



Ministry of Science and Higher Education of the Russian Federation  
Peter the Great St. Petersburg Polytechnic University

**Institute of Industrial Management, Economics and Trade**

APPROVED

Director of the Institute of Industrial  
Management, Economics and Trade

  
\_\_\_\_ V.E. Shchepinin  
« 17 »  2024

**PROGRAM**

**of the admission exam for the applicants to the master's degree  
in the field of study / educational program**

**38.04.02 Management/**

**38.04.02\_30 Развитие международного бизнеса (международная  
образовательная программа) / International Business Development  
(International Educational Program)**

---

*Code and name of the field of study / educational program*

St. Petersburg  
2024

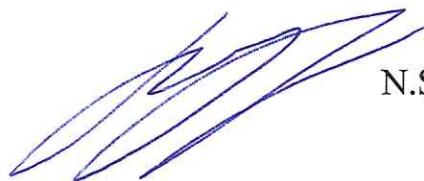
## ABSTRACT

The program includes a list of topics (questions) on subjects of the basic part of the professional block in the field of **38.03.02 Management**, which are included in the content of the admission exam for the master program.

The admission exam is evaluated on a **100-point scale** and consists of three subjects:

- Management;
- Marketing;
- Enterprise's Economics.

Supervisor of the Educational Program



N.S. Lukashevich

Compiled by:

Associate Professor



M.G. Livintsova

Associate Professor



A.I. Klimin

Associate Professor



N.S. Lukashevich

Associate Professor



S.V. Pupentsova

Associate Professor



I.V. Skvortsova

Associate Professor



V.V. Wilken

Associate Professor



Z.L. Simakova

The program is reviewed and recommended for publication by the methodological council of the **Institute of Industrial Management, Economics and Trade** (protocol № 3 date «16» october 2024).

# **1. SUBJECTS INCLUDED IN THE INTERDISCIPLINARY EXAM PROGRAM**

## **1.1. Management.**

## **1.2. Marketing.**

## **1.3. Enterprise's Economics.**

# **2. CONTENT OF SUBJECTS**

## **2.1. Management**

Topics (questions):

1. Management's schools and approaches.
2. Elaboration of management in Russia.
3. Objective requirements of the appearance of management as a split up type of movement. Management's functions and assignments.
4. Management of socio-economic systems (organizations).
5. Management as an information process, subject and object of management, management function.
6. Function's environment of an enterprise. The role of internal and external environmental factors in enterprise management.
7. Basic principles of management. System laws in enterprise management.
8. Management pyramid. Enterprise policy.
9. Modern concepts of enterprise movement and areas of activity management (late XX century-early XXI century).
10. Concept and attributes of the organizational culture of an enterprise.
11. Sorts and assignments of organizational cultures.
12. Quality management. Lean manufacturing. Reduction of losses.
13. Concepts of strategic management and planning. Sorts of development strategies.
14. Stages of strategic management: mission, vision, goals, strategic analysis and strategy development.
15. Types of plans in management. Planning principles. Evaluation of planning quality.
16. Aggregate methods in planning. Pure and mixed aggregate planning strategies.
17. Regulation and control in the management system. Forms and stages of control.
18. Modeling of management situations and creation of management decisions.
19. Identification and analysis of problems. Methodological foundations of the process of elaborating and creating managerial decisions.
20. Characteristics of the decision-making environment. Making decisions in conditions of uncertainty.

21. Risk assessment when creating managerial decisions. Risk's division.
22. Justification of decision-making using the "Payment Matrix" and "Decision Tree" methods. Decision-making criteria. Sensitivity analysis for the decision being made.
23. Group and individual expert decision-making methods (Delphi method, brainstorming, 6-3-5, synectics, morphological analysis, etc.).
24. Methodology for conducting individual one-time expert assessment.
25. Priority of solved assignments. Ranking. Ratings of the enterprise, state, etc.
26. Division of an authority by levels of government. Collective management branches.
27. Delegation of assignments and responsibilities. Delegation of authority: pros and cons.
28. Typical organizational structures of enterprise management (pros and cons, application). Principles and methods of building organizational structures of enterprise management.
29. Integration processes in management. Efficiency of integration and diversification processes.
30. Motivation of personnel activity in management. Creation of the motivation system.
31. Material and non-material labor incentives.
32. Meaningful theories of subordinates' motivation to treatises (A. Maslow, D. McClelland, F. Herzberg).
33. Procedural theories of subordinates' motivation to treatises (V. Vroom's theory of expectations, J. S. Adams' theory of justice, L. Porter – E. Lawler's complex model of motivation).
34. Typological theories of motivation (D. McGregor, V. I. Gerchikov).
35. General principles of personnel management. Soft and rough principles of personnel management.
36. Organization of personnel management. System of personnel management assignments.
37. Formalized personnel's certification.
38. Definition of leadership in the management system, leader and manager.
39. Management of formal and informal groups: formation of groups, characteristics, management principles.
40. Approaches to leadership. Situational models in leadership theory. Style of management.
41. Leadership: power, sources and forms of power.
42. The nature of organizational conflict. Causes, sources, and sorts of conflicts.
43. Phases and stages of conflict development.
44. Methods of managing and overcoming conflicts.
45. Conflict of innovations in the organization.

### Study Literature:

1. Егоршин, Александр Петрович. Стратегический менеджмент: учебник для студентов вузов, обучающихся по направлениям «Менеджмент» и «Управление персоналом» / А. П. Егоршин, И. В. Гуськова. 2-е изд., перераб. и доп. Москва: ИНФРА-М, 2018. 290 с.
2. Петров, А. Н. Менеджмент в 2 ч. Часть 1. : учебник для вузов / А. Н. Петров ; ответственный редактор А. Н. Петров. 2-е изд., испр. и доп. Москва : Издательство Юрайт, 2021. 349 с.
3. Менеджмент в 2 ч. Часть 2. : учебник для вузов / А. Н. Петров [и др.] ; ответственный редактор А. Н. Петров. 2-е изд., испр. и доп. Москва : Издательство Юрайт, 2021. 299 с.
4. Daft Richard L. Management 9th ed. Cengage Learning, 2009. 704 p.
5. Материалы для подготовки к экзамену <https://disk.yandex.ru/d/H5tNINpIP0rheg>

## 2.2. Marketing

### Topics (questions):

1. The notion of marketing. Marketing concepts, areas and models. Marketing mix model ("4P").
2. Strategic and operational marketing according to J.-J. Lambin.
3. External and internal marketing environment. Micro and macro environment. Marketing audit. SWOT Analysis.
4. Development of marketing forms: production, commodity, sales, direct, holistic marketing: socially oriented, internal, integrated "4P" and "4C", relationship marketing
5. The concept of performance marketing: consumer capital, brand equity, socially responsible marketing.
6. Definition of a market. Demand, supply, price. Market types. Shift of supply and demand curves due to the influence of non-price factors. Geographical and commodity markets. Market capacity. Market share. Formulae to calculate market share.
7. Extensive and intensive ways to increase market share. The simplest formula to calculate market capacity for consumer goods. Methods to forecast market capacity.
8. Market as a set of heterogeneous buyers. Market segmentation. Areas of B2C and B2B market segmentation. Target market. Market window. Market niche. Optimal segment.
9. Differentiation. Areas of differentiation. Positioning. Definitions. Price quality matrix. Positioning options offered by E. Rice and J. Trout. Marketing types according to segmentation.
10. Competitiveness. Competitiveness of a company and a product. Definitions. Competitive advantages. Strategic indicators of the competitiveness of a company as a whole and areas for its evaluation. Key competences. Strategic and operational strategic advantage.
11. Competitiveness forces according to M. Porter. Strategic areas of

competitiveness according to M. Porter.

12. Strategic decisions in marketing. Diversification. I. Ansoff's Product-Market matrix. Types of industries.

13. Market subject categories. Consumer market and industrial commodity market (B2C и B2B). Principles of marketing with respect to the consumer (buyer).

14. A model of factors that affect consumer behavior in the B2C market according to F. Kotler.

15. Cultural factors that determine the behavior of buyers in the consumer market according to F. Kotler. Culture, values, subcultures. Social factors that determine the behavior of buyers in the consumer market.

16. Personal factors that determine the behavior of buyers in the consumer market according to F. Kotler. Stages of the family life cycle.

17. Psychological factors that determine the behavior of buyers in the consumer market according to F. Kotler. A. Maslow's hierarchy of needs. The "perception-assimilation- belief-attitude" model.

18. Psychographics and lifestyle models. VALS2 model.

19. Types of consumer enterprises. Types of purchases on behalf of enterprises. Features of decisions for various types of purchases. Utilized horizontal and vertical sales for enterprise buyers. The purchasing center at the enterprise. Participants of the purchasing process.

20. A model of factors that affect the behavior of buyers on behalf of enterprises. Decision-making process related to purchasing.

21. Marketing consumer studies. Types of marketing studies. The subject of marketing studies. The scheme of stages of marketing consumer studies (basic stages and sub-stages).

22. Aims of marketing studies. Types of aims. Requirements for aims. Analysis of internal reports, external sources and external conditions during aim setting. Study plan. General population and sample. Communication methods. Questionnaire for data gathering. Types of questions. NPS index.

23. Definition of goods. Goods and services. Classification of services. Two-way marketing in services. Three layers of goods. Classification of goods (basic and complementary).

24. Brand. Dual essence of brands: brand for manufacturer (seller) and brand for buyer (consumer). T. Gad's 4D Branding model.

25. Brand name. Brandmark. Logo. Trademark. Definitions of brand.

26. Brand policies. Examples of companies that use various brand policies. Advantages and disadvantages of various brand policies.

27. Packaging. Three layers of packaging. Service support.

28. Commercial variety of goods and nomenclature. Features of the variety of goods and nomenclature. Analysis of the variety of goods. The notion of business portfolio.

29. Strategic business element. BCG matrix for strategic analysis. ABC analysis. Seasonality.

30. Life cycle of goods. Stages of the life cycle of goods. Features of the stages of the life cycle of goods. Variety of curves of the life cycle of goods. Stages of

development of new goods.

31. Competitiveness of goods. Single comparative indicators of competitiveness or quality of products. Integral (complex) additive indicator of product competitiveness or quality.

32. Definition of a price. Stages of pricing. Pricing strategies. Pricing aims and objectives. Examples of aims.

33. Elasticity of demand depending on the price. Formula of interval elasticity and elasticity at the upper limit. Elasticity types.

34. Interrelation of proceeds amounts and elasticity. Ranges of prices and the role of the seller.

35. Cost price. Fixed and variable costs. Proceeds. Profit. Break-even point. Profit target. Target sales volume in kind at a known price and target profit. Determination of cost-based prices on the basis of the target profit and a known volume of sales in kind.

36. Profitability of cost and profitability of sales. Optimal price in case of elastic demand.

37. Competitiveness types from the point of view of a number of sellers, differentiation and product quality, price levels. Interrelationship of market share and the amount of profit.

38. Possible pricing model. Pricing methods classification. Cost methods. Positioning-based (competitiveness) methods. Consumer behavior study-based methods. Mixed pricing methods. Final pricing.

39. The structure of consumer goods and industrial commodity distribution channels. Hybrid distribution channels. Vertical and horizontal marketing systems.

40. Types of distribution channels according to a number of marketing mediators. Market coverage formula. Types of sales outlets at B2C markets. Off-, on-trade outlets, HoReCa.

41. Marketing logistics (commodity movement). Functions of marketing logistics.

42. Components of the promotion (marketing communications) complex. Basic (main and secondary) and complementary parts of the complex according to the classic composition. Integrated marketing communications. ATL, BTL, TTL advertising.

43. Strategic factors that determine the composition of the marketing communications complex (6 factors).

44. Definition of personal sale. Types of activities of sales force. Sale process stages. Sales force management stages.

45. Rating and control of sales force activities.

46. Organizational structures of sales force management.

47. Definition of an advertisement. Advertising-related decisions. Advertising influence system. Advertising effectiveness. Three indicators of communicative advertising effectiveness.

48. Means of advertising (ATL and BTL, mass media and non-mass media). Composition. Advantages. Disadvantages. The scope of application.

49. Advertising budget. Factors that affect the amount of the advertising budget.

Methods to define the amount of the advertising budget.

50. Sales promotion. Dual nature of promotion. Promotion areas. Promotion methods aimed at end consumers. Promotion methods aimed at end consumers classification. Sales promotion and the company's own sales force incentive methods.

51. Effectiveness of sales promotion. Types of fluctuations in sales volumes during promotion. Budget for promotion and incentive measures. Composition of promotion costs.

52. Definition of public relations. Role and position of public relations in the company. Importance of public relations for enterprises of various types of activity. Methods of conducting public relations activities.

#### Study Literature:

1. Ламбен Ж-Ж. Менеджмент, ориентированный на рынок / Пер. с англ. Под ред. В.Б. Колчанова. – СПб.: Питер, 2016. 720 с.

2. Kotler P., Armstrong G. Principles of Marketing. 17th. ed. Global Edition. Pearson, 2017. 736 p

3. Материалы для подготовки к экзамену. Режим доступа: <https://goo.su/Oynkhqb>

### **2.3. Enterprise's Economics**

Topics (questions):

1. The enterprise and its role in society. Goals of the establishment and operation of the enterprise. Resources in achieving the enterprise's purposes. Industrial and market relations of the enterprise. Entrepreneurial movement.
2. Sorts of enterprises and their classification in the Russian Federation.
3. Types and forms of entrepreneurial activity.
4. Organizational and economic forms of organizations (enterprises). The procedure for forming and liquidating an enterprise.
5. Social forms of production organization: concentration, cooperation, specialization.
6. Production process: concept, content, types. Principles of organization of the production process. Production cycle.
7. Sorts of production organization (single, serial, mass).
8. Production structure of the enterprise, types of production structure: subject, technological, mixed. Enterprise's general plan.
9. The enterprise's production program, its sections and indicators. Commodity, gross output, volume of products sold, volume of gross and intra-factory turnover.
10. Production capacity of the enterprise. Production capacity utilization indicators. Average annual, actual and projected production capacity.
11. Enterprise's resources. Non-current assets.



12. Fixed funds of the enterprise. Classification of fixed funds. Active and passive parts of fixed funds. Accounting of fixed funds in physical and monetary terms.
13. Types of assessment (cost) of basic production assets of the enterprise.
14. Depreciation of the company's fixed production assets, types of depreciation.
15. The concepts of depreciation of the basic production assets and the depreciation fund. Methods for calculating the depreciation of the basic production assets.
16. Indicators for tracking the movement of basic production assets. Performance indicators for using the basic production assets. Improving the use of basic production assets.
17. Current assets of the enterprise: concept, composition, structure and turnover.
18. Normalized floating capital of the enterprise. Floating capital standards for raw materials, basic materials, semi-finished products, auxiliary materials, containers, spare parts, incomplete production, and finished products.
19. Floating capital efficiency indicators. Acceleration of turnover.
20. The concepts of "labor resources" and "labor potential". Enterprise personnel – main characteristics, classification according to various criteria.
21. Indicators of personnel movement at the enterprise. Staff turnover.
22. Labor productivity – indicators and methods of their calculation. Ways to increase labor productivity at the enterprise.
23. Organization of labor remuneration at the enterprise. Form and systems of remuneration. Tariff system of labor remuneration and its characteristics.
24. Time-based payment system.
25. Piecework payment system.
26. Labor rationing, its essence and tasks. Rationing and payment of labor.
27. Enterprise costs. The nature and classification of costs.
28. Current expenses of the enterprise. Grouping of running costs by economic elements and its value.
29. Current expenses of the enterprise. Classification of costs in relation to the volume of output: characteristics of conditionally variable, conditionally fixed and total costs. The concept of marginal costs.
30. The concept of production cost. Cost structure by calculation items.
31. Pricing policy of the enterprise: concept and goals. Price and types of prices. Pricing and sorts of markets. Price-forming factors.
32. Market supply and demand. Price and non-price factors that determine supply and demand. Market equilibrium. Price discrimination and efficiency.
33. Stages of forming prices for the company's products.
34. Methods and models of pricing for the company's products.
35. The concept of effect and efficiency. Enterprise profit-concept and types. Net profit generation scheme. Directions for using net profit.
36. The cost-volume-profit relationship (CVP analysis). Break-even analysis.
37. Profitability indicators – concept and purpose. Types of profitability. Ways to improve profitability indicators.
38. The concept of enterprise competitiveness. Competitive factors.
39. The concept of product competitiveness. Competitive factors.

40. The concept and indicators of product quality. Quality management. Quality loop.
41. Investment activity of the enterprise. Concept and classification of investments. Investment cycle.
42. Sources of financing for investment activities.
43. The concept and purpose of an investment project. Structure of the investment project business plan.
44. Economic efficiency of investments. Types of efficiency.
45. Indicators for evaluating the effectiveness of investment projects. Discounting and compounding procedure.
46. Accounting at the enterprise: concept, purpose. Sorts of accounting: managerial, accounting, statistical, tax.
47. Analytical activity at the enterprise. Basic forms of accounting statements. Indicators of financial and economic activity of the enterprise: solvency, financial stability, business activity, profitability.

#### Study Literature:

1. Материалы для подготовки к экзамену  
<https://disk.yandex.ru/d/H5tNINpIP0rheg>
2. Экономика предприятия: учебник для студентов вузов, обучающихся по экономическим специальностям/ под ред. В.Я. Гонфинкеля – М: ЮНИТА-ДАНА, 2014.
3. Экономика предприятий (организаций): учебник /А.И. Нечитайло, А.Е. Карлик – М: КноРус, 2014.
4. Экономика предприятия (организации): учебник для вузов по направлению «Экономика» и экономическим специальностям / под ред. В. Я. Позднякова и О. В. Девяткина. – 4-е изд., перераб. и доп. – Москва: Инфра-М, 2015.
5. Экономика предприятия: учебное пособие/ С.Б. Сулоева, Е.Е. Абушова, Н.С. Ключарева, Н.В. Муханова / СПб.: Изд-во Политехн. ун-та, 2016.
6. Baye Michael R., Prince Jeffery T. Managerial Economics and Business Strategy 9th ed. McGraw-Hill, 2016. 576 p.

### **3. CRITERIA FOR EVALUATING THE ENTRANCE TEST (INTERDISCIPLINARY EXAMINATION) FOR MASTER'S PROGRAM IN DIRECTION 38.04.02 “MANAGEMENT”**

The test is a set of test tasks reflecting questions on the main sections of three disciplines presented in the Program of entrance examinations to the master's program in the direction of 38.04.02 “Management”:

- Management (block 1).
- Marketing (block 2).
- The economics of enterprise (block 3).

Test tasks are completed without the use of auxiliary educational materials, in written form.

#### Types of test items

According to the method of answering, test tasks can be of the following main types:

- closed tests with one correct answer, in which you need to choose only one correct answer from the proposed options;
- closed tests with two or more correct answers, in which at least two correct answers must be marked from the proposed options;
- open tests in which there are no correct answer options; the applicant must give the only correct answer independently.

Test questions will be divided into three blocks.

Block 1. Discipline “Management”.

Number of test questions – 10, including:

- closed test tasks – 8;
- open tasks – 2.

Block 2. Discipline “Marketing”.

Number of test questions – 10, including:

- closed test tasks – 8;
- closed test tasks of level I complexity – 4;
- closed test tasks of level II complexity – 4;
- open tasks – 2.

Block 3. Discipline “The economics of enterprise”.

Number of test questions – 10, including:

- closed test tasks – 8, including:
- closed test tasks of level I complexity – 4;
- closed test tasks of level II complexity – 4;
- open tasks – 2.

#### Evaluation criteria

Block 1 (Management) for each correctly solved closed test task with one correct answer, 2 points are assigned. If in a closed test task with two or more correct answers the applicant did not mark all correct answer options, 1 point is assigned for the test task.

Block 2 (Marketing) correct answer to a closed question:

I level of difficulty – 2 points.

II level of difficulty – 3 points.

Unit 3 (The economics of enterprise) correct answer to a closed question:

I level of difficulty – 2 points.

II level of difficulty – 3 points.

For each correctly solved open task, you are awarded:

Block 1 (Management) – 7 points.

Block 2 (Marketing) – 7 points.

Block 3 (The economics of enterprise) – 8 points.

The total score is 100 points.

If in an open test, despite the solution algorithm provided by the applicant, there is no final and only correct answer, no points are awarded for the test task.

Notes on the correct answer options are made legibly by the applicant.

Illegible answers will not be scored.

If all answer options in a test task are marked as correct, no points are awarded for the test task.

#### 4. EXAMPLE OF THE INTERDISCIPLINARY EXAM

Peter the Great St. Petersburg Polytechnic University  
Institute of Industrial Management, Economics and Trade

### INTERDISCIPLINARY EXAM

field of study / educational program

**38.04.02\_30** Развитие международного бизнеса (международная образовательная программа) / International Business Development (International Educational Program)

---

*Code and name of the field of study / educational program*

### QUESTIONS

1. Planning involves:

- a. association of people who work together on the basis of certain rules and procedures;
- b. setting goals and developing ways to achieve them;
- c. encouraging employees to perform purposeful activities;
- d. coordination of the results of activity of individual divisions of the enterprise.

correct answer: **b**

2. Calculate your return on sales as a percentage rounded to integers if you know that you sold 250 units of products at a price of 6000 rubles/piece, fixed costs were 400,000 rubles, variable costs were 3000 rubles/piece.

correct answer: **23%**

Revenue=250\*6000 = 1,500,000

Costs (prime cost)=400 000+3000\* 250=1 150 000

Profit= 1 500 000– 1 150 000= 350 000

Profitability=350000/1500000\*100=0,2333\*100%=23,33~23%

3. The type of production that is characterized by the simultaneous production of a wide range of homogeneous products at the enterprise, the release of which is repeated for a long time-this is ...

- a. mass production;
- b. single production;
- c. mass production;
- d. project production.

correct answer: **c**