

Veer Narmad South Gujarat University
BACHELOR OF COMPUTER APPLICATION
FY Semester – I NCF - NEP
AEC - Communication Skills (101)

Marks: 25

Q 1 Answer the following (Any THREE)

[6]

1. Definition and process of communication.
2. What is the importance of eye contact in non-verbal communication?
3. What is hard listening?
4. What is verbal communication? What are the types of verbal communication?

Q 2 You want to apply to Ellen Graphics, Ahmedabad for the post of a Graphic Designer [7]
Draft a resume for the same including your personal, educational details and expected salary.

OR

Kavya writes an email to Municipal Commissioner regarding the problem of non-functioning street lights in her area. [7]

Q 3 Draft a group discussion amongst Raveena, Kareena, Juhi and Madhu on the topic 'Online shopping v/s Offline shopping'. [7]

OR

Draft a presentation consisting of 7 slides on the topic 'Importance of Sports in life'. [7]

Q 4 Read the passage and answer the questions given below. [5]

Education means a training of our mind to learn and gather information about various subjects that can help us to survive and be successful in this world. Education is essential for a fulfilling life where you learn the meaning and goal of your existence through the process of gaining education. It adds meaning to our life by helping us find our skills, talent and provides right direction to move on. During tough times education can become a torch bearer and lead us out of it. Education not just helps us acquire knowledge but also helps us earn respect, power and status in society as an educated person is always respected everywhere. It saves us from a lot of problems like poverty, unemployment, involvement into criminal activities so we can say that it

is life saviour. It helps in the development of our personality to impress others easily and imbibe moral values to lead an ethical life. We also learn to be more discipline through education to lead a good life. It is important to strive for knowledge and not degree as knowledge is ever lasting. Along with theoretical knowledge, one should also learn the practical side of it for better implication of it. Meaningful education can benefit not just the individuals but to the society at large as it inspires one to work for the betterment of society and involve in social welfare activity with the help of right education. So for our overall development education is a must.

Questions:

1. What is education?
2. What are the benefits of education?
3. What sort of problems can be solved with the help of Education?
4. How can education lead to social welfare?
5. Find synonym of the word 'achieve' from the passage.

OR

Write a blog on 'My favourite movie'.

(5)

VEER NARMAD SOUTH GUJARAT UNIVERSITY

First Year B.C.A (Semester-1)

Examination MARCH-2026

Subject Code: 2411000901011001



MAJOR-104-Computer Programming & Programming Methodology (CPPM)(TH)

Set – 1

Q-1 (A) Answer MCQ (Any Four)

[4]

1 Which of the following is a valid variable name in C?

- A) int
- B) num1
- C) 123abc
- D) #value

2 Which loop is guaranteed to execute at least once?

- A) for loop
- B) while loop
- C) do-while loop
- D) nested loop

3 Which function is used to compare two strings in C?

- A) strcmp()
- B) strcomp()
- C) stringcompare()
- D) equals()

4 What is the default value of an uninitialized local variable in C?

- A) 0
- B) Garbage value
- C) Null
- D) Compiler dependent

5 Which of the following is a valid identifier in C?

- A) lsum
- B) sum*1

C) int

D) sum1

[B] Answer in short. (Any Four)

[4]

1. What is the difference between = and ==?
2. What is a pointer?
3. What do you mean by ternary operator?
4. What is the use of continue statement?
5. What is the subscript number in array?

Q-2 A Explain the difference between compiler and interpreter.

[5]

OR

Q-2 A Define algorithm. Write an algorithm to find factorial of number N.

[5]

Q-2 B Explain any four operators in detail.

[4]

Q-3 Answer following (Any Two)

[8]

A What is array? Explain one dimensional numeric array.

B What is the difference while and do while loop.

C What is branching statement? Explain any one in detail.

VEER NARMAD SOUTH GUJARAT UNIVERSITY
Examination March- 2026
B.C.A (NCF-NEP) F.Y Semester-I
Subject Code: 2411000901022001
Course Code:Major-105-Data Processing and Analysis (TH)



Time: 1 Hour

Total Marks: 25

Q.1 (A) Choose appropriate correct option (Any Four)

[4]

1. Which of the following is used to create a graphical representation of data in a spreadsheet?

- A. Table
- B. Formula
- C. Char
- D. Cell

2. Which SQL datatype is used for variable -length strings?

- A. CHAR
- B. VARCHAR
- C. INT
- D. NUMBER

3. Which of the following component is responsible for managing disk space and storage?

- A. Transaction Manager
- B. Query Processor
- C. Report Generator
- D. DDL Compliar

4. The WHERE clause cannot be used with which SQL statement?

- A. SELECT
- B. UPDATE
- C. CREATE

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D. DELETE

5. What type of view allows users to update the underlying table through the view?

- A. Read only view
- B. Materialized view
- C. Updatable view
- D. Virtual view

(B) Answer in Short (Any Four)

[4]

1. What is Schema?
2. What is weak Entity?
3. What is derived attribute?
4. Which clause used to sort the result set in SQL?
5. List out components of a database system?

Q.2 Answer the following:

A. What is Workbook ? Explain its structure?

[5]

OR

A. How to add Header and footer in worksheet.

B. What is Key? Explain primary and Foreign key in DBMS?

[4]

Q.3 Answer the following(Any Two)

[8]

1. Explain DDL statements.
2. What is constraints? Explain NOT Null and Unique constraints.
3. Define a view in SQL. What are the advantages of using views?

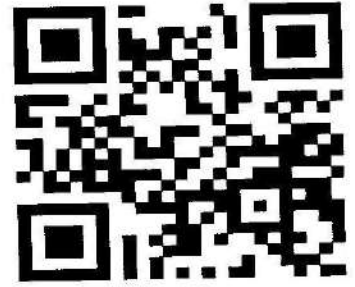
VEER NARMAD SOUTH GUJARAT UNIVERSITY

EXAMINATION-MARCH-2026

(Bachelor Of Computer Applications (Semester-I))

Subject Code: 2311000901030001

Course Code: Introduction To Computers



[TIME: TWO HOURS]

[MAX. MARKS:50]

Q1 [A] Select Correct option. (Any 5)

[5]

1. Which of these statements are TRUE about a supercomputer?

- (A) It is used for scientific research (B) It has very high computation speed
(C) It is very expensive (D) All of these

2. Which of the following memory is used in Digital Camera?

- (A) Virtual memory (B) Flash memory (C) Main memory (D) Cache memory

3. Which of the following is not an example of octal number system?

- (A) 123 (B) 478 (C) 372 (D) 760

4. A _____ that contains billions of documents in the form of WebPages, is one of the most popular services on the internet.

- (A) Web (B) Bookmark (C) URL (D) Web browser

5. Which of the following is a device used for video games, flight simulators, training simulators and for controlling industrial robots.

- (A) Keyboard (B) Light Pen (C) Joystick (D) Mouse

6. Which of these is a storage device?

- (A) CD ROM (B) Resistor (C) Cache memory (D) All of these

7. Which of the following is a company providing internet access, just like a telephone company?

- (A) DSL (B) Web Browser
(C) Internet Service Provider (D) Modem

[B] Answer the following. (Any 5)

[5]

1. What is non-volatile memory?
2. What is mainframe computer?
3. What is full form of ASCH?
4. What is RFID?
5. What is line printer?
6. What is internet?
7. What is full form of URL?

Q-2 [A] Answer following.

1. What is a computer? Explain its characteristics. Also list its limitations. **[5]**
2. What is memory? Which are various types of memory? Explain in detail. **[5]**

OR

Q-2 [A] Answer following.

1. Write a note on block diagram of computer along with its all functional units. **[5]**
2. Explain cache memory and virtual memory. **[5]**

Q-2 [B] Answer following.

1. Differentiate super computer, mini computer and micro computer. **[3]**
2. Differentiate system software and application software. **[3]**

OR

Q-2 [B] Answer following.

1. Explain any three uses of computer in detail. **[3]**
2. What is operating system? What are various functions of operating system? **[3]**

Q-3 [A] Answer following.

1. What are the pointing devices? Explain various pointing devices. **[5]**
2. Write a note on various hardware devices used in internet connection. **[5]**

OR

Q-3 [A] Answer following.

1. Write a note on various scanning devices. [5]
2. What is cloud computing? Explain its applications. [5]

Q-3 [B] Answer following.

1. Differentiate between laser printer and inkjet printer. [3]
2. Explain the term - internet and WWW. [3]

OR

Q-3 [B] Answer following.

1. Explain how Fast Tag works. [3]
2. What is web browser? List various web browser. [3]

Q-4 Solve following. (Any 4) [8]

1. $(1234567)_{10} = (?)_2$
2. $(11011001101011)_2 = (?)_{10}$
3. $(11010110)_2 + (11101110)_2 = ?_2$
4. $(1100100)_2 - (1000110)_2 = ?_2$
5. $(110101100011)_2 - (10101110111)_2 = ?_2$
6. $(10110111.0110)_2 + (11011101.1111)_2 = ?_2$

F.Y.B.C.A (Sem-I) Examination MARCH 2026

Subject: Mathematics-102 (NCF-NEP)

Code: 2311000901040001

(Multidisciplinary Course) Paper: (MDC-102)



Total Marks:50

Instructions:

- (1) All questions are compulsory.
- (2) Figures to the right indicate marks of the corresponding question.

Q.1 Answer the following. (10)

- (1) If $A = \{x : x^2 + x - 12 = 0; x \in Z\}$ then find $P(A)$.
- (2) If $f : N \rightarrow N$, $f(x) = 2x - 1$ is a function then R_f is _____.
- (3) If truth value of a statement p is T then the truth value of $(\sim(\sim p))$ is _____.
- (4) In a Boolean Algebra prove that $0' = 1$ and $1' = 0$.
- (5) Evaluate: $\begin{vmatrix} 3 & -5 \\ -7 & 3 \end{vmatrix}$

Q.2 Answer the following. (Any Two) (10)

- (1) In usual notation prove that $A - (B \cup C) = (A - B) \cap (A - C)$.
- (2) In a survey of 600 students in a school, 150 students were found to be drinking Tea and 225 drinking Coffee, 100 were drinking both Tea and Coffee. Find how many students were drinking neither Tea nor Coffee.
- (3) If $A = \{x : x \in N, x < 6\}$, $B = \{x : x \in N, 3 < x < 9\}$ and $C = \{1, 4, 5, 7\}$ then verify $(A \cup B) \cap C = (A \cap C) \cup (B \cap C)$.

Q.3 Answer the following. (Any Two) (10)

- (1) The demand function of sugar in market is $d = f(p) = 1605 - 5p^2$. Find the demand of sugar for price $p =$ Rs. 5, 6 and 8 per kg. respectively. At what price the demand of sugar will be zero?
- (2) If $f(x) = x(x + 1)(2x + 1)$ then find the value of $f(x) - f(x - 1)$.

(3) If $f(x) = (x^2 - 9)/(x - 3)$, $x \in Z - \{3\}$ and $g(x) = x + 3$, $x \in Z$. State whether $f(x)$ and $g(x)$ are equal or not?

Q.4 Answer the following. (Any Two)

(10)

(1) Using truth-table prove the following De-Morgan's law.

(i) $\sim(p \vee q) = (\sim p) \vee (\sim q)$

(ii) $\sim(p \wedge q) = (\sim p) \vee (\sim q)$

(2) Check whether D_{21} is a Boolean Algebra or not; $\forall a, b \in D_{21}$

$$a + b = \text{L.C.M. of } a, b$$

$$a \cdot b = \text{G.C.D. of } a, b \quad \text{and } a' = 21/a$$

(3) Check the validity of the logical arguments

Hypothesis: $S_1: p \wedge (\sim q) \Rightarrow r$, $S_2: p \vee q$, $S_3: q \Rightarrow p$.

Conclusion: $S: r$

Q.5 Answer the following. (Any Two)

(10)

(1) Solve using Cramer's Rule:

$$4x + 10y = 2xy,$$

$$5x + 16y = 3xy$$

(2) Find the inverse of $A = \begin{vmatrix} 2 & 3 & 1 \\ 0 & 5 & 6 \\ 1 & 1 & 2 \end{vmatrix}$

(3) If $A = \begin{vmatrix} 4 & 5 & 7 \\ -2 & 3 & 0 \end{vmatrix}$

$B = \begin{vmatrix} 0 & 1 & 4 & 7 \\ -2 & 1 & 0 & 5 \\ 3 & 0 & 1 & 4 \end{vmatrix}$ then find AB and BA , whichever is possible.

VEER NARMAD DAKSHIN GUJARAT UNIVERSITY

EXAMINATION MARCH– 2026

Bachelor Of Computer Application Semester- I

Subject Code: : 2311000901070001

Paper Code :VAC – IKS Bharatiya Knowledge Systems -An Introduction



Total Marks : 25

Time: 1 Hour

Q – 1 Answer any five of the following questions.

(10)

1. In the Ashtadasha Vidyas (Eighteen Branches of Knowledge), where is the mention of “Natyashastra” found?
 - a) Manusmriti
 - b) Rigveda
 - c) Natyaveda
 - d) Upanishads

2. What is the meaning of the word “Rat”?
 - a) Austerity
 - b) Dance
 - c) Engaged in enjoyment or delight
 - d) Knowledge

3. From where did the idea of the coexistence of “Nature and Human” originate?
 - a) Upanishads
 - b) Mahabharata
 - c) Gita
 - d) Puranas

4. What is the ultimate goal of the Purushartha Chatushtaya (the four aims of life)?
 - a) Dharma
 - b) Artha
 - c) Kama
 - d) Moksha

5. Who described Indian culture as “Unity in Diversity”?
 - a) Swami Vivekananda
 - b) Dayananda Saraswati
 - c) Rabindranath Tagore

d) Dr. Radhakrishnan

6. Who was the discoverer of “Zero” in the Indian scientific world?
- Aryabhata
 - Bhaskaracharya
 - Varahamihira
 - Chanakya
7. The concept of “Sin and Virtue” (Paap–Punya) is associated with which aspect?
- Karma
 - Wealth
 - Knowledge
 - Values

Q – 2(A) Give a brief answer to any one of the following questions. (5)

- Describe in your own words the form of India as depicted in Vedic literature.
- Describe the main sources of the Indian knowledge tradition (Vedas, Upanishads, Puranas, Smritis, etc.).

Q – 2(B) Give a brief answer to any one of the following questions. (5)

- Describe the characteristics of Vedic culture.
- Explain the concept of Moksha and the paths to its attainment.

Q – 2(C) Give a brief answer to any one of the following questions. (5)

- Explain the position and role of women in Indian society.
- Discuss the various paths of worship — Jnana (knowledge), Bhakti (devotion), Karma (action), and Dhyana (meditation).