

Business and Management: Second-round sample tasks for the Open Doors undergraduate track

You will be asked to complete 35 tasks, including:

- 21 entry-level tasks, each correct answer worth 1 point;
- 11 intermediate-level tasks, each correctly answered task worth 5 points;
- 3 advanced tasks (constructed response), each correctly completed task valued at 8 points.

In test tasks, correct answers are highlighted in bold.

Evaluation criteria and standard answers are provided for the advanced tasks requiring constructed responses.

Decision-Making in Management

Task 1 Entry level (1 point)

A generalized system of views on the world, nature, society, culture, and their place in the world

- a) attitude
- b) world perception
- c) world outlook
- d) worldview**

Answer: d.

Task 2 Entry level (1 point)

A conscious motive that forces a person to achieve a goal because of its significance and emotional attractiveness to it

- a) interest**
- b) needs
- c) content
- d) form

Answer: a.

Task 3 Entry level (1 point)

The complex of interacting elements is

- a) system**
- b) principle
- c) value
- d) norms

Answer: a.

Task 4
Intermediate level (5 points)

A graduate student prepares an essay on the difference between scientific knowledge and other types of cognitive activity. Find the features of scientific knowledge in the list below.

- a) based on the experience of everyday life
- b) is aimed at obtaining knowledge previously unknown to humankind**
- c) uses special methods**
- d) assumes compliance with the purpose and means
- e) regulated by social norms

Answer: b, c.

Task 5
Intermediate level (5 points)

Every morning, Anna turns on the TV and watches a Latin American series. What features of a work of art make it possible to characterize it as an example of mass culture?

- a) elitism
- b) anonymity of the authors
- c) accessibility**
- d) entertainment character**
- e) deep philosophical ideas

Answer: Answer c, Answer d.

Scientific field 2. Strategic Management

Task 1
Entry level (1 point)

He divided all management functions into general, related to any field of activity, and specific, related directly to the management of the enterprise.

- a) F. Taylor
- b) H. Fayol**
- c) E. Mayo
- d) M. Weber

Answer: b.

Task 2
Entry level (1 point)

A special type of management activity, through which the subject of management influences the managed object, is called:

- a) the process of management

- b) the function of management**
- c) the system of management
- d) the model of management

Answer: b.

Task 3
Entry level (1 point)

The external environment of the organization is

- a) a set of elements and factors surrounding the company that have a direct impact on the process and conditions of its operation
- b) factors that directly affect the operations of the organization and are directly influenced by the operations of the organization
- c) conditions and factors that arise independently of the activities of the organization and have a significant impact on it**
- d) Factors that may not have a direct immediate effect on operations, but affect them

Answer: c.

Task 4
Intermediate level (5 points)

Select the management principles proposed by Henri Fayol from the list of statements provided below

- a) subordination of common interests to individual interests
- b) subordination of individual interests to common ones**
- c) priority of interests
- d) multi-direction
- e) fairness**
- f) coincidence of goals

Answer: b, e.

Task 5
Intermediate level (5 points)

Select traditional management functions from the list provided below.

- a) planning**
- b) alignment
- c) synchronization
- d) impact
- e) handling
- f) motivation**

Answer: a, f.

Organizational Behavior and Human Resource Management

Task 1 Entry level (1 point)

What are the two forms of social control that stand out in social studies?

- a) moral and physical
- b) natural and artificial
- c) internal and external**
- d) violent and nonviolent

Answer: c.

Task 2 Entry level (1 point)

What are the measures by which a violator of social norms can return to a full life in society?

- a) recreation
- b) rehabilitation**
- c) restoration
- d) isolation

Answer: b.

Task 3 Entry level (1 point)

What is NOT considered to be an element of a self-control mechanism?

- a) communication**
- b) public opinion
- c) sanction
- d) individual consciousness

Answer: a.

Task 4 Intermediate level (5 points)

Sergey turned 15 years old. Find in the list below the conditions that will allow him to conclude an employment contract by the Labor Code of the Russian Federation and write down the letters under which they are indicated.

- a) written consent of the parents (guardians)
- b) performing light work that does not harm health and moral development**
- c) a state of health that allows you to cope with physical exertion
- d) permission from the guardianship and guardianship

authority

e) **work without prejudice to the development of the educational program of general education**

f) work activities on holidays and weekends that do not interfere with education

Answer: b, e.

Task 5 **High level (8 points)**

The Norma company is engaged in the development and production of innovative gadgets. The company's management noticed that there was a problem among employees related to low motivation, which affected labour productivity.

Suggest to the management of the Norma company three specific measures to increase employee motivation, based on the theory of two-factor motivation by Herzberg. Justify your choice by indicating which factors each of the events will affect.

Note that the evaluation will consider how you solve the task; providing only the final answer is not sufficient.

Solution:

Reasoning (3 points). According to Herzberg's two-factor motivation theory, there are two types of factors that affect employee motivation:

- Hygienic factors: do not lead to an increase in motivation, but their absence causes dissatisfaction. These include wages, working conditions, relationships with colleagues and management, company policy, and workplace safety.
- Motivational factors: they help to increase motivation. These include achievements, recognition, responsibility, opportunities for professional growth, and interesting work.

Selection of events (2 points). Three measures to increase employee motivation:

1. Introduction of a recognition and awarding system: development of a system of awards and rewards for achievements in work, public expression of gratitude for a job well done. This will affect motivational factors such as recognition and achievement.
2. Providing opportunities for professional growth: the introduction of training and development programs, the opportunity to attend courses, and participation in conferences and seminars. This will affect motivational factors such as professional growth opportunities and interesting jobs.
3. Creating an atmosphere of team spirit: the introduction of teamwork, organization of corporate events, joint projects, and mentoring program. This will affect hygiene factors such as relationships with colleagues, as well as motivational factors such as achievement and recognition.

Justification (3 points). The introduction of a recognition and reward system will help strengthen employees' self-confidence, as well as increase their motivation to achieve new goals. Providing opportunities for professional growth will allow employees to feel their importance and confidence in the future. Creating an atmosphere of team spirit will strengthen the relationship between employees, and make work more comfortable and efficient.

Assessment criteria:

Overview (understanding Herzberg's theory of two-factor motivation: the correct definition of hygienic and motivational factors and their impact on employee motivation) - 3 points.

Selection of 3 motivation-enhancing activities based on Herzberg's theory - 2 points.

The validity of the proposed activities (an explanation of how each of the activities will affect specific motivation factors) – 3 points.

Business analytics and digital transformation of business

Task 1

Entry level (1 point)

A taxi firm has 15 cars available at the moment: 2 red, 9 yellow and 4 green. One of the cars, which happens to be the closest to the customer, is on a call. What is the probability that the yellow cab will arrive at the order?

- a) 0,06
- b) 0,59
- c) 0,6**
- d) 0,61

Answer: c.

Task 2

Entry level (1 point)

What is a computer network?

- a) a system that connects all possible devices to the most important information-rich software
- b) a system that provides data exchange between devices or software**
- c) a system that is formed by various devices and their software products that are used for economically important tasks
- d) A system that has connections and exchanges the most important data

Answer: b.

Task 3

Entry level (1 point)

What are tables and graphs used for in statistics?

- a) To publish data
- b) To visualize data**
- c) To store data
- d) To present data

Answer: b.

Task 4

Intermediate level (5 points)

An agricultural firm purchases large hen eggs from two households. 40% of the eggs from the first household are eggs of the highest category, and 20% of the eggs from the second household are eggs of the highest category. In total, 35% of the eggs are of the highest category. What is the probability that the eggs purchased from this firm will be from the first household? What is the probability that the eggs purchased from this firm will be of the highest category and from the first household?

- a) 0,75
- b) 0,6
- c) 0,65
- d) 0,12

Answer: a, d.

Task 5 High level (8 points)

The company has 15 branches. Between every two branches, there is either communication or there is no communication. It turns out that for any Branch M, there are three branches such that they do not communicate with each other in pairs, but they do communicate with Branch M. What is the largest number of communication links in the company between branches?

Solution:

Reasoning (3 points). Consider a branch M. By convention, there are branches N, O, and P which are connected to M but pairwise not connected to each other. This means that O and P are not connected to N. Now consider the branch N. For it, three branches must also be found. We must find branches A, B, and C, which are not connected in pairs (among them, perhaps, there is branch M). But then there are at least six communications NO, OP, NP, AB, BC, AC.

Formula (2 points). The total possible communication in the company is determined by the formula: $K = \frac{1}{2} \times n \times (n - 1)$, where K is the number of communications, and n is the number of branches.

Calculations (3 points). $K = \frac{1}{2} \times 15 \times (15 - 1) = 105$. Total roads satisfying the condition of no more than $105 - 6 = 99$ communication links.

Answer. The highest number of connections is 99.

Criteria:

Reasoning – 3 points

Formula – 2 points

Calculations – 3 points

International Business and Management

Task 1 Entry level (1 point)

The minimum consumer basket in the USA costs \$500. How much does the equivalent basket cost in Russia if the nominal exchange rate is 34 rubles/\$, and the real exchange rate, which shows how many times prices in the country in question are lower than in the USA, is 2?

- a) 8500
- b) 17000
- c) 6500

d) 20000

Answer: a.

Task 2
Entry level (1 point)

Net exports amounted to \$30 billion, and imports to \$90 billion. Find exports.

- a) -\$60 billion.
- b) \$3 billion.
- c) \$60 billion.
- d) \$120 billion.**

Answer: d.

Task 3
Entry level (1 point)

The totality of market relations between countries based on the international division of labour stands for:

- a) International economic relations
- b) world market**
- c) international trade
- d) foreign trade policy of the state

Answer: b.

Task 4
Intermediate level (5 points)

The population of the country saves 40% of each additional unit of disposable income with autonomous consumption equal to 100 billion dollars. Investment expenditures are $I = 300$ billion dollars. Government purchases of goods and services - $G = 900$ billion dollars. Exports exceed imports by 200 billion dollars. Determine the equilibrium volume of production and the value of the Keynesian multiplier for a balanced government budget.

- a) 2400**
- b) 4800
- c) 5,5
- d) 2,5**

Answer: a, d.

Task 5
Intermediate level (5 points)

Which of these factors contributes to globalization?

- a) development of transport technologies**
- b) the rise of nationalism and protectionism
- c) rising prices for goods

d) the development of information technology

Answer: a, d.

Management of Technology and Innovation

Task 1
Entry level (1 point)

Which of the following waves are recognized in large cycles of N. Kondratiev's conjuncture:

- a) upward and downward**
- b) synchronous and asynchronous
- c) single and multiple
- d) Stable and unstable

Answer: a.

Task 2
Entry level (1 point)

According to the depth of the changes being made, there are

- a) technological, industrial, economic, trade, social, and management innovations
- b) radical, improving, modifying innovations**
- c) single, diffuse innovations
- d) local, systemic, strategic innovations

Answer: b.

In terms of the depth of the changes produced, innovations are as follows

- (a) Technological, production, economic, trade, social, and management innovations
- (b) Radical, improving, modifying innovations**
- (c) Single, diffuse
- (d) Local, systemic, strategic.

Task 3
Entry level (1 point)

The ability to develop new ideas and to discover new ways of looking at problems and opportunities is called

- a) Entrepreneurship
- b) Innovation
- c) Creativity**
- d) Creative thinking

Answer: c.

Task 4

Intermediate level (5 points)

Choose the correct examples of environmental innovations:

- a) transformation of ownership relations, distribution of profits
- b) creation of generations of environmentally friendly machine systems, waste-free technologies, environmental monitoring tools**
- c) transformation of family relations
- d) development of the principles of an innovative economy, a national innovation system
- e) innovations in the economic structure
- f) the use of renewable energy sources; energy conservation**

Answer: b, f.

Task 5
Intermediate level (5 points)

What are the differences between an innovative project and an investment project?

- a) a higher degree of uncertainty**
- b) higher probability of obtaining high profits
- c) availability of scientific and technical developments
- d) involvement of unique resources in the implementation of projects**

Answer: a, d.

Scientific field 7. Entrepreneurship

Task 1
Entry level (1 point)

What are the forms of entrepreneurship?

- a) Private, general, state
- b) Individual, partnership, corporate**
- c) Individual, joint

Answer: b.

Task 2
Entry level (1 point)

Which of the following is not a characteristic feature of entrepreneurial activity?

- a) the creative potential of society**
- b) the independence and autonomy of economic entities operating within the framework of legal norms
- c) economic interest aimed at making a profit

Answer: a.

Task 3
Entry level (1 point)

The existence of a market economy requires:

- a) **freedom of choice for producers to make decisions**
- b) prohibition of competition
- c) absence of private ownership of the means of production

Answer: a.

Task 4
Intermediate level (5 points)

A legal entity must have the following characteristic features in combination:

- a) engage in commercial activities without state registration
- b) ability to act in property turnover on its own behalf**
- c) ability to act in trade turnover on its own behalf
- d) cannot have separate property
- e) ability to be liable for obligations with its property**

Answer: b, e.

Task 5
High level (8 points)

If a company spends 600 thousand rubles per month on renting premises and equipment, 900 thousand rubles on employee salaries, 1 million rubles on raw materials and supplies, and sells products for 3.5 million, then the profit will be:

Note that the evaluation will consider how you solve the task; providing only the final answer is not sufficient.

Solution:

A simple formula is used to calculate profit:

Formula (3 points). Profit = Income - Expenses.

Income is all cash receipts for a certain period.

Expenses are all expenses for the same period.

Calculations (3 points). Expenses = 600 thousand rubles + 900 thousand rubles + 1 million rubles = 2,500 thousand rubles.

Profit = 3.5 million - 2.5 million = 1 million rubles.

Answer: profit will be 1 million rubles, (**conclusion 2 points**) which positively reflects on the economic activity of the firm

Assessment criteria:

Formula 1 - 3 points.

Calculations 2 - 3 points.

Conclusion 3 - 2 points.