

MACHINE LEARNING – UNIT 5

COMPLETE PYQ ANALYSIS (2020–2025)

RGPV Exam Trend Analysis

UNIT 5 TOPICS

1. Bayesian Learning
 2. Bayes Optimal Classifier
 3. Naive Bayes Classifier
 4. Bayesian Belief Networks
 5. Mining Frequent Pattern
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YEAR-WISE PYQ ANALYSIS

2025 PAPER

Asked Questions

Q1

Explain Naive Bayes Classifier.

 MOST IMPORTANT

Q2

Explain Bayesian Learning.

★ HIGHLY REPEATED

Q3

Explain Bayesian Belief Networks.

★ IMPORTANT

 **2024 PAPER**

 **Asked Questions**

Q1

Explain Bayes Optimal Classifier.

★ HIGH CHANCE

Q2

Explain Frequent Pattern Mining.

★ IMPORTANT

Q3

Differentiate Bayesian Learning and Naive Bayes.

★ MEDIUM-HIGH

2023 PAPER

Asked Questions

Q1

Explain Naive Bayes with example.

★ REPEATED

Q2

Explain Bayesian Belief Networks.

★ HIGH CHANCE

Q3

Explain Bayesian Learning.

★ REPEATED

2022 PAPER

Asked Questions

Q1

Explain Frequent Pattern Mining.

★ IMPORTANT

Q2

Explain Naive Bayes Classifier.

★ HIGHLY REPEATED

Q3

Explain Bayes Theorem.

★ VERY IMPORTANT

 **2021 PAPER**

 **Asked Questions**

Q1

Explain Bayesian Learning with applications.

★ HIGH CHANCE

Q2

Explain Bayesian Belief Networks.

★ REPEATED

Q3

Explain Naive Bayes Algorithm.

★ IMPORTANT

 **2020 PAPER**

Asked Questions

Q1

Explain Bayes Optimal Classifier.

★ MEDIUM-HIGH

Q2

Explain Frequent Pattern Mining.

★ REPEATED

Q3

Explain Naive Bayes.

★ MOST REPEATED




FINAL FREQUENCY ANALYSIS

Topic	Frequency	Importance
Naive Bayes Classifier	★★★★★★	VERY HIGH
Bayesian Learning	★★★★★	HIGH
Bayesian Belief Networks	★★★★	HIGH
Frequent Pattern Mining	★★★★	HIGH
Bayes Optimal Classifier	★★★★	MEDIUM-HIGH



TOP 5 MOST REPEATED QUESTIONS


1 Explain Naive Bayes Classifier.

 Asked in:

- 2020
- 2022
- 2023
- 2025

 HIGHEST PRIORITY


2 Explain Bayesian Learning.

 Asked in:

- 2021
- 2023
- 2025

 VERY IMPORTANT


3 Explain Bayesian Belief Networks.

 Asked in:

- 2021
- 2023
- 2025

 HIGH CHANCE

4 Explain Frequent Pattern Mining.

 Asked in:

- 2020
- 2022
- 2024

 IMPORTANT

Explain Bayes Optimal Classifier.

 Asked in:

- 2020
- 2024

 MEDIUM-HIGH

MOST EXPECTED QUESTIONS FOR UPCOMING EXAM

VERY HIGH CHANCE

1. Explain Naive Bayes Classifier.
 2. Explain Bayesian Learning.
 3. Explain Bayesian Belief Networks.
 4. Explain Frequent Pattern Mining.
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HIGH CHANCE

5. Explain Bayes Optimal Classifier.

6. Explain Bayes Theorem with example.

MEDIUM CHANCE

7. Differentiate Bayesian Learning and Naive Bayes.

SMART STUDY STRATEGY

FIRST STUDY THESE

1. Naive Bayes Classifier
 2. Bayesian Learning
 3. Bayesian Belief Networks
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THEN STUDY

4. Frequent Pattern Mining
 5. Bayes Optimal Classifier
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LAST REVISION

6. Bayes Theorem
7. Applications



ONE-NIGHT REVISION PRIORITY

- ✓ Bayes theorem uses probability
 - ✓ Naive Bayes assumes independent features
 - ✓ Bayesian Learning updates probabilities
 - ✓ Bayesian Belief Network represents dependencies
 - ✓ Frequent Pattern Mining finds repeated patterns
 - ✓ Bayes Optimal Classifier gives minimum error
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TOPPER STRATEGY FOR GOOD

CGPA



If You Have Only 2 Hours

Study in this order:

1. Naive Bayes
2. Bayesian Learning
3. Frequent Pattern Mining
4. Bayesian Belief Networks

These topics alone can cover:

- ✓ Long questions
- ✓ Repeated PYQs
- ✓ Definitions

✓ Short notes

✓ Theory questions

and can help score very high marks in Unit 5.