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|  **logo_unec** **AZƏRBAYCAN DÖVLƏT İQTİSAD UNİVERSİTETİ** |
| **BEYNƏLXALQ İQTİSADİYYAT MƏKTƏBİ** |
| **BEYNƏLXALQ İQTİSADİYYAT (İNGİLİS DİLLİ) KAFEDRASI** |

**PROBABILITY AND MATHEMATICAL STATISTICS**

**ANAR KAZIMOV**

**1029,1030**

**Exam**

1. Conditional probability. Independent events

2. Conditional probability. Total probability formula. Product rule.

3. Conditional probability. Product rule.

4. Contingency table. Probaility definition.

5. Conditional probability.

6. Basic probability definition.

7. Product rule.

9. Bayes’ formula. Total probability.

10. Product rule.

11. Bayes’ formula.

12. Product rule. Bayes’ formula.

13. Total probability formula.

14. Bayes’ formula.

15. Derive the formula of total/marginal probability.

16. Bayes’ formula.

17. Bayes’ formula.

18. Conditional probability.

19. Bernulli trials. Binomial probability.

20. Total probability.

21. Total probability.

22. Binomial probability.

23. Indepepndent events.

24. Binomial probability.

25. Binomial proability.

26. Find the mathematical expectation and variance for Puasson distribution.

27. Find the unknown constant in density function.

28. Find the probability according to normal distribution.

29. Find the expected value using its properties.

30. Find the second order centralized moment for exponential (power) distribution.

31. Find the probability for the given distribution function.

32. Find the binomial probability.

33. Find the probability for the given distribution function.

34. Write 3 sigma rule (Empirical rule).

35. Find the probability according to unifrom distribution.

36. Find the probability for the given density function.

37. Find the probability according to Puasson distribution.

38. Find the binomial probability.

39. Find the standart deviation using density function.

40. Find the probability according to normal distribution.

41. Find the expected value of binomial distribution.

1. For the given distribution function of continuous random variable find the probability.
2. Find the variance (binomial distribution).
3. Use exponential distribution to find the probabilities.
4. Use function .
5. Find the probability according to Puasson distribution.
6. Compute the variance and standard deviation of the random variable.
7. Give a mathematical expression for the probability density function (uniform distribution).
8. For the given distribution table compute the expected value.
9. For the given distribution table compute the expected value.
10. From distribution table of 2 dimensional random variable, write table of component X.
11. The density function for the two dimesnional independent random variable
12. Find the second order centralized moment for exponential (power) distribution.
13. Find the second order centralized moment for exponential (power) distribution.
14. Find the second order centralized moment for exponential (power) distribution.
15. Write conditional distribution for X.
16. Write conditional distribution for X.
17. Write conditional distribution for X.
18. For the given distribution function of 2 dimensional random variable find the probability.
19. The density function for the two dimensional continuous random variable.
20. Find the third order raw moment.
21. Cumulative distribution function for two dimensional random variable.
22. Cumulative distribution function for two dimensional random variable.
23. Cumulative distribution function for two dimensional random variable. Probability.
24. Cumulative distribution function for two dimensional random variable.
25. Cumulative distribution function for two dimensional random variable.Probability.
26. Cumulative distribution function for two dimensional random variable.
27. Write the distribution of component.
28. Write the distribution of component.
29. Write conditional distribution for Y given X.
30. Write conditional distribution for Y given X.
31. Write conditional distribution for Y given X.
32. Find density function of component X.
33. Correlation coefficient.
34. Covariance of two dimensional random variable.