

Final control of GIT questions

1. Explain the sequence of data entry technologies and data sources in geoinformation systems with examples?
2. Explain in more detail the methods of application of remote sensing in geoinformation systems with examples?
3. Broadly explain the sequence of creating urban planning data, directive data, and analytical data using geoinformation technologies?
4. Explain in more detail the methods of conducting spatial analysis of geoinformation and regions?
5. Explain the definition of Geoinformation technologies and the main components and functionality of Geoinformation technologies?
6. Explain the concept of cadastral assessment of urban land based on urban planning approach using geoinformation systems with more examples?
7. Explain in more detail the application of remote sensing in geoinformation systems and its calculation using NDVI and its capabilities?
8. Explain in detail the methods and new approaches used in the main historical periods of the development of geographic information systems with examples?
9. Explain in more detail the creation of territorial information management systems using geoinformation technology?
10. What tools are used in digitizing maps and give examples of their advantages?
11. Explain with examples how to connect spatial data with attributive data?
12. Data structures and models in geoinformation technologies explain their functions in more detail with examples?
13. Explain the methods and possibilities of decision-making based on the software and structural features of geoinformation technologies?
14. Methods and additional possibilities of working with space, aerial and photo images and images in Geoinformation technologies?
15. What are the forms of spatial data and explain their characteristics with examples?
16. Explain the types of data in the Geoinformation technologies system and how they are sequenced in examples?
17. Explain the characteristics of attributive data and the methods of their application in Geoinformation technologies with examples in which sequence?
18. What are effective methods of data storage and how are they used in Geoinformation technologies?
19. What are the main methods of data analysis and what results do they provide explain with a series of examples.
20. In what formats is spatial data stored and what are the advantages of each format, explain with a sequence of examples?
21. How to ensure the relevance of data in Geoinformation technologies systems, explain in sequence with examples?
22. What technologies and approaches does Geoinformation technologies use in knowledge management explain with a sequence of examples?
23. What are the main factors when choosing a Geoinformation technologies system and what criteria are taken into account explain with a sequence of examples?
24. What functions does the ArcGIS program perform and what are its analysis capabilities, explain with a sequence of examples?
25. What are the capabilities of the QGIS program and how does it differ from ArcGIS, explain with a sequence of examples?
26. Explain the sequence of AutoCAD Map and its main features with examples?
27. Explain the main advantages of the GeoMedia Professional program and the areas of application in what sequence of examples?

28. Explain in a sequence of examples in which areas and for what purposes the MapInfo Professional program is used?
29. What is the uniqueness of the WINGIS system and how it differs from other Geoinformation technologies programs, explain with a sequence of examples?
30. Explain how the GeoDraw program is used and what its main functions are, with a sequence of examples?
31. Explain what models MGE (Modular GIS Environment) supports and what its capabilities are in sequence with examples?
32. Explain in more detail with examples how to analyze remote sensing data in Geoinformation technologies?
33. How are real objects modeled in geoinformation technologies systems and what is the importance of this modeling process, with a sequence of examples?
34. What are the main types of spatial data and what are their characteristics , with a sequence of examples?
35. How are spatial data displayed and what tools are used for visualization with a sequence of examples?
36. What are raster data and in what areas are they used for what purposes, explain in sequence with examples?
37. What is the uniqueness of vector data and how are they used in geoinformation technologies, explain in sequence with examples?
38. How do data models work in geoinformation technologies and what tasks do they perform explain in sequence with examples?
39. Explain how the integration of spatial and attributive data is carried out and what results it gives, with a sequence of examples?
40. What factors are important in the choice of data formats and explain their place in geoinformation technologies in the order of examples?
41. Explain how spatial analysis models are used in geoinformation technologies and their types in a sequence of examples?
42. How to create spatial representations of real objects and how to ensure their accuracy, explain with a sequence of examples?
43. How are databases organized in geoinformation technologies systems and how do their management systems work, explain with a sequence of examples?
44. What are the types of data formats and what are the purposes of each of them, explain in sequence with examples?
45. What possibilities does PostgreSQL and PostGIS provide and what is their use in geoinformation technologies systems explain in sequence with examples?
46. Explain how to design a spatial database and what are the steps in the sequence with important examples?
47. Explain how database management is implemented in the geoinformation technologies system and which technologies are used in a sequence of examples?
48. What are the methods of creating and processing tables and what analytical tasks are solved in geoinformation technologies systems, explain in sequence with examples?
49. Explain with examples the structure of attributive data and the methods of their management?
50. Explain the methods of analysis of geoinformation technologies databases and their importance with a sequence of examples?
51. Explain how spatial queries work and what data they return with a sequence of examples?
52. How is database security ensured and what tools are used to increase security in geoinformation technologies systems, explain with examples?
53. Explain how data can be entered in the geoinformation technologies system and what types of input methods are divided into examples with a sequence of examples?

54. How are data transformations performed and what tools are used in this process, explain in sequence with examples?
55. Explain how data is entered on the basis of remote sensing and in what examples are the areas of their use sequenced?
56. What are the main processes in map digitization and what are their technical aspects, explain in sequence with examples?
57. What are the methods of creating vector data and what steps do they involve, explain in sequence with examples?
58. What are the methods of raster data processing and what is their practical importance, explain with a sequence of examples?
59. How to enter satellite images into a geoinformation technologies system and how to ensure their spatial accuracy, explain with a sequence of examples?
60. What are the methods of measuring and collecting data for geoinformation technologies and what devices are used, explain in sequence with examples?
61. Explain how to add attributive data in the geoinformation technologies system and what functions they perform, with a sequence of examples?
62. How to ensure the accuracy and reliability of data sources, and how this process is controlled, explain with a sequence of examples?
63. What is spatial analysis and explain its role in the geoinformation technologies system in a sequence of examples?
64. What are the main tasks of spatial analysis in geoinformation technologies and what are their areas of application, please explain with examples?
65. What are the methods for spatial analysis and what are the purposes of each of them, explain in sequence with examples?
66. Explain how spatial queries are made and how their results are analyzed with examples?
67. Explain how the results of spatial analysis can be visualized and which tools are used in a sequence of examples?
68. Explain how spatial data can be associated with attributive data and what kind of analyzes this leads to, with a sequence of examples?
69. How do vector and raster analysis methods differ and in which areas are they used with a sequence of examples?
70. Explain the methods of network analysis in spatial analysis and in which areas they are used with a sequence of common examples?
71. Explain the limitations of spatial data analysis in geoinformation technologies and how to overcome them with examples?
72. What factors are taken into account when choosing programs for spatial analysis, and explain in more detail which programs are more effective with examples?
73. Explain in more detail what tools are used in the digitization of maps and in what examples are their functional possibilities?
74. What are the most common errors in the digitization process and what measures can be taken to prevent them, with a sequence of examples?
75. What are the advantages of digitized maps in vector format and explain in more detail with examples for which analysis they are more effective?
76. What are the specific aspects of digitization of topographic maps and what difficulties do they cause, with a sequence of examples?
77. How is accuracy of digitized maps ensured and what techniques are used for this, explain in more detail with examples?
78. How to edit digitized maps in the GIS system and what tools are used, explain in more detail with examples?
79. How to digitize maps in an automated way and what are the advantages of this method, explain in more detail with examples?

80. What is the role of software in the digitization of maps, and which programs are effective examples?
81. How can spatial data be analyzed after digitization and what results does this analysis give explain in more detail with examples?
82. What are the main elements of vector data and what are their functions, give explain in more detail with examples?
83. Explain the role of points, lines, and polygons in vector data and elaborate on their practical applications give explain in more detail with examples?
84. Explain in more detail with examples how vector analysis is performed and what are its main steps?
85. What is the role of vector data in spatial analysis and explain in more detail what examples are more effective in which analysis?
86. What operations can be used to analyze vector data and what are their results? Explain in more detail with examples?
87. How to change the symbols of vector data and explain in more detail in examples what is important in this analysis?
88. How are topological relationships determined in the geoinformation technologies system and what is their function explain in more detail with examples?
89. What are the methods of connecting vector data with attributive data and what are the advantages of this connection, explain in more detail with examples?
90. What measures are taken to increase the accuracy of vector data and how is this process controlled explain in more detail with examples?
91. What are the differences between vector and raster data analysis capabilities, and in what situations are they preferable, explain in more detail with more examples?
92. What are the types of scales on topographic maps and what are their differences explain in more detail with examples?
93. How to read topographic maps and how to interpret the symbols on it, explain in more detail with examples?
94. Explain the relationship between scale and resolution and elaborate on how it is reflected in geoinformation technologies analysis with examples?
95. How are elevation lines marked on topographic maps and how to read them in more detail explain in more detail with examples?
96. Explain in more detail how to analyze topographic maps in geoinformation technologies systems and what results are obtained with examples?
97. How digital elevation models are displayed on topographic maps and explain in more detail how they are used with examples?
98. What tools are used to create scale maps in geoinformation technologies programs and what are their advantages explain them in more detail with examples?
99. What is a PostgreSQL database system and what are its main features, explain in more detail with examples?
100. How to create a table in PostgreSQL and explain the main steps of this process in more detail in examples?
101. How to store spatial data through PostGIS and what tools are used for this, explain in more detail with examples?
102. Explain in more detail how spatial indexing is done and in which cases it is effective with examples?
103. Explain in more detail with examples how data integration is provided in a geodatabase and which technologies are used?
104. What are the benefits of geoinformation technologies and database integration and in what areas are they used?
105. Explain in more detail with examples how spatial queries are performed in PostGIS and how their results are interpreted?

106. How is security ensured when working with PostgreSQL/PostGIS and which mechanisms are used?
107. What methods are used in working with large volumes of data in a geodatabase, and how to increase efficiency, explain in more detail with examples?
108. How to convert raster data to vector format and what tools are used in this process, explain in more detail with examples?
109. How to work with attributive data in geoinformation technologies and what actions can be performed, explain in more detail with examples?
110. Explain in more detail what is NDVI and how to calculate it with examples?
111. Explain in more detail with examples how to download and process satellite images?