

Questions for the exam

1. Approaches to the definition of risk. Risk theories.
2. Essence and features of entrepreneurial risks.
3. Risk factors.
4. Risk functions.
5. Risk classification
6. Risk classification criteria.
7. Internal and external risks.
8. Pure and speculative risks.
9. Production risk.
10. Commercial risk.
11. Financial risk.
12. Investment risks.
13. Force - major risks.
14. Risk management concepts
15. Risk assessment model: risk identification, risk analysis in terms of the likelihood of occurrence
16. Impacts or neutralize them,
17. Development of alternatives for responding to possible risks,
18. Analysis of residual risks.
19. Risk monitoring.
20. System of risk management standards.
21. Risk identification techniques
22. Documentation analysis.
23. Brainstorm.
24. Identification of the root cause.
25. SWOT analysis.
26. Methods using diagrams.
27. Expert review.
28. BPEST analysis and PESTLE analysis
29. Statistical and probabilistic methods of risk assessment: probability of occurrence of a risk
30. event; distribution functions of a random variable characterizing a risk event; the probability of
31. hitting a random variable characterizing a risk event in a given interval; probability of deviation
32. from the mean value; expected value; dispersion; standard deviation; the coefficient of
33. variation.
34. 2. Construction of sample distribution functions for risk assessment. Use of Poisson, Bernoulli,
35. Gauss, Boltzmann distributions for risk assessment.
36. Role and place of normal distribution in risk assessment, three sigma rule in risk assessment.
37. Simulation of random walks, Wiener process, Ito process.
38. Construction of a decision matrix and evaluation of risk-containing strategies.
39. Modeling the behavior of risky objects through random walk models.
40. Using the binomial model for risk assessment.

41. Value at risk (VaR).
42. Methods for building risk profiles.
43. The concept of stress testing; sensitivity analysis,
44. scenario analysis;
45. decision tree;
46. Features of fuzzy-multiple risk assessment models.
47. Analysis of alternatives by the fuzzy preference relation method.
48. Bankruptcy risk assessment model. Building a fuzzy-multiple model for assessing the risk of bankruptcy.
49. The principle of expected value and its inadequacy. Criteria for selection under risk conditions.
50. Modified Barrois insurance model. The Barrois insurance model based on the principle of expected utility.
51. Types of utility functions. Selection of an analytical expression for the utility function.
52. Models of risks and principles for calculating premiums.
53. Probability of ruin as a traditional measure of risk. Net premium and security load.
54. Traditional actuarial principles for the formation of premiums.
55. Models of individual and collective risk.