) Define the following:** **5X1=05**
- a. Topology
  - b. DHCP
  - c. Network Security
  - d. Phishing
  - e. Firewall

- Q.1.B) Match the Following and Rewrite the Matched Pairs:** **5X1=05**

1) Network Administrator	A) Group of computers that share common communication link.
2) Local Area Network	B) involves wide range of operational task to run the network smoothly.
3) Message Integrity	C) Flooding the website with packets and making it unavailable for legitimate users to access.
4) White hat hackers	D) Data must arrive at the receiver exactly as it was sent.
5) DOS	E) handles Penetration testing and Vulnerability.

- Q.2. Answer the following:**

- A) What is OSI Model? **02**
- B) Differentiate between Intranet and Extranet. **03**
- C) Illustrate the use of Data link layer. **05**

**Q.3. Answer the following:**

- A) Differentiate between Connection oriented and Connectionless TCP Protocol (four points each). **02**
- B) Explain the Components of data communication. **03**
- C) List and explain the different types of physical topologies. **05**

**Q.4. Answer the following:**

- A) What is transmission media? List the different types of transmission media. **02**
- B) Differentiate between serial transmission and parallel transmission. **03**
- C) Discuss the working of Unipolar and polar line encoding schemes. **05**

**Q.5. Answer the following:**

- A) What is logical addressing? **02**
- B) A block of addresses is granted to a small organization. We know that one of the addresses is 200.14.32.11/20. What are the first and last addresses in the block? What are the total addresses in the block? **03**
- C) Explain Circuit switched and packet switched datagram network. **05**

**Q.6. Answer the following:**

- A) What is process to process delivery? **02**
- B) Differentiate between multiplexing and demultiplexing. **03**
- C) Explain TCP protocol with the help of a diagram. **05**

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**B.C.A. CBCS (SEMESTER IV) END EXAMINATION (SEE), APRIL 2024**  
**CAG 117- IT IN MANAGEMENT**

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**Duration: 2 hours**

**Total marks: 60**

**Intructions: i) All questions are compulsory.**  
**ii) Figures to the right indicate full marks.**

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- Q1. Answer the Following. (10 marks)
1. What is information system? (1)
  2. How does acquiring new technology gain efficiency? (1)
  3. What is modern organisation? (1)
  4. What are Ethics of IT? (1)
  5. What is Social responsibility of IT? (2)
  6. What is Internet Governance? (2)
  7. State any 2 points of changing world of information. (2)
- Q2. A. Explain the three drivers of Business Value of IT. (5 marks)  
B. Explain the Components of Information System. (5 marks)
- OR**
- X. What is the role of computer in modern business? (5 marks)  
Y. Briefly explain the types of Information System. (5 marks)
- Q3. A. Explain the sources of acquiring technology. (5 marks)  
B. i) What is business in Digital economy. (3 marks)  
ii) Explain any 2 importance of information system in business. (2 marks)
- OR**
- X. Briefly explain the need to acquire technology (5 marks)  
Y. i) Explain any 3 factors determining Business value of IT. (3 marks)  
ii) What is the role of IT in e-commerce? (2 marks)

**P.T.O.**



Goa Vidyaprasarak Mandal's  
**Gopal Govind Poy Raiturcar College Commerce & Economics**  
**Farmagudi, Ponda-Goa**

**B.C.A. CBCS (SEMESTER IV) END EXAMINATION, APRIL 2024**

**GE-401 SOCIAL ENGINEERING**

**Duration: 2 hours**

**Total Marks: 60**

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*Instructions: i) All questions are compulsory.  
ii) Figures to the right indicate full marks.*

Q.1. A. Answer the following: **(5x1=05)**

1. Define Baiting attack.
2. Give an example of open-ended question used in Elicitation.
3. Define Human Buffer Overflow.
4. What is Neurolinguistic programming?
5. Define Magnetic locks.

Q.1. B. Fill in the blanks: **(5x1=05)**

1. \_\_\_\_\_ attack is an act of searching the business's trash to find information that can be used to attack a computer network.
2. The key elements to become a successful \_\_\_\_\_ are voluterring information, making a deliberate false statement, assuming knowledge and appealing to someone's ego.
3. \_\_\_\_\_ type of micro expressions is a positive and pleasant emotion used by malicious social enginners to start off a conversation with a smile inorder to put the target at ease in divulging information.
4. \_\_\_\_\_ online tool allows the social engineer to create PDFs and send emails with malicious code embedded in them.
5. \_\_\_\_\_ is a Caller ID Spoofing method that uses a spare computer and a VoIP service.

Q.2. A. Explain social engineering with the help of an example. **(05)**

B. Explain any five sources of gathering information. **(05)**

**OR**

Q.2. X. Explain any five types of social engineers. **(05)**

Y. Discuss the steps in developing a communication model. **(05)**

- Q.3. A. Explain spam mails attack with the help of an example. List any one impact caused and one possible prevention measure for this attack. (05)
- B. Explain the skills required for mastering Elicitation. (05)
- OR**
- Q.3. X. Explain any two Technical Attack Vectors. (05)
- Y. Explain the leading and assumptive types of questions used in Elicitation. (05)
- Q.4. A. Explain the five steps to perfect the social engineer's Listening Skills. (05)
- B. Explain the Five Fundamentals of Influence and Persuasion. (05)
- OR**
- Q.4. X. Explain any two ways to detect Deceit in a Target. (05)
- Y. Explain the different types of Framing alignment. (05)
- Q.5. A. Explain any two types of Authorities used by social engineers to manipulate their target. (05)
- B. Explain the following Physical tools used by the social engineers: (05)
- i. Camera and Recording devices
- ii. GPS tracker
- OR**
- Q.5. X. Explain any two Positive Manipulation Techniques using Social Engineering examples. (05)
- Y. Explain the following Password Profiling online tools: (05)
- i. CUPP (Common User Password Profiler)
- ii. CeWL (Custom Word List Generator)
- Q.6. A. Explain any two ways in creating a Security Awareness Culture at workplace. (05)
- B. Discuss the application of social engineering framework to the DMV hacking of Mitnick case study. (05)
- OR**
- Q.6. X. Explain the five steps used in Choosing the best Auditor. (05)
- Y. Discuss the Mitnick case study on Hacking the Social Security Administration. (05)
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**GOPAL GOVIND POY RAITURCAR COLLEGE OF COMMERCE AND ECONOMICS**  
**FARMAGUDI, PONDA - GOA**  
**B.C.A. CBCS (SEMESTER- IV) REGULAR EXAMINATION, APRIL 2024**  
**SOFTWARE ENGINEERING**

**Duration:** 2 hours

**Total Marks:** 60

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**Instructions:** i) All questions are compulsory.

ii) Figures to the right indicate full marks.

**Q1.A) Fill in the blanks:** **(5\*1=5)**

- A) \_\_\_\_\_ is a program or set of programs containing instructions that provide desired functionality.
- B) \_\_\_\_\_ characteristic of the software provides a positive user experience.
- C) \_\_\_\_\_ document serves as a contract between the development team and customers During Requirement Analysis phase.
- D) \_\_\_\_\_ is the most popular framework for agile implementation in projects..
- E) \_\_\_\_\_ are bad things done in code, just like bad patterns in the code.

**Q1.B) Answer the following:** **(5\*1=5)**

- A) What is Software Engineering?
- B) What is a Version Control System?
- C) Define Release Management.
- D) What is Product Backlog?
- E) Define White Box testing?

**Q2. Answer the following:**

- A) Define Reliability of a Software. **(2)**
- B) Explain the importance of Software Engineering. **(3)**

- C) a.Explain any one type of Version Control System. (2)
- b.With the help of a diagram, Explain WaterFall Model. (3)

**Q3. Answer the following:**

- A) what are the characteristics of Agile Software Development Process?. (2)
- B) What is the Manifesto for Agile software Development? (3)
- C) Explain Scrum Process Framework with a neat diagram. (5)

**Q4. Answer the following:**

- A) What is Test Driven Development?. (2)
- B) What is a SCRUM Burndown Chart?. (3)
- C) What is Pair Programming? What are the benefits of Pair Programming? (5)

**Q5. Answer the following:**

- A) State any 2 tools used for Unit Testing. (2)
- B) What is Software Refactoring?.Explain **Extract Method** of Refactoring. (3)
- C) What is Performance Testing? Explain the factors governing Performance Testing. (5)

**Q6. Answer the following:**

- A) What are the advantages of TDD? (2)
- B) Explain Software Quality Assurance. (3)
- C) What is Black Box Testing?.Explain any 2 techniques of Black Box Testing. (5)

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**ECONOMICS, FARMAGUDI-PONDA, GOA.**  
**B.C.A. CBCS (SEMESTER-IV) REGULAR EXAMINATION APRIL 2024**  
**CAA-102 TECHNICAL WRITING SKILLS**

**Duration: 2 hours**

**Marks: 60**

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**Q.1.A. Fill in the blanks with appropriate answers.**

**(DO NOT copy the statement)**

**(1×6=6)**

1. The four C's of commercial correspondence are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
2. The "memo" is an abbreviation of \_\_\_\_\_.
3. \_\_\_\_\_ letter is produced at the time of leaving the organisation / company.
4. \_\_\_\_\_ is a revolutionary Act that aims to promote transparency in government institutions in India.
5. \_\_\_\_\_ is a small advertisement that you put in a newspaper if you want to buy or sell something, employ somebody, find a flat, etc.
6. \_\_\_\_\_ is a stationery design that unifies your printed correspondence to your brand.

**Q 1.B. State whether the following statements are true or false.**

**(DO NOT copy the statement).**

**(1×6=6)**

1. The RTI Act of 2005 has empowered the citizens of India.
2. Open tender is the process aimed at acquiring goods and services at the lowest price.
3. Situation vacant is written by a person who wants a job.
4. When you put an email address in the CC or "carbon copy" field it means that a copy of the email you are sending will also be sent to that address.
5. A resignation letter is a formal document notifying an employer that you are leaving your job.
6. Signature is always written in handwriting.

**Q.2.A Attempt any ONE of the following.**

**(6×1=6)**

1. Write an **Estates and Property for sale** advertisement. Advertising 3BHK apartment at Dona Paula. Mention the details of this property.

**OR**

2. Write a **Situation Vacant** Advertisement for the post of female sales executive officer, with good knowledge of excel and can speak English along with other reason languages.

**Q.2.B. Attempt any ONE of the following.**

**(6×1=6)**

- A. Draft a Cover Letter in response to the following advertisement. VACANCY: Position for Web Developer, should have expertise in HTML, JavaScript, PHP and at least 1 year experience having exposure to web administration. Send application to Vision 370, Verna-Goa, 403722.

**OR**

- B. Write an application to the Municipal Commissioner of the municipality of your locality complaining about frequent power cuts in your area.

**Q.3. Answer Any THREE.**

**( 4×3=12)**

1. Write a short note on the Press release.
2. What is an appointment letter?
3. Explain, “send telegrams not essays.”
4. What is meant by Information under RTI Act, 2005?
5. Define Letterhead and mention key elements it must have.
6. What do you mean by the effectiveness of a business letter?

**Q.4. Answer any ONE SET of questions.**

**(6×2=12)**

1. What is the basic structure of a Report?
2. What do you mean by coherence of the language? Give an example.

**OR**

3. In what context, “Be conscious that the reader does not have much time.” has been used?
4. Draw a formal letter layout and mark the parts of the letter.

**Q.5.A. Choose any ONE topic and write a feature article for the Newspaper. (6×1=6)**

1. Impact of Globalization on Norms and Experiences around Gender

**OR**

2. Are smart classes beneficial to students?

**Q.5.B. Choose any ONE topic and write a report. (6×1=6)**

1. NAAC Peer Visit 2024, that took place in your institution.

**OR**

2. Women's Premier League 2024.

**- THE END -**