

This question paper contains 3 printed pages]

HA—1002—2026

FACULTY OF ARTS/COMMERCE/SCIENCE

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

APRIL/MAY, 2026

(NEP 2020 Pattern)

INDIAN KNOWLEDGE SYSTEM

Paper IKS 1101

(Undergraduate Level Students Studying Across All Faculties)

(Wednesday, 1-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

- N.B. :-**
- (i) All questions carry equal marks.
 - (ii) Question No. 1 is compulsory.
 - (iii) Solve any *two* of the remaining four questions (Q. No. 2 to Q. No. 5).
 - (iv) Figures to the right indicate full marks.
- (i) सर्व प्रश्नांना समान गुण आहेत.
 - (ii) प्रश्न क्र 1 अनिवार्य आहे.
 - (iii) उर्वरित चार प्रश्नांपैकी कोणतेही दोन प्रश्न सोडवा (प्र. क्र. 2 ते प्र. क्र. 5)
 - (iv) उजवीकडील अंक पूर्ण गुण दर्शवितात.

P.T.O.

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

- (i) Which subjects are included in the Indian knowledge system ?
- (ii) Name the *four* types of Pramana (means of knowledge) in Nyaya Philosophy.
- (iii) What is the importance of city planning in ancient Indian architecture ?
- (iv) What natural fertilizers were used in ancient Indian agriculture ?

खालील प्रश्न सोडवा (प्रत्येकी 2.5 गुण) :

- (i) भारतीय ज्ञान प्रणालीमध्ये कोणकोणते विषयांचा समावेश आहे ?
- (ii) न्याय दर्शनातील चार प्रकारचे प्रमाण सांगा.
- (iii) प्राचीन भारतीय स्थापत्यकलेतील शहर नियोजनाचे महत्व काय आहे ?
- (iv) प्राचीन भारतीय शेतीत कोणते नैसर्गिक खत वापरले जात असते ?

2. Discuss the contributions of Ayurveda, astronomy and mathematics to Indian science. 10

आयुर्वेद, खगोलशास्त्र, आणि गणित या भारतीय विज्ञानाच्या योगदानाचे विवेचन करा.

3. Explain the importance of the principles of Jain philosophy – ahimsa (non-violence), anekantavada (pluralism), aparigraha (non-possessiveness), and self-discipline. 10

जैन दर्शनाची तत्त्वे - अहिंसा, अनेकांतवाद, अपरिग्रह आणि आत्मसंयम यांचे महत्व स्पष्ट करा.

4. What is the concept of Indian economics ? 10

भारतीय अर्थशास्त्राची संकल्पना काय आहे ?

5. Discuss the contributions of Charaka Samhita, Sushruta Samhita, and Vagbhata in Ayurveda. 10

आयुर्वेदातील 'चरक संहिता' 'सुश्रुत संहिता व वाग्भट यांच्या योगदानाची चर्चा करा.

This question paper contains 2 printed pages]

HA—01—2026

**FACULTY OF HUMANITIES/SCIENCE AND
TECHNOLOGY AND COMMERCE MANAGEMENT**

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

APRIL/MAY, 2026

(NEP 2020 Pattern)

ENGLISH (Compulsory)

Paper I (HENGAEC1101)

(Developing Spoken Communication)

(Saturday, 4-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

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

(iii) Figures to the right indicate full marks.

1. Write short notes on :

10

(i) Non-verbal communication

(ii) Imperative sentences

(iii) Promoting the function

(iv) Telephonic conversation.

P.T.O.

2. Discuss the importance of spoken communication. 10
3. Prepare *five* common self-introduction questions with suitable answers. Your response should include the following points :
name, address, education, food habits, and hobbies. 10
4. Prepare an anchoring script of the inaugural function of the 'NSS Special Camp' organized by your college at the village nearest your college. 10
5. You are planning to go to a movie. Draft a phone conversation asking your friend to join you. 10

This question paper contains 2 printed pages]

HA—18—2026

FACULTY OF HUMANITIES

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

APRIL/MAY, 2026

MARATHI (MIL)

AECMAR-1101

गद्य, पद्य व उपयोजित मराठी-I

(Tuesday, 7-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

(ii) सर्व प्रश्नांना समान गुण आहेत.

1. थोडक्यात टिपा लिहा :

10

(अ) स्त्री-पुरुष तुलना

(ब) 'प्रयत्नवादी जीवन प्रवास' मधील शब्दांचे महत्व

(क) उंबरा ओलांडणाऱ्या बायका या कवीतेतील स्त्री व्यथा

(ड) कार्यालयीन पत्रलेखनाचे स्वरूप

P.T.O.

This question paper contains 2 printed pages]

HA—17—2026

FACULTY OF HUMANITIES

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

APRIL/MAY, 2026

HINDI (MIL)

HHINMIL-1101

साहित्य कलश और व्यावहारिक हिंदी, भाग-1

(Tuesday, 7-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

N.B. :- (i) पहला प्रश्न अनिवार्य है।

(ii) प्रश्न क्रमांक 2 से 5 में से किन्हीं दो प्रश्नों के उत्तर लिखिए।

(iii) सभी प्रश्नों के समान अंक हैं।

1. टिप्पणियाँ लिखिए :

10

(अ) ब्लॉग लेखन की उपयोगिता

(ब) 'पंच परमेश्वर' कहानी का अलगू चौधरी

(क) आकाशवाणी के विज्ञापन की विशेषताएँ

(ड) कवि मैथिलीशरण गुप्त का परिचय।

P.T.O.

WT

(2)

HA—17—2026

2. 'उर्फ़ सैम' कहानी की कथावस्तु लिखिए। 10
3. 'गीत-फ़रोश' कविता का आशय समझाइए। 10
4. समाचार-पत्र के विज्ञापन की विशेषताएँ लिखिए। 10
5. ब्लॉग लेखन के अर्थ एवं स्वरूप पर चर्चा कीजिए। 10

HA—17—2026

2

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

NEPJX—101—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

AI & ML

Paper—SAMLCT-1101

(Python Fundamentals)

(Thursday, 9-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

N.B. :- (i) Question paper consists of **5** questions, each of **10** marks.

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

(iii) Solve any *two* from Q. No. **2** to Q. No. **5**.

1. Attempt the following (**2.5** marks each) : 10

(a) Explain application area of Python.

(b) Write down Keywords.

(c) Write a symbol for creating flowchart.

(d) Describe module in Python.

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

(a) Explain Interpreter in Python.

(b) Explain input/output operation in Python.

P.T.O.

3. Attempt the following questions (5 marks each) : 10
- (a) Explain operator in Python.
 - (b) Explain data types in Python.
4. Attempt the following questions (5 marks each) : 10
- (a) Explain controlling statement in Python.
 - (b) Explain looping statement in Python.
5. Attempt the following questions (5 marks each) : 10
- (a) Explain file handling operation in Python.
 - (b) WAP to display the following pattern :

```
*****  
*           *  
*           *  
*****
```

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

NEPJX—103—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

AI & ML

Paper—SAMLCT-1102

(Digital Electronics and Computer Organization)

(Wednesday, 15-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

(ii) From Q. Nos. 2 to 5, solve any *two* questions.

(iii) Assume suitable data, wherever necessary.

(iv) Figures to the right indicate full marks.

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

10

(a) What is 1's complement ? Explain with example.

(b) Explain Octal Number System.

(c) Explain X-OR gate.

(d) Explain T-Type FF.

(e) Explain half-adder.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Explain 4 : 1 Multiplexer.
 - (b) Draw and explain 2-bit Asynchronous counter.
3. Attempt the following (5 marks each) : 10
- (a) Solve the following :
 - (i) $(10001 + 11100)$
 - (ii) $(10001 * 101)$.
 - (b) Explain the functions of CPU, ALU and CU.
4. Attempt the following (5 marks each) : 10
- (a) Explain full subtractor.
 - (b) Explain clocked JK FF.
5. Attempt the following (5 marks each) : 10
- (a) Give the difference between combinational circuits and sequential circuits.
 - (b) Explain Secondary Memory with its types.

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

NEPJX—102—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

AI AND ML

Paper—SAMLMT-1101

(RDBMS)

(Saturday, 11-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

- N.B. :-*
- (i) Question No. **1** is compulsory.
 - (ii) From Q. Nos. **2** to **5**, solve any *two* 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 (**2.5** marks each) : 10
- (a) What are Triggers ?
 - (b) Explain types of Entity Set.
 - (c) Explain the concept of Keys.
 - (d) Explain Functional Dependencies.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Explain the concept of After Trigger.
 - (b) Explain Mapping Cardinalities with E-R diagram.
3. Attempt the following (5 marks each) : 10
- (a) Explain Codd's rules of DBMS.
 - (b) What is Normalization ? Explain 2NF in detail.
4. Attempt the following (5 marks each) : 10
- (a) Explain the concept of Explicit Cursor.
 - (b) Write a note on Cross Join.
5. Attempt the following (5 marks each) : 10
- (a) Explain concept of Clauses in detail.
 - (b) Explain Alter command in detail.

This question paper contains 2 printed pages]

HA—1003—2026

FACULTY OF ALL

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

APRIL/MAY, 2026

(NEP 2020 Pattern)

VALUE EDUCATION COURSE

(VECCOI-1151)

(Constitution of India)

(Thursday, 2-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

N.B. :— (i) Question No. 1 will be compulsory.

(ii) Students are required to solve a total of 3 questions.

(iii) Students need to solve any *two* of the remaining four questions

(Q. No. 2 to Q. No. 5).

(i) प्रश्न क्र. 1 अनिवार्य आहे.

(ii) एकूण 3 प्रश्न सोडविणे आवश्यक आहे.

(iii) प्र. क्र. 2 ते 5 पैकी कोणतेही दोन प्रश्न सोडवा.

P.T.O.

1. Write short notes on (*all*) (2.5 marks each) : 10
- (i) Sources of Indian constitution
- (ii) Right to equality
- (iii) Functions of the Council of Ministers
- (iv) Briefly state the financial relations between centre and the state.
- थोडक्यात टिपा लिहा (सर्व) (प्रत्येकी 2.5 गुण) :
- (i) भारतीय राज्यघटनेची उगमस्थाने
- (ii) समतेचा हक्क
- (iii) मंत्री मंडळाचे कार्य
- (iv) केंद्र आणि राज्य यांच्यातील वित्तीय संबंध थोडक्यात सांगा.
2. Describe the working of the Constitutional Assembly. 10
- संविधान सभेच्या कामकाजाचे वर्णन करा.
3. State the directive principles of state policy. 10
- राज्याच्या धोरणाची मार्गदर्शक तत्त्वे सांगा.
4. Explain the powers and functions of Indian President. 10
- भारताच्या राष्ट्रपतीचे अधिकार व कार्य स्पष्ट करा.
5. Explain the legislative relations between the centre and the state. 10
- केंद्र-राज्य यांच्यामधील कायदेविषयक संबंध स्पष्ट करा.

This question paper contains 2 printed pages]

HA—25—2026

**FACULTY OF HUMANITIES, SCIENCE AND TECHNOLOGY AND
COMMERCE AND MANAGEMENT**

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

APRIL/MAY, 2026

(NEP 2020)

ENGLISH (Compulsory)

HENGAEC-1151

(Developing Written Communication-II)

(Wednesday, 8-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

- N.B. :**— (i) Question No. 1 is compulsory.
(ii) Attempt any *two* (2) questions from question No. 2 to 5.
(iii) Figures to the right indicate full marks.

1. Write short notes on : 10
- (i) Topic sentence
- (ii) Precis writing
- (iii) Types of emails
- (iv) Components of meeting agenda.

P.T.O.

2. Explain the importance of punctuation marks with suitable examples. 10
3. Write in detail about the structure of report writing. 10
4. Draft to resume for the post of Marketing Director, including key components such as contact information, career objective, education, skills, work experience and other relevant sections. 10
5. Write a notice about the “Class Test Examination” including all the important parts of a notice. 10

This question paper contains 2 printed pages]

HA—10—2026

FACULTY OF HUMANITIES

B.A. (NEP) (First Year) (Second Semester) EXAMINATION

APRIL/MAY, 2026

MARATHI (MIL)

Paper II (AECMAR-1151)

(मराठी साहित्य आणि व्यावहारिक मराठी)

(Monday, 6-04-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

(ii) प्रश्न क्रमांक 2 ते 5 यापैकी कोणतेही दोन प्रश्न सोडवा.

(iii) सर्व प्रश्नांना समान गुण आहेत.

1. थोडक्यात टिपा लिहा :

10

(अ) साहित्य म्हणजे काय ?

(ब) नाटक

(क) गीताचे स्वरूप

(ड) बातमी.

P.T.O.

प्रश्न क्रमांक 2 ते 5 यापैकी कोणतेही दोन प्रश्न सोडवा :

2. दत्ता भगत यांच्या 'वाटा-पळवाटा' या नाटयांशातून आलेला आंबेडकरी विचार स्पष्ट करा. 10
3. 'आम्ही तुफानातील दिवे' या गीतातून वामनदादा कर्डक यांनी कोणता विचार मांडला आहे ? 10
4. वर्तमान पत्रातील बातमीचे स्वरूप स्पष्ट करा. 10
5. जाहिरात म्हणजे काय ? ते सांगून जाहिरातीचे प्रकार विशद करा. 10

This question paper contains 2 printed pages]

HA—09—2026

FACULTY OF HUMANITIES

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

APRIL/MAY, 2026

(NEP Pattern)

HINDI (MIL)

HHINMIL-1151

[साहित्य कलश और व्यावहारिक हिंदी (भाग II)]

(Monday, 6-04-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

(ii) प्रश्न क्रमांक 2 से प्रश्न क्रमांक 5 में से किन्हीं दो प्रश्नों के उत्तर लिखिए ।

(iii) सभी प्रश्नों के अंक समान हैं ।

1. टिप्पणियाँ लिखिए :

10

(अ) कृत्रिम मेधा का अर्थ

(ब) दुष्यंत कुमार का सामान्य परिचय

(क) 'नेताजी का चश्मा' कहानी के हालदार साहब

(ड) पाठ से वाक् प्रणाली के उपयोग ।

P.T.O.

2. 'मुंबई काण्ड' कहानी की मूल संवेदना लिखिए । 10
3. 'कदम मिलाकर चलना होगा' कविता का आशय लिखिए । 10
4. वाक् से पाठ प्रणाली की विशेषताएँ लिखिए । 10
5. कृत्रिम मेधा की उपयोगिता लिखिए । 10

This question paper contains 3 printed pages]

NEPJX—203—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Paper—SAMLMT-1152

(Fundamental of Statistics)

(Thursday, 16-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

- N.B. :-*
- (i) Question No. 1 is compulsory.
 - (ii) From Q. No. 2 to Q. No. 5 solve any *two* questions.
 - (iii) Assume suitable data, if necessary.
 - (iv) Use of any electronic media such as mobile phone, digital diary is not permitted.
 - (v) Non-programmable calculator is allowed.

1. Attempt the following (2.5 marks each) : 10
- (a) Write the merits and demerits of Median.
 - (b) Explain Sample Space.
 - (c) Define Mode. Write its merits and demerits.
 - (d) Explain events.

P.T.O.

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

- (a) Explain data.
(b) Define mode and compute mode from the following :

Weight	No. of Students
37	8
25	10
28	15
17	11
45	9
54	6

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

- (a) Define correlation. Explain positive and negative correlation.
(b) Calculate the Mean from the following data :

Height	Frequency
15	7
30	9
45	13
60	10
75	7
90	3

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

(a) Define median and calculate median from the following :

Weight	Frequency
20 – 25	6
25 – 30	11
30 – 35	16
35 – 40	10
40 – 45	7
45 – 50	2

(b) Write scope of Statistics in computer science.

5. Attempt the following (5 marks each) : 10

(a) Write a note on regression.

(b) If A and B are not mutually exclusive events, then prove that :

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

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

NEPJX—202—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

AI AND ML

Paper—SAMLMT-1151

(Computer Network)

(Monday, 13-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

- N.B. :—*
- (i) Question No. 1 is compulsory.
 - (ii) From Q. Nos. 2 to Q. No. 5, solve any 2 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 (2.5 marks each) : 10
- (a) Explain NIC card.
 - (b) Explain WAN.
 - (c) Differentiate between Internet versus Intranet
 - (d) Explain TCP/IP.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Explain data transmission type.
 - (b) Explain unguided transmission Media.
3. Attempt the following (5 marks each) : 10
- (a) Explain TCP/IP reference model.
 - (b) Write the difference between Wi-Fi and Wi-max ?
4. Attempt the following (5 marks each) : 10
- (a) Define network topology.
 - (b) Explain Client and Server Architecture.
5. Attempt the following (5 marks each) : 10
- (a) Explain Cloud deployment model in detail.
 - (b) Write the difference between Connection Oriented and Connectionless Services.

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

NEPJX—201—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Paper—SAMLCT-1151

(OOPs with Java)

(Friday, 10-4-2026)

Time : 10.00 a.m. to 12.00 noon

Time—2 Hours

Maximum Marks—30

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

(ii) From Q. Nos. **2** to **5**, solve any *two* 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 (**2.5** marks each) :

10

(a) Explain variables and its types.

(b) Describe user defined exception.

(c) Write a note on Final keyword.

(d) Define Encapsulation.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Describe Packages and its types in detail.
 - (b) Explain StringBuffer class with example.
3. Attempt the following (5 marks each) : 10
- (a) Write a program to demonstrate use of try-catch block.
 - (b) Write a program to demonstrate abstract class and abstract methods.
4. Attempt the following (5 marks each) : 10
- (a) Explain Java Architecture in detail.
 - (b) Describe constructors and its types.
5. Attempt the following (5 marks each) : 10
- (a) Explain command line arguments in detail.
 - (b) Describe run time polymorphism with example.