

Total No. of Printed Pages:01

SUBJECT CODE NO:-CA-02-2025
FACULTY OF SCIENCE AND TECHNOLOGY
EXAMINATION WINTER 2025
B.A/B.Com/B.Sc (NEP) (SEM-III)
English-Compulsory-(Compulsory English)
Comprehension & Grammar-I

[Time: 2:00 Hours]

[Max.Marks:30]

“Please check whether you have got the right question paper.”

- N.B. 1) Solve all Questions.
2) Question 1 is Compulsory
3) Solve any Two questions from Q.2 to Q.5

- Q.1** Attempt the following short notes: **10**
a) Agarwal
b) Swami's fabricated tales
c) Choices and perplexity in The Road Not Taken.
d) Different forms of 'Tobe'
- Q2** How does Dilip Chitre bring out the bitter sense of loneliness and generation gap in the poem Father Returning Home? **10**
- Q3** Write in your own words the complexities of the parent-child relationship in the short story 'Father's Help.' **10**
- Q4** Discuss The Road Not Taken as a metaphor of decision-making and cover its consequences in life. **10**
- Q5** Write a detailed note on main verbs. **10**

This question paper contains 2 printed pages]

CA—18—2025

FACULTY OF ARTS/COMMERCE/SCIENCE

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

NOVEMBER/DECEMBER, 2025

MARATHI (MIL)

Paper AECMAR-1201

(मराठी साहित्य—III)

(Saturday, 15-11-2025)

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

Time—2 Hours

Maximum Marks—30

N.B. :— (1) प्रश्न पहिला अनिवार्य आहे.

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

(3) सर्व प्रश्नांना समान गुण आहेत.

1. पुढील टिपा थोडक्यात लिहा :

10

(i) क्रांतीदर्शी सावित्रीमाय

(ii) 'मरीआईचा गाडा' मधील सटवाजी

(iii) महात्मा फुले आणि बहुजन शिक्षणाचा ध्यास

(iv) शहीद भगतसिंह यांची तत्त्वनिष्ठा.

P.T.O.

2. 'केशवसुतांची 'नवा शिपाई' ही कविता मानवतावादाची पेरणी करणारी आहे.' विशद करा. 10
3. भास्कर चंदनशिव यांच्या 'मेखमारो' या कथेतील संघर्ष तुमच्या शब्दांत लिहा. 10
4. 'आसन्नमरण काळी राणी' या ललित लेखातील त्याग आणि भोग यांच्यातील अंतर्विरोध स्पष्ट करा. 10
5. 'लोकांसाठी चालणारे राज्य हवे!' या भाषणातून डॉ. बाबासाहेब आंबेडकर यांनी कोणते विचार मांडले आहेत, ते लिहा. 10

This question paper contains 2 printed pages]

CA—17—2025

FACULTY OF HUMANITIES

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

NOVEMBER/DECEMBER, 2025

HINDI (MIL)

Paper HHINMIL-1201

(गद्य विविधा विभाग-I)

(Saturday, 15-11-2025)

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

Time—2 Hours

Maximum Marks—30

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

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

(3) सभी प्रश्नों के अंक समान हैं।

1. टिप्पणियाँ लिखिए (प्रति टिप्पणी 2½ अंक) :

10

(अ) नुक्कड़ नाटक विधा का परिचय

(ब) 'भारत का मुकुट' निबंध का आशय

(क) सोशल मीडिया

(ड) उषा प्रियंवदा का जीवन-परिचय।

P.T.O.

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

2. मॉरीशस में भारतीय संस्कृति, सभ्यता और परंपराओं के गहरे जुड़ाव और संरक्षण को 'लघु भारत मॉरीशस का संस्कृति-प्रेम' यात्रा-वृत्तान्त में हुआ है, स्पष्ट कीजिए। 10
3. 'पूस की एक और रात' कहानी का उद्देश्य लिखिए। 10
4. 'प्रसाद के नाम पत्र' की मूल संवेदना स्पष्ट कीजिए। 10
5. 'और वो सुघरका....' संस्मरण का आशय लिखिए। 10

Total No. of Printed Pages:02

SUBJECT CODE NO:-NEPGX-301-2025
FACULTY OF SCIENCE AND TECHNOLOGY
EXAMINATION WINTER 2025
B.SC (SECOND YEAR) (SEM-III)
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
DATA ANALYTICS WITH PAYTHON

[Time: 2:00 Hours]

[Max.Marks:30]

“Please check whether you have got the right question paper.”

- N.B. I. Question paper consists of 5 questions, each of 10 marks.
II Question No. 1 is compulsory
II Solve any two from Q. 2 to Q.5

Q.1 Attempt the following (2.5 Marks Each)

10

- a) What is Object-Oriented Programming? Explain with examples.
- b) Explain arrange, linspace, reshape and slicing functions of NumPy with examples.
- c) Define Data Transformation in Pandas with one use case.
- d) What is Data Analytics and Data Science?

Q.2 Attempt the following question:

10

- a) What is inheritance in Python? explain with an example.
- b) Write a note on Dashboards with Plotly Dash with example

Q.3 Attempt the following question:

10

- a) Explain Data Merging, Joining, and Concatenation in Pandas.
- b) Write a program to create a line plot and bar plot with plotly using suitable data

Q.4 Attempt the following question:

10

- a) Describe styling and themes available in Seaborn.
- b) Write a program to demonstration of various uses to NumPy

Q.5 Attempt the following question:

10

- a) Explain Simple and Multiple Linear Regression
- b) Write a program to demonstrates Saving Plots and Subplots

Total No. of Printed Pages:02

SUBJECT CODE NO- NEPGX-302-2025
FACULTY OF SCIENCE AND TECHNOLOGY
EXAMINATION WINTER 2025
B.SC (SECOND YEAR) (SEM-III)
AI&ML
ANALYZING DATA WITH POWER BI

[Time: 2:00 Hours]

[Max.Marks:30]

“Please check whether you have got the right question paper.”

- 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 dairy and electronic calculator is not permitted.

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

- (a) Explain Sum Dax function with an example.
- (b) Explain Pie chart.
- (c) List any three commonly used Power BI visualizations.
- (d) Write a short note on filters.

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

- (a) Explain how to import data from CSV file.
- (b) How to create dashboard from Reports?

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

- (a) What is Dax?
- (b) Explain SAMEPERIODLASTYEAR Time intelligence Dax Function.

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

- (a) Explain the process of importing Custom Visuals from the marketplace.
- (b) Explain Divide and If Dax functions in Power BI.

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

10

- (a) What is Difference Between Measures and calculated column.
- (b) How to Publish reports from Desktop to Service?

Total No. of Printed Pages:02

SUBJECT CODE NO- NEPGX-303-2025
FACULTY OF SCIENCE AND TECHNOLOGY
EXAMINATION WINTER 2025
B.Sc. (SECOND YEAR) (SEM-III)
ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING
MATHEMATICS FOR AI AND ML

[Time: 2:00 Hours]

[Max.Marks:30]

“Please check whether you have got the right question paper.”

- 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 dairy and electronic calculator is not permitted.

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

- (a) Explain Power Set.
- (b) Form the table for Connectives, Symbol, and Name corresponding to logical connective
- (c) Define Domain, range, and Co-domain with an example.
- (d) Explain a Bipartite Graph with an example.

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

- (a) Explain set and its types
- (b) If $A=\{1, 4, 7, 10\}$, $B=\{2, 4, 6, 7, 11\}$, $C=\{3, 5, 8, 9, 12\}$ and $U = \{X/X \in \mathbb{N}: 1 \leq x \leq 12\}$ then find
 - i) $A \cup B$
 - ii) $B \cap C$
 - iii) $A - B$
 - iv) $(B \cap C')$
 - v) $A \cap (B \cup C)$

Q.3 Attempt the following. (5 marks each)**10**

(a) Using truth tables examine whether each of the following statements is tautology, contradiction or contingency

i) $(P \wedge Q) \wedge (\sim P \vee \sim Q)$

ii) $[(P \vee Q) \vee R] \rightarrow [P \vee (Q \vee R)]$

iii) $[P \rightarrow (\sim Q \vee R)] \leftrightarrow \sim[P \rightarrow (Q \rightarrow R)]$

(b) Write the truth tables for any five logical connectives

Q.4 Attempt the following, (5 marks each)**10**

(a) Explain Function and its type.

(b) 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) $A \times (B \cup C) = (A \times B) \cup (A \times C)$

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

(a) Explain Degree of Vertex.

(b) Write note on walk, path and circuit.