УТВЕРЖДАЮ

Заведующий кафедрой общего землеведения и гидрометеорологии

факультета географии и геоинформатики

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Ю.А. Гледко

22 ноября 2022 г., протокол № 4

**Вопросы к зачету**

**по учебной дисциплине «ГИС в управлении водными ресурсами» (иностранная магистратура)**

1. Distribution of water over the Earth.
2. Characteristics of the Hydrosphere.
3. Hydrological cycles over the globe.
4. Moisture circulation and water balance in the atmosphere.
5. The water balance of the continents. Classification of water objects according to water exchange.
6. Methods of hydrological measurements.
7. Main hydrographic characteristics.
8. Elements of the river network.
9. River channel and its morphometric characteristics.
10. Structure and density of the river network. River profile types.
11. The concept of fluid regimes. Chezy formula.
12. Distribution of the flow velocities through the river.
13. Flow dependence according to the slope and roughness of the channel.
14. Relationship between flow rates and water levels (flow curves).
15. GIS technologies in hydrological modelling.
16. A semi-distributed catchment models.
17. Hydrological processes in different subbasins.
18. Indices for evaluation model simulations against point measurements in the river network.
19. Defining the gravity centers of watersheds.
20. Catchment’s characteristics.
21. Methods of streamflow calculations.
22. Streamflow volume, layer and specific discharge, streamflow coefficients.
23. Phases of hydrological regime and their characteristics.
24. Applied hydro-climatological indices.
25. Approaches of spatial analysis of hydrological information.

Доцент И.С. Данилович