

## **APPROVED**

by Academic Board of

Institute of Geology

Protocol #9 by 28 February 2017

### **PROGRAMME**

#### **Entrance examination**

for Master of Sciences on «Economic Geology» educational program (speciality 103 – «Earth sciences», English taught)

#### **Preface**

Program of additional entrance examination for Bachelors graduated in non-“Earth science” programs is built on basic of the «Mineralogy» normative course of Bachelor’s programs in 6.040103 – «Geology» and 103 «Earth sciences».

Entrance examination is passing in form of written exams with four questions. Estimation of results is making by 100-mark scale. Total mark for entrance exam is a **sum** of marks from each answer in a ticket. The maximum mark for one answer is 25. All answers is making by writing.

#### **Themes for examination questions:**

##### **Mineralogy**

Basic conceptions of mineralogy. Definition of mineral. Mineral’s grains, crystals, and aggregates, mineral shapes, structural classification of minerals. Crystal chemistry and types of minerals. Isomorphism, polymorphism and polytypism of minerals. Chemical composition and formulas of minerals. Typical minerals of major classes. Properties of minerals. Methods of mineralogical analysis.

**Literature:**

1. Nesse W.D. Introduction to Mineralogy. – Oxford University Press, 2012. – 480 p.
2. Klein C., Philpotts A. Earth materials. Introduction to mineralogy and petrology. – Cambridge University Press, 2013.
3. Wenk H.-R., Bulakh A. Minerals. – Cambridge: University Press, 2004. – 646 p.

**Examples of entrance examinations tickets**

Taras Shevchenko National University of Kyiv

APPROVED

Pro-Rector (Science & Educational  
work)

\_\_\_\_\_ V. Bugrov

« \_\_\_\_ » \_\_\_\_\_ 2017

**«Institute of Geology»**

**Additional entrance examination for Master of Science**

**Educational program:** «Economic Geology»

**Educational courses:** «Mineralogy»

Ticket № 1

1. Chemical linkages in crystalline matter.
2. Color of minerals.
3. Give the definition of a mineral. Please provide a list of major mineral's types.
4. Optical properties of minerals.

Head of Attestation Committee

V. Mikhailov