Казахский национальный университет имени аль-Фараби

Факультет географии и природопользования

Кафедра географии, землеустройства и кадастра

Магистратура

ПРОГРАММА

**«Управление природопользованием с применением геоинформационных технологий»**

**«7M05204 – Геопространственное управление окружающей средой», 2 курс, а/о**

**Алматы, 2020**

ВОПРОСЫ ЭКЗАМЕНАЦИОННОГО КОНТРОЛЯ

1. Expand the essence of geographic information systems. Tell the story of the development of GIS.  
2. Give a definition to new information technologies, justify their importance and role in land management and cadastre.  
3. Describe geographic information systems and their products. Indicate their features and differences.  
4. Describe the functionality of Word.  
5. Explain the applied aspects of GIS in land management and cadastre  
6. Describe the functionality of the GIS. Define the shapefile format  
7. Define a geographic database  
8. Describe additional GIS modules. Give examples of their application in different fields of activity  
9.Name the official distributors of GIS software  
10. Explain the features and differences between the geodatabase and shapefiles  
11. Explain the labels of the layers Arc Mar. Describe the use of the Maplex module.  
12. Explain the differences between personal and corporate geodatabases  
13. What are the main data formats supported by Arc GIS.  
14. Define metadata.  
15. Describe Arc GIS applications - Arc Map, Arc Toolbox, Аrc Сatalog  
16. Expand the process of labeling features in ArcMap. Specify methods for labeling objects.  
17. Give the definition of the topology. Indicate what topological relationships exist. Give an example of topological errors.  
18. Unleash the Power of Annotation in GIS  
19. Describe the Maplex plug-in  
20. What are the types of diagrams in Аrc Mar  
21. Describe the layers of the geographic base of the maps.  
22. Give the definition of the raster data format in the GIS.  
23. Name the coordinate systems. Describe the spatial reference. Indicate the differences in projections for different territories.  
24. Give the definition of the vector data format in GIS  
25. Describe the Layer format  
26. Tell us about card templates. Describe the process for applying card templates.  
27. Specify the elements of the map layout. Describe the map layout process.  
28. Indicate the features and differences of Data View and Layout View in Arc Map  
29. Expand the structure of the geodatabase. Give an example.  
30. Name the types of fields in the attribute table and describe each of them.  
31. Give an example of creating a point layer and creating fields in the attribute table.  
32. Determine what categories the point layer can be divided into (for example, the layer of settlements).  
33. Give an example of creating a line layer and creating fields in the attribute table.  
34. Determine which categories can be divided into a linear layer (for example, a layer of rivers)  
35. Give an example of creating a polygonal layer and creating fields in the attribute table.  
36. Determine which categories the polygonal layer can be divided into (for example, the layer of administrative districts)  
37. Explain the difference in functions: a) create a polygon and b) cut a polygon in a polygon layer  
38. Explain the difference in functions: a) polygon autocomplete and b) change polygon in polygon layer  
39. Explain the Difference Between Column, Stack and Pie Charts  
40. Give an example of creating different types of diagrams in ArcGis  
41. Expand the essence of converting a polygonal layer to a point layer  
42. Expand the essence of converting a line layer to a point layer  
43. Describe the operation of the functions a) object merging, b) object closure  
c) combining objects  
44. Indicate the differences between labels and annotations  
45. Describe the step-by-step process of symbolizing in ArcGis  
46. ​​Describe the operation of the functions a) merge objects, b) save as a layer file  
47. Expand the essence of the topology function and when it is applied  
48. Find the fundamental differences between the "Data View" and "Layout View" functions  
49. Describe what basic cartographic rules apply to the design of maps  
50. Describe the process of linking topographic maps in ArcGis  
51. Find the Differences Between Shape-file and Feature Class  
52. Expand the entity of the geodatabase and how it is created  
53. Provide an interpretation of the basic cartographic rules when labeling objects.  
54. Link annotation and database creation in ArcGis  
55. Describe the process of defining symbols in the ArcGis program  
56. Describe the process of labeling objects  
57. Describe the process of creating shapefiles  
58. Describe the ArcToolBox application  
59. Explain the difference between ArcCatalog and ArcMap  
60. Describe the process of composing maps