# Approved

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**The dean of faculty**

Doctor of philosophy, professor,

Masalimova A.R.

**Examination questions on discipline “Advanced Methods of Statistics in Psychology”**

**Direction of specialization “6М050300 –Psychology”**

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| **№** | **Question** | **Part\*** |
|  | Describe Scientific research in Psychology and its’ features in Modern Psychology | 1 |
|  | Give general characteristics of Measuring scales | 1 |
|  | Compare of parametric and nonparametric tests in SPSS | 1 |
|  | Normal distribution and processing of psychological data | 1 |
|  | Describe: criteria of mathematical statistics and psychological test | 1 |
|  | Give classification of mathematical criteria in processing psychological data | 1 |
|  | Explain general characteristics of SPSS statistic software | 1 |
|  | Describe Principles of work with SPSS: design of experiment, data collecting etc. | 1 |
|  | Main problems of Data illustration in SPSS | 1 |
|  | Explain Data Systematization in SPSS | 1 |
|  | Describe variables in SPSS. | 1 |
|  | Main characteristics of multivariate data in SPSS | 1 |
|  | Function of Syntax in SPSS: describe | 1 |
|  | Give an example of Syntax formation in SPSS | 1 |
|  | Work with output data files: main problems | 1 |
|  | Explain Different ways of data saving in SPSS | 2 |
|  | Describe main features of data outputs in SPSS | 2 |
|  | Give classification of different types of plots in SPSS | 2 |
|  | Analysis of Variance: One-Way ANOVA | 2 |
|  | One-Way ANOVA in psychological research: explain main features | 2 |
|  | T-Test: explain different reasons in choose | 2 |
|  | Define Significant levels in statistical criteria | 2 |
|  | Explain correlational research methods in SPSS | 2 |
|  | Correlation in SPSS: main possibilities in psychological research | 2 |
|  | Define main possibilities of MatLab in processing of Psychological data | 2 |
|  | Research in Psychology and MatLAb: give some examples | 2 |
|  | Define measuring scales in modern psychological research | 2 |
|  | How Scientific report relate with output files in SPSS | 2 |
|  | Explain Possibilities of Statistic programs in psychological research | 2 |
|  | Compare depended and independed variables in SPSS | 2 |
|  | Features of measurements in psychology | 3 |
|  | Analyze Descriptive statistics in psychology | 3 |
|  | Describe main concepts of SPSS | 3 |
|  | Describe power of criteria | 3 |
|  | Describe meaning and types of statistical hypothesis | 3 |
|  | Purpose, description and limitations of multifunctional factor analysis | 3 |
|  | Give classification to different form of statistical programs in Psychology | 3 |
|  | Analyze statistics in several psychological research articles | 3 |
|  | Analyze ways of mention about significant parameter in psychological research papers | 3 |
|  | Describe Correlational Coefficient in Excel | 3 |
|  | Give several examples of MatLab in psychological research | 3 |
|  | Evaluating process of data illustration in scientific article | 3 |
|  | Explain the role of statistic methods in Psychology | 3 |
|  | Features of research data design | 3 |
|  | Explain a role of measuring scales in the selection criteria in SPSS | 3 |
|  | Systemically describe limitations of Statistic programs in psychological research | 3 |
|  | Give overview of MatLab in Psychology | 3 |
|  | Think over the steps of statistical analysis | 3 |
|  | Compare Null and alternative hypotheses in psychological research | 3 |
|  | Compare internal and external validity in psychological research | 3 |
|  | Explain the importance of careful experimental design | 3 |
|  | Define how researchers’ goal influence on design an experiment and statistic of research | 3 |
|  | Analyze significant parameters in psychological research papers | 3 |
|  | Analyze statistics in modern psychology | 3 |
|  | Give an example of data illustration in scientific article | 3 |
|  | Analyse your own thesis research data design | 3 |
|  | Describe how statistic methods influence on psychological experiment | 3 |
|  | Analyze limitations of Statistic methods in psychological research | 3 |
|  | Describe Correlational Coefficient | 3 |
|  | Analyze of statistical programs in Psychology | 3 |

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