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HA—24—2026

FACULTY OF HUMANITIES

B.A. (NEP) (Third Semester) EXAMINATION

APRIL/MAY, 2026

COMPULSORY ENGLISH

HENGAC-1201

(Comprehension and Grammar-I)

(Tuesday, 7-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

(ii) Question No. 1 is compulsory.

(iii) Solve any *two* questions from Q. 2 to Q. 5.

1. Attempt the following short notes :

10

(a) Ratnam

(b) Teacher Samuel

(c) Central Idea in The Road Not Taken

(d) Helping Verbs

P.T.O.

2. Discuss Mr. Ratnam's Trick to test the honesty of his new salesman in your own words. 10
3. 'Background Casually' is a close self-analysis of the person who feels himself in an alien world'. Discuss. 10
4. Describe Swami Vivekananda's boat journey in your own words. 10
5. Discuss simple present, simple past and simple future tense with suitable examples. 10

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HA—03—2026

FACULTY OF ARTS

B.A. (NEP) (Third Semester) EXAMINATION

APRIL/MAY, 2026

MARATHI (MIL)

Paper III (AECMAR-1201)

(मराठी साहित्य)

(Saturday, 4-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

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

(iii) सर्व प्रश्नांना समान गुण आहेत.

1. पुढील टिपा थोडक्यात लिहा :

10

(i) 'नवा शिपाई' मधील समतेचा विचार

(ii) 'मेखमारो' मधील रखमाजी

(iii) यशोधरा

(iv) लोकशाहीचे भवितव्य.

P.T.O.

2. प्रज्ञा दया पवार यांनी सावित्रीबाईंच्या विचार आणि कार्याचे महत्व कशाप्रकारे सांगितले आहे, ते लिहा. 10
3. 'मरीआईचा गाडा' ही कथा वैज्ञानिक दृष्टिकोन रुजविणारी आहे' स्पष्ट करा. 10
4. म. जोतीराव फुले यांच्या बहुआयामी व्यक्तिमत्वाचे भावचित्र 'मनातले जोतीराव' या लेखाधारे विशद करा. 10
5. शहीद भगतसिंहांचे वडिलांना लिहिलेल्या पत्रातील विचार थोडक्यात लिहा. 10

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NEPJK—301—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP Pattern)

DATA SCIENCE

Paper—SDSCCT-1201

(Statistical Methods for Data Science)

(Thursday, 9-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

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 2 questions.

(iii) Figures to the right indicate full marks.

(iv) Assume suitable data, if necessary.

(v) Non-programmable calculator is allowed.

1. Attempt the following (2.5 marks each) :

10

(a) Define statistics.

(b) Write merits and demerits of median.

P.T.O.

- (c) Describe Regression.
- (d) Prove that $P(A') = 1 - P(A)$.
2. Attempt the following (5 marks each) : 10
- (a) Write importance of statistics.
- (b) Compute lower and upper quartile from the following data :

Class	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
Frequency	2	6	8	13	11	4

3. Attempt the following (5 marks each) : 10
- (a) Explain events in detail.
- (b) Explain scope of statistics in Computer Science.
4. Attempt the following (5 marks each) : 10
- (a) Define Mean and compute Mean from the following :

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

WT

(3)

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(b) Find mean value of X and Y :

$$3x + 2y - 26 = 0; 6x + y - 31 = 0$$

5. Attempt the following (5 marks each) :

10

(a) Explain Permutation and Combination.

(b) Calculate coefficient of correlation from the following data :

X	10	12	13	17	18
Y	5	6	7	9	13

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NEPJK—302—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

DATA SCIENCE

Paper—SDSCCP-1202

(Data Analytics with Python Part-I)

(Saturday, 11-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

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 **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 questions (**2.5** marks each) :

10

(a) Define Data Analytics. Explain need and applications in short.

(b) What are Loops ? Explain there types with example.

P.T.O.

- (c) Explain List datatype with their methods.
- (d) Explain Numpy array slicing with example.
2. Attempt the following questions (5 marks each) : 10
- (a) Describe Mathematical Operations on arrays with example.
- (b) Explain Customizing basic plots concept with example.
3. Attempt the following questions (5 marks each) : 10
- (a) Explain Grouping concept in Pandas with example.
- (b) Describe Handling Duplicate Data concept.
4. Attempt the following questions (5 marks each) : 10
- (a) Explain SciPy and its submodules in detail.
- (b) Describe Generator and Generator Expression with example.
5. Attempt the following questions (5 marks each) : 10
- (a) What is Random number generation in Numpy ? Explain with examples.
- (b) Explain Array shape manipulation and broadcasting with examples.

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NEPJK—303—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP Pattern)

DATA SCIENCE

Paper—SDSCMT-1201

(Analyzing Data with SQL)

(Wednesday, 15-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

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 is the use of LIMIT in SQL ?
 - (b) What is Where Clause in SQL ?
 - (c) Explain AND or NOT.
 - (d) Define Foreign Key.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Explain full join.
 - (b) Explain Date functions.
3. Attempt the following (5 marks each) : 10
- (a) Write a query to display the top 3 highest-paid employees.
 - (b) What are Stored Procedures ? Write an example.
4. Attempt the following (5 marks each) : 10
- (a) Explain the difference between WHERE and HAVING clauses.
 - (b) What is Distinct ? Write an example.
5. Attempt the following (5 marks each) : 10
- (a) Write a query using Subquery to find the second-highest salary.
 - (b) Explain different types of SQL joins with examples.

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HA—16—2026

FACULTY OF HUMANITIES

B.A. (NEP) (Fourth Semester) EXAMINATION

APRIL/MAY, 2026

ENGLISH (Compl.)

(Comprehension and Grammar-II)

(Monday, 6-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

(ii) Question No. 1 is compulsory.

(iii) Solve any *two* questions from Question Nos. 2 to 5.

1. Write short notes on :

10

(a) Character sketch of Ali

(b) The quarrel between Malasha and Akoulya

(c) Concept of equality in 'The Mountain and the Squirrel'.

(d) Uses of 'would'.

P.T.O.

2. Discuss the theme of loneliness and grief in the story 'Letter' by Dhumketu. 10
3. Justify the title 'Little Girls Wiser than Men'. 10
4. 'There will come soft Rains' describe the dangers of technology obsessed society. Discuss. 10
5. Explain with suitable examples the uses of modal auxiliaries 'can', 'could', 'may' and 'might'. 10

This question paper contains 2 printed pages]

HA—1004—2026

FACULTY OF ARTS/COMMERCE/SCIENCE

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

APRIL/MAY, 2026

VALUE EDUCATION

VECEVS-1251

(Environmental Studies)

(Compulsory)

(Thursday, 2-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

सर्व प्रश्नांना समान गुण आहेत.

(ii) Question No. 1 is compulsory.

प्रश्न क्रमांक 1 अनिवार्य आहे.

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

प्रश्न क्र. 2 ते प्रश्न क्र. 5 कोणतेही दोन प्रश्न सोडवा.

1. Write short notes on the following (2.5 marks each) :

10

खालील प्रश्नांवर थोडक्यात टिपा लिहा (प्रत्येकी 2.5 गुण) :

(a) Flood

पूर

(b) Soil erosion

जमिनीची धूप

P.T.O.

- (c) Food web
अन्नजाळे
- (d) Deforestation.
जंगलतोड.
2. Explain the renewable and non-renewable resources with suitable examples. 10
क्षयक्षम व अक्षयक्षम साधनसंपत्ती म्हणजे काय ? उदाहरणासह स्पष्ट करा.
3. Define environment. Discuss the need for public awareness in environmental protection. 10
पर्यावरणाची व्याख्या लिहा. पर्यावरणाच्या संरक्षणात जनजागृतीची गरज यावर चर्चा करा.
4. What is water pollution ? Describe the causes and effects of water pollution. 10
जल प्रदूषण म्हणजे काय ? जल प्रदूषणाची कारणे व परिणाम विशद करा.
5. Discuss in detail energy flow in ecosystem. 10
परिसंस्थेतील उर्जाप्रवाह याची सविस्तर चर्चा करा.

This question paper contains 2 printed pages]

HA—26—2026

FACULTY OF HUMANITIES

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

APRIL/MAY, 2026

HINDI (MIL)

Paper-IV—HHINMIL-1251

(गद्य विविधा भाग-2)

(Wednesday, 8-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

N.B. :— (i) प्रश्न क्रमांक 1 अनिवार्य है।

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

(iii) सभी प्रश्नों के अंक समान हैं।

1. टिप्पणियाँ लिखिए (प्रति टिप्पणी 2½ अंक) :

10

(अ) राकेश अचल का व्यक्तित्व कृतित्व

(ब) रेडियो नाटक विधा का परिचय

(क) 'पत्थरबाबू' कहानी का उद्देश्य

(ड) 'अठतल्ले से गिर गए खेत बाबु' कहानी का रतन

P.T.O.

निम्नलिखित में से किन्हीं दो (2) प्रश्नों के दीर्घोत्तरीय उत्तर लिखिए :

2. 'सिन्दबाद की अन्तिम यात्रा' की मूल संवेदना स्पष्ट कीजिए। 10
3. 'संस्कृति का स्वरूप' लेख का आशय प्रस्तुत कीजिए। 10
4. 'सूर्यास्त के पहले' रेडियो नाटक में मानवीय संवेदना को बताइए। 10
5. 'पत्थरबाज' कहानी में असलम का चरित्र-चित्रण कीजिए। 10

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HA—27—2026

FACULTY OF ARTS/COMMERCE/SCIENCE

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

APRIL/MAY, 2026

MARATHI (MIL)

(AECMAR-1251)

(मराठी भाषिक उपयोजन-IV)

(Wednesday, 8-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

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

(iii) सर्व प्रश्नांना समान गुण आहेत.

1. पुढील टिपा थोडक्यात लिहा :

10

(i) सूत्रसंचालनाचे स्वरूप

(ii) चरित्रात्मक मुलाखत

(iii) टिप्पणी लेखन—संकल्पना

(iv) रोजनिशी लेखनाची भाषा.

P.T.O.

2. प्रभावी सूत्रसंचालकाचे गुणविशेष सविस्तर लिहा. 10
3. मुलाखत म्हणजे काय ते सांगून मुलाखतीला सामोरे जाताना कोणती काळजी घ्यावी ते स्पष्ट करा. 10
4. टिप्पणी लेखनाचे महत्व विशद करा. 10
5. रोजनिशी लेखनाचे विशेष स्पष्ट करा. 10

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NEPJK—401—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP Pattern)

COMPUTER SCIENCE

Paper—SDSCCP-1252

(Programming with R)

(Friday, 10-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

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

(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

(i) Explain `readline()` and `print()`.

(ii) Explain function in R.

P.T.O.

- (iii) Write factor levels.
- (iv) Explain indexing in R.
2. Solve the following (each **5** marks) : 10
- (a) Write steps for installation of R.
- (b) Explain arithmetic and logical operators in R with example.
3. Solve the following (each **5** marks) : 10
- (a) Explain break and next statement in R with example.
- (b) Explain local *vs* global variable with example.
4. Solve the following (each **5** marks) : 10
- (a) Write exporting data with write.csv() and write.table() with example.
- (b) Explain indexing and subsetting data.
5. Solve the following (each **5** marks) : 10
- (a) Explain group_by() and summarize() with example.
- (b) Explain line charts and boxplots with example.

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

NEPJK—402—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP-2020)

COMPUTER SCIENCE

Paper—SDSCCT-1251

(Data Analytics with Python (Part-II))

(Monday, 13-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—30

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

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

(iii) Solve any *two* from Q. Nos. **2** to **5**.

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

- (a) Define Exploratory Data Analysis (EDA) and mention its goals.
- (b) What is Datetime Indexing ? Explain its use with an example.
- (c) What is a Heatmap ? Where is it used in analytics ?
- (d) Explain Confusion Matrix and its four components.

2. Attempt the following questions :

- (a) Explain working with JSON and API data in Python.
- (b) Explain Seaborn pairplot and its purpose in statistical visualization.

P.T.O.

3. Attempt the following questions :
 - (a) Explain EDA workflow step-by-step.
 - (b) Explain interactive plots using Plotly and mention two benefits.
4. Attempt the following questions :
 - (a) Explain feature scaling techniques—MinMaxScaler and StandardScaler.
 - (b) Explain cross-validation. Why is it used in Machine Learning ?
5. Attempt the following questions :
 - (a) Explain PCA (Principal Component Analysis) for dimensionality reduction.
 - (b) Describe types of Data Analytics : Descriptive, Diagnostic, Predictive, Prescriptive.

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

NEPJK—403—2026

FACULTY OF SCIENCE AND TECHNOLOGY

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

APRIL/MAY, 2026

(NEP Pattern)

COMPUTER SCIENCE

Paper—SDSCMT-1251

(Mathematics for Data Science)

(Thursday, 16-4-2026)

Time : 2.00 p.m. to 4.00 p.m.

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 Set.

(b) Describe Proposition and Compound statement.

(c) Explain Function.

(d) Explain connected graph.

P.T.O.

2. Attempt the following (5 marks each) : 10
- (a) Explain types of sets with examples.
- (b) Construct truth table :
- $$\sim p \vee (q \wedge r)$$
3. Attempt the following (5 marks each) : 10
- (a) Let $A = \{1, 2, 3, 4\}$, $B = \{4, 5, 6\}$, $C = \{5, 6\}$, Verify :
- (i) $A \times (B \cap C) = (A \times B) \cap (A \times C)$
- (ii) $A \times (B \cup C) = (A \times B) \cup (A \times C)$.
- (b) Explain Relation with example.
4. Attempt the following (5 marks each) : 10
- (a) Describe walk, path, circuit.
- (b) Determine $q \rightarrow (p \vee q)$ is a tautology.
5. Attempt the following (5 marks each) : 10
- (a) Explain Graphs.
- (b) Define Cartesian product and show that $A \times B \neq B \times A$.