AA—1002—2025

FACULTY OF ALL

B.A./B.Com./B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020 Pattern)

INDIAN KNOWLEDGE SYSTEM

Paper–IKS-1101

(Wednesday, 2-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :—   (*i*)   *All* questions carry equal marks.

        (*ii*)   Question no. **1** is compulsory.

        (*iii*)   Solve any *three* of the remaining five questions (Q. Nos. **2** to **6**).

        (*iv*)   Figures to the right indicate full marks.

        (*i*)   **सर्व** प्रश्नाना समान गुण आहेत.

        (*ii*)   प्रश्न क्र. 1 अनिवार्य आहे.

        (*iii*)   उर्वरित 5 प्रश्नापैकी कोणतेही 3 प्रश्न सोडवा (प्र. क्र. 2 ते 6).

        (*iv*)   उजवीकडील अंक पूर्ण गुण दर्शवितात.

P.T.O.

1. Solve the following questions (2.5 marks each) : 10

   (a) What is the Indian Knowledge System ?

   (b) Describe in detail the nature of Buddhist philosophy, its four Noble Truths and the Eightfold Path.

   (c) What is the significance of city planning in ancient Indian architecture ?

   (d) What is the importance of the contributions of Sushruta Samhita and Vagbhata ?

   खालील प्रश्न सोडवा (प्रत्येकी 2.5 गुण) :

   (a) भारतीय ज्ञान प्रणाली म्हणजे काय ?

   (b) बौद्ध दर्शनाचे स्वरूप, त्याचे चार आर्यसत्ये आणि अष्टांगिक मार्ग यांचे सविस्तर वर्णन करा.

   (c) प्राचीन भारतीय स्थापत्यकलेतील शहर नियोजनाचे महत्त्व काय आहे ?

   (d) सुश्रुत संहिता आणि वाग्भट यांच्या योगदानाचे महत्त्व काय आहे ?

2. What is the significance of the Gurukula system, and how did it operate within the context of ancient Indian education ? 10

   गुरुकुल पद्धतीचे महत्त्व काय आहे आणि ती प्राचीन भारतीय शिक्षण पद्धतीत कशी कार्यरत होती ?

3. What is the concept of Nāstika systems ? Provide a detailed introduction to Jainism, including its nature, concepts and scriptures, as one of the Nāstika systems. 10

   नास्तिक प्रणाली म्हणजे काय ? जैन धर्म या नास्तिक प्रणालींचे स्वरूप, संकल्पना आणि साहित्याचा सविस्तर परिचय द्या.

4. What is the concept of Indian Economics ? 10

   भारतीय अर्थशास्त्राची संकल्पना काय आहे ?

5. How was the metal industry in ancient India ?   10

प्राचीन भारतातील धातू उद्योग कसा होता ?

6. Solve the following questions (2.5 marks each) : 10

 (*a*) What were the features of the ancient Indian education system ?

 (*b*) What does 'Apoorva' mean, and what is its significance ?

 (*c*) Provide a detailed description of the concept and tradition of ancient Indian music.

 (*d*) How did the historical development of astronomy unfold in India ?

खालील प्रश्न सोडवा (प्रत्येकी **2.5** गुण) :

 (*a*) भारतीय प्राचीन शिक्षण पद्धतीची वैशिष्ट्ये कोणती होती ?

 (*b*) अपूर्वा म्हणजे काय आणि त्याचे महत्त्व काय आहे ?

 (*c*) प्राचीन भारतीय संगीताची संकल्पना आणि परंपरा याबद्दल सविस्तर वर्णन करा.

 (*d*) भारतामध्ये खगोलशास्त्राचा ऐतिहासिक विकास कसा झाला ?

AA—01—2025

FACULTY OF HUMANITIES/SCIENCE AND TECHNOLOGY AND COMMERCE AND MANAGEMENT

B.A./B.Sc./B.Com. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020)

ENGLISH (Comp.)

Paper–I(HENGAEC-1101)

(Developing Spoken Communication)

(Friday, 4-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :—   (*i*)   Question No. **1** is compulsory.

(*ii*)   Attempt any *three* questions from Q. Nos. **2** to **5**.

(*iii*)   Figures to the right indicate full marks.

1.   Write short notes on :   10

(*i*)   Types of communication

(*ii*)   Imperative sentences

(*iii*)   Tips for proposing vote of thanks

(*iv*)   Telephonic conversation.

                 P.T.O.

2. Explain, how verbal communication differs from nonverbal communication. 10

3. Illustrate the usage of exclamations in English language by giving suitable examples. 10

4. Draft a Welcome Speech for the College Annual Function. 10

5. Ramesh calls up Rohan to convince him to go to college trip. Draft the conversation. 10

AA—09—2025

FACULTY OF HUMANITIES

B.A./B.Sc./B.Com. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020)

HINDI (MIL)

Paper–I–HHINMIL-1101

(साहित्य कलश और व्यावहारिक हिंदी, भाग-1)

(Monday, 7-4-2025)   **Time : 10.00 a.m. to 12.00 Noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (*i*) **पहला** प्रश्न अनिवार्य है।

(*ii*) प्रश्न क्रमांक **2** से **6** में से किन्हीं **तीन** प्रश्नों के उत्तर लिखिए।

(*iii*) **सभी** प्रश्नों के समान अंक हैं।

1. निम्नलिखित में से किन्हीं **दो** पर टिप्पणियाँ लिखिए :   10

(अ) 'ब्लॉग' की उपयोगिता

(ब) दूरदर्शन के विज्ञापन की विशेषताएँ

(क) 'पंच परमेश्वर' कहानी का समझू साहू।

(ड) 'जो बीत गई सो बात गई' कविता का आशय।

P.T.O.

2. 'चीफ़ की दावत' कहानी की कथावस्तु लिखिए। 10

3. 'गीत फरोश' कविता की संवेदना को स्पष्ट कीजिए। 10

4. ब्लॉग के स्वरूप पर प्रकाश डालिए। 10

5. आकाशवाणी के विज्ञापन की विशेषताएँ लिखिए। 10

6. 'उर्फ सैम' कहानी की कथावस्तु लिखिए। 10

AA—10—2025

FACULTY OF HUMANITIES

B.A./B.Sc./B.Com. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

MARATHI (MIL)

Paper—AECMAR-1101

(गद्य, पद्य व उपयोजित मराठी-I)

(Monday, 7-4-2025)	**Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours *Maximum Marks—40*

N.B. :— (i) **पहिला** प्रश्न सोडविणे अनिवार्य आहे.

(ii) **सर्व** प्रश्नांना समान गुण आहेत.

1. टिपा लिहा (कोणत्याही **दोन**) : 10

(अ) 'काळ्या तोंडाची' या कथेतील चंपी

(ब) 'युगायुगाची गुलामी चाल' मधील स्त्री

(क) कार्यालयीन पत्रलेखनाचे घटक

(ड) इतिवृत्ताचे स्वरूप.

P.T.O.

(पुढील प्रश्न क्रमांक **2** ते प्रश्न क्रमांक **6** या मधील कोणतेही **तीन** प्रश्न सोडवा) : 30

2. 'पुरुषांकडून स्त्रियांवर होणाऱ्या अन्यायाचे विवेचन' ताराबाई शिंदे यांनी कसे केले आहे ते लिहा.

3. 'भुरा' या नायकाच्या जीवन संघर्षाचे चित्रण शरद बावीस्कर यांनी कसे केले आहे ते स्पष्ट करा.

4. प्रेमाचा उत्कट आविष्कार 'अंदाज आरशाचा' या गझलेतून कसा उमटला आहे. ते लिहा.

5. दुष्काळी परिस्थितीमुळे होरपळलेल्या गावाचे चित्रण रवी कोरडे यांनी कसे केले आहे ?

6. कार्यालयीन पत्रलेखन करतांना कोणत्या बाबीची काळजी घेतली पाहिजे ते लिहा.

This question paper contains **2** printed pages]

NEPSD—101—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (First Semester) (NEP) EXAMINATION

APRIL/MAY, 2025

COMPUTER SCIENCE

SCSCCT–1101

(Logic Building Using C-I)

(Wednesday, 9-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (*i*)   Question No. **1** is compulsory.

       (*ii*)   Attempt any *three* questions from Q. No. **2** to Q. No. **5**.

       (*iii*)   Figures to the right indicate full marks.

       (*iv*)   Assume suitable data if necessary.

1.   Attempt the following :   10

     (*a*)   Define programming language.

     (*b*)   Explain printf statement.

     (*c*)   Explain break statement.

     (*d*)   Define array.

     (*e*)   Write a program for addition of two numbers.

                                         P.T.O.

2. Attempt any *two* of the following : 10

   (*a*) How compiler differ from interpreter ?

   (*b*) What are the different type of languages ?

   (*c*) Explain concept of assembler.

3. Attempt any *two* of the following : 10

   (*a*) Explain operators used in C.

   (*b*) Explain I/O statements in C.

   (*c*) Write a program in C for addition of two numbers.

4. Attempt the following (any *two*) : 10

   (*a*) Explain nested if with example.

   (*b*) What are the different looping statements used in C.

   (*c*) Write a program in C to display factorial of a number.

5. Attempt any *two* of the following : 10

   (*a*) What are the different type of arrays used in C ?

   (*b*) Write a program to search element in array.

   (*c*) Write a program to add two 3 × 3 matrices.

This question paper contains **2** printed pages]

NEPSD—102—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (NEP) (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

COMPUTER SCIENCE

SCSCMT–1101

(Web Technology-I)

(Saturday, 12-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks*—40

N.B. :— (*i*)   Question No. **1** is compulsory.

(*ii*)   From Q. No. **2** to Q. No. **5** solve any *three* questions.

(*iii*)   Assume suitable data, if necessary.

1.   Attempt the following (**2** marks each) :   10

(*a*)   Define Web browser.

(*b*)   What is internet ?

(*c*)   What is is you mean by protocol ?

(*d*)   What is HTML ?

(*e*)   What are tags and attributes ?

P.T.O.

2. Attempt the following (any *two*) (**5** marks each) : 10

   (*a*) Explain Web protocols HTTP and HTP.

   (*b*) Explain IDE applications of HTML.

   (*c*) Design web page to display simple HTML structure.

3. Attempt the following (any *two*) (**5** marks each) : 10

   (*a*) Explain structure of HTML with example.

   (*b*) Explain image tag and their attributes.

   (*c*) Design web page to demonstrate marquee tag.

4. Attempt the following (any *two*) (**5** marks each) : 10

   (*a*) Explain form tag with their attributes.

   (*b*) Create web page to display your friends list using UL and OL tag.

   (*c*) Explain Anchor Tag.

5. Attempt the following (any *two*) (**5** marks each) : 10

   (*a*) Explain features of HTML 5.

   (*b*) Explain elements of HTML 5.

   (*c*) Create web page to display HTML 5 simple tags.

This question paper contains **2** printed pages]

NEPSD—103—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (First Semester) EXAMINATION

APRIL/MAY, 2025

(NEP 2020 Pattern)

COMPUTER SCIENCE

SCSCMT-1102

(Computer Network)

(Wednesday, 16-4-2025) **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours *Maximum Marks—40*

N.B. :— (*i*) Question No. **1** is compulsory.

(*ii*) From Q. No. **2** to Q. No. **5** solve any *three* questions.

(*iii*) Assume suitable data, if necessary.

(*iv*) Figures to the right indicate full marks.

(*v*) Use of any electronic media such as mobile phone, digital diary and electronic calculator is not permitted.

1. Attempt the following (**2** marks each) : 10

(*a*) What is computer networking ?

(*b*) Explain IPV4 and IPV6.

(*c*) Explain TCP/IP protocol in detail.

(*d*) Explain Repeater.

(*e*) Explain SMTP.

P.T.O.

2. Attempt the following (any *two*) : 10

   (*a*)   Explain Fiber optical cable in detail.

   (*b*)   What is Topology ? Explain tree topology.

   (*c*)   Explain social transmission mode.

3. Attempt the following (any *two*) : 10

   (*a*)   Explain types of ethernet.

   (*b*)   Explain IInternet *versus* Intranet.

   (*c*)   Explain client and server architecture.

4. Attempt the following (any *two*) : 10

   (*a*)   Explain OSI/ISO reference model.

   (*b*)   What is Switching ? Explain packet switching.

   (*c*)   Explain model TCP/IP reference.

5. Attempt the following (any *two*) : 10

   (*a*)   Explain NIC card in detail.

   (*b*)   Explain WiFi and WiMax in detail.

   (*c*)   Explain Internet of Things (IOT).

This question paper contains **2** printed pages]

AA—1003—2025

FACULTY OF ALL

B.A./B.Com./B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020 Pattern)

VALUE EDUCATION

(VECCOI-1151))

(Constitution of India–I)

(Thursday, 3-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks*—40

N.B. :— (*i*)   Question No. **1** is compulsory.

   (*ii*)   Students are required to solve a total of **4** questions.

   (*iii*)   Students are required to solve any *three* of the remaining five questions (Q. Nos. **2** to **6**).

   (*i*)   प्रश्न क्रमांक **एक** अनिवार्य आहे.

   (*ii*)   एकूण **4** प्रश्न सोडविणे आवश्यक आहे.

   (*iii*)   प्रश्न क्रमांक **2** ते **6** पैकी कोणतेही **तीन** प्रश्न सोडवा.

1.   Write short notes on (All) (2.5 marks each) :   10

  (*a*)   Explain the sources of Indian Constitution

  (*b*)   Discuss the Directive Principles of State Policy

  (*c*)   Comment on Judicial activism

  (*d*)   Explain the utility of Rajya Sabha.

               P.T.O.

थोडक्यात टिपा लिहा (सर्व) (प्रत्येकी 2·5 गुण) :

(a)   भारतीय राज्यघटनेची उगमस्थाने स्पष्ट करा

(b)   मार्गदर्शक तत्त्वांची चर्चा करा

(c)   न्यायिक सक्रियतेवर भाष्य करा

(d)   राज्यसभेची उपयुक्तता स्पष्ट करा.

2.   State the salient features of the Indian Constitution.   10

     भारतीय राज्यघटनेची ठळक वैशिष्ट्ये स्पष्ट करा.

3.   Explain in detail the Fundamental Rights.   10

     मूलभूत अधिकाराचे सविस्तर विवेचन करा.

4.   Explain the powers and functions of Indian President.   10

     भारताच्या राष्ट्रपतीचे अधिकार व कार्य स्पष्ट करा.

5.   Explain the structure and powers of Lok Sabha.   10

     लोकसभेची रचना आणि अधिकार स्पष्ट करा.

6.   Elucidate the administrative relations between the Centre and State.   10

     केंद्र आणि राज्य यांच्यातील प्रशासकीय संबंधाचे विवेचन करा.

AA—16—2025

FACULTY OF HUMANITIES/SCI. AND TECHNOLOGY AND COMMERCE AND MANAGEMENT

B.A./B.Com./B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020)

ENGLISH (Compulsory)

Paper–II (HENGAEC-1151)

(Developing Written Communication)

(Tuesday, 8-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :—   (*i*)   Question No. **1** is compulsory.

       (*ii*)   Attempt any *three* questions from Question Nos. **2** to **5**.

       (*iii*)   Figures to the right indicate full marks.

1.   Write short notes on :   10

     (*i*)   Purpose of a paragraph

     (*ii*)   Expanding Vocabulary

     (*iii*)   Types of resumes

     (*iv*)   Features of circulars.

                                              P.T.O.

2. Explain the principles of clear writing in detail. 10

3. What are the essential components of essay writing ? Discuss each component in detail. 10

4. Write a job application for the post of Marketing Coordinator at Infosys, Pune. 10

5. Prepare the meeting agenda of the "Marketing Team Strategy Session" including the introduction, review of the previous quarter, upcoming campaign, budget allocation and next steps. 10

AA—02—2025

FACULTY OF HUMANITIES

B.A./B.Com./B.Sc. (NEP) (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

HINDI (MIL)

Paper HHINMIL-1151

(साहित्य कलश और व्यावहारिक हिंदी : भाग-II)

(Saturday, 5-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (1) **पहला** प्रश्न अनिवार्य है।

(2) प्रश्न क्रमांक **2** से प्रश्न क्रमांक **6** में से किन्हीं **तीन** प्रश्नों के उत्तर लिखिए।

(3) **सभी** प्रश्नों के अंक समान हैं।

1. निम्नलिखित में से किन्हीं **दो** पर टिप्पणियाँ लिखिए :   10

(अ) 'कृत्रिम मेधा' की उपयोगिता।

(ब) 'बाशिंदा' कहानी का करेला झा।

(क) वाक् से पाठ प्रणाली।

(ड) 'फर्क नहीं पड़ता' कविता का आशय।

P.T.O.

2. 'वसीयतनामा' कहानी की कथावस्तु लिखिए।   10

3. 'कदम मिलाकर चलना होगा' कविता में व्यक्त संदेश स्पष्ट कीजिए।   10

4. 'कृत्रिम मेधा' का अर्थ स्पष्ट करते हुए उसके महत्व को विशद कीजिए।   10

5. 'मुंबई काण्ड' कहानी में व्यक्त मानवीय मूल्यों का विश्लेषण कीजिए।   10

6. 'अपने घर की तलाश' कविता की मूल संवेदना पर प्रकाश डालिए।   10

This question paper contains **2** printed pages]

AA—03—2025

FACULTY OF HUMANITIES

B.A./B.Sc./B.Com. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(NEP-2020)

MARATHI (MIL)

Paper–AECMAR-1151

(मराठी साहित्य आणि व्यावहारिक मराठी–II)

(Saturday, 5-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (i) **पहिला** प्रश्न सोडविणे अनिवार्य आहे.

(ii) **सर्व** प्रश्नांना समान गुण आहेत.

1. टिपा लिहा (कोणत्याही **दोन**) :   10

(अ) 'वाटा-पळवाटा' मधील सतीश

(ब) हायकू

(क) बातमी मूल्ये

(ड) जाहिरातीचा मसुदा.

P.T.O.

पुढील प्रश्न क्रमांक **2** ते **6** यामधील कोणतेही **तीन** प्रश्न सोडवा : 30

2. 'रोमराज्य' या पाठातून लेखिकेने 'रोम' शहराचे वर्णन कसे केले ते तुमच्या शब्दात लिहा.

3. पंडित जवाहरलाल नेहरू यांनी आपल्या पत्रातून इंदूस कोणता संदेश दिला ते लिहा.

4. कवी केशवकुमार यांनी 'प्रेमाचा गुलकंद' या कवितेतून एकतर्फी प्रेमाचे चित्रण कसे केले ते सांगा.

5. 'आम्ही तुफानातील दिवे' या कवितेचा आशय स्पष्ट करा.

6. आकाशवाणीवरील जाहिरातीच्या स्वरूपाविषयी चर्चा करा.

This question paper contains **2** printed pages]

NEPSD—201—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(As per NEP)

COMPUTER SCIENCE

Paper–SCSCCT–1151

(OOPs Using C++–II)

(Friday, 11-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 *Hours*   *Maximum Marks*—40

N.B. :— (*i*)   Question No. **1** is compulsory.

(*ii*)   From question No. **2** to **5** solve any *three* questions.

(*iii*)   Draw neat and labelled diagram if necessary.

1.   Attempt the following :   10

(*a*)   Explain Applications of OOP in detail.

(*b*)   What are the different operators used in C++ ?

(*c*)   Explain the concept of functions.

(*d*)   What are the different I/O statements used in C++ ?

(*e*)   What are the different stream classes ?

P.T.O.

2. Attempt the following (any *two*) : 10

   (*a*) Explain benefits of OOPs in detail.

   (*b*) Explain the concept of array with example.

   (*c*) Write a program in C++ to describe concept of nested for loop.

3. Attempt the following (any *two*) : 10

   (*a*) Explain concept of call by value in detail.

   (*b*) What is overloading ? Explain function overloading in detail.

   (*c*) Write a program in C++ to describe concept of friend function.

4. Attempt the following (any *two*) : 10

   (*a*) Explain the concept of pure virtual function in detail.

   (*b*) Explain the concept of inheritance in detail.

   (*c*) Write a program in C++ to describe concept of single inheritance.

5. Attempt the following (any *two*) : 10

   (*a*) Explain the concept of stream classes in detail.

   (*b*) Explain the concept of formatted and unformatted I/O.

   (*c*) Explain concept of manipulators in detail.

This question paper contains **2** printed pages]

NEPSD—202—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(NEP)

COMPUTER SCIENCE

SCSCMT-1151

(Data Structure-II)

(Tuesday, 15-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :— (*i*)   Question No. **1** is compulsory.

(*ii*)   From question Nos. **2** to **5** solve any *three* questions.

(*iii*)   Figures to the right indicate full marks.

(*iv*)   Assume suitable data, if necessary.

(*v*)   Use of any electronic media such as mobile phone, digital diary, and electronic calculator is not permitted.

1.   Attempt the following (**2** marks each) :   10

(*a*)   Explain data structure operations.

(*b*)   Explain priority queue.

(*c*)   What is binary tree ?

(*d*)   Define data structure.

(*e*)   Define linked list.

P.T.O.

2. Attempt any *two* of the following : 10

   (*a*) Explain binary search algorithm.

   (*b*) What is linear array ? Discuss representation of linear array in memory.

   (*c*) Write an algorithm to traverse the linear array.

3. Attempt any *two* of the following : 10

   (*a*) Explain Insertion sort.

   (*b*) Write an algorithm to delete a node from the linked list after the given node.

   (*c*) Discuss the concept of garbage collection.

4. Attempt any *two* of the following : 10

   (*a*) What is Stack ? Explain Array representation of stacks.

   (*b*) Explain arithmetic expression.

   (*c*) Discuss various operations of queues.

5. Attempt any *two* of the following : 10

   (*a*) Explain postorder traversal of binary tree.

   (*b*) Write a short note on general tree.

   (*c*) Explain types of binary tree.

NEPSD—203—2025

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2025

(NEP Pattern)

COMPUTER SCIENCE

SCSCMT-1152

(RDBMS-II)

(Thursday, 17-4-2025)   **Time : 10.00 a.m. to 12.00 noon**

Time—2 Hours   *Maximum Marks—40*

N.B. :—   (*i*)   Question No. **1** is compulsory.

      (*ii*)   From Q. No. **2** to Q. No. **5** solve any *three* questions.

      (*iii*)   Assume suitable data, if necessary.

      (*iv*)   Figures to the right indicate full marks.

      (*v*)   Use of any electronic media such as mobile phone, digital diary and electronic calculator is not permitted.

1.   Attempt the following (**2** marks each) :   10

    (*a*)   Write in brief purpose of DBMS Systems.

    (*b*)   Write a short note on Enterprise Constraints.

(c) Write the Syntax and example of CREATE TABLE and ALTER TABLE statement.

(d) Give the use of COMMIT and ROLLBACK statement.

(e) Write in brief use of Order By clause.

2. Attempt the following (any *two*) (**5** marks each) : 10

(a) Explain in detail structure of Relational Database.

(b) Explain the significance of ER Model in Relational Database.

(c) Explain importance of Super Key, Candidate Key, Primary key and Foreign key in relational database.

3. Attempt the following (any *two*) (**5** marks each) : 10

(a) What is Normalization ? Explain first normal form with example.

(b) Define constraint. Explain with example Domain and Referential Integrity constraint.

(c) Explain decomposition using functional dependencies.

4. Attempt the following (any *two*) (**5** marks each) : 10

(a) Write the use, syntax and example of the following DML statements :

(i) INSERT INTO

(ii) UPDATE

(iii) DELETE.

(b) Explain any *five* string functions supported by RDBMS.

(c) What is Join ? Explain with its types.

5. Attempt the following (any *two*) (**5** marks each) : 10

(a) Explain in detail concept of Cursor in RDBMS.

(b) Explain with example use of Stored Procedure.

(c) Explain with example concept of Database Trigger.