## MASTER'S DIPLOMA EXAM. Field of study: Architecture

General issues:

1. What are the designer's rights and obligations in terms of construction law?

2. What principles of professional ethics should architects follow?

3. Develop the concept of Vitruvius 'Man is a measure of all things' in terms of contemporary ergonomics.

4. How to understand the notion 'context of a place'?

5. How to understand the notion 'social participation in spatial planning'?

6. How to understand the terms: a dominant and an accent in urban planning ? Give examples.

7. How to understand the terms: points and places formally important in architectural solutions ? Give examples.

8. Compare the urbanization factors in the 19<sup>th</sup> century and in the 21<sup>st</sup> century.

9. Discuss synthetically the ideas of "ideal cities" from the 19th and 20th centuries.

10. Discuss the development trends of cities of the post-industrial era.

11. Compare the Athens Charter of 1933 with the New Athens Charter.

12. What does the protection of cultural values in city planning consist in.

13. Present the purpose, method and problems involving the "Study of conditions and directions of spatial development of a municipality (town)".

14. Present the relationship between the "Local spatial development plan" and the "Study of conditions and directions of spatial development of a municipality (town)"

15. How to define public spaces in a city? Explain the difference between public space and social space?

16. How to understand the notion 'revitalization of urban areas'? Give examples.

17. Characterize modern spatial groupings of the industry such as technopoles, research parks, science and technology parks (technoparks).

18. Give reasons why post-industrial areas are being created. Discuss their types as well the methods and directions of their transformation.

19. What is the natural environment? Name its constituent elements.

20. What functions do rural areas play in the present day? Give examples.

21. Describe the basic principles of designing communication in open areas (streets, parking lots, bike paths, pavements).

22. Discuss the rules of situating a free-standing object on a building plot?

23. Discuss the principles of situating a building in densely urbanized space, especially in city centers (e.g. in the frontage of the street, in outbuildings, etc.)?

24. Building form - discuss its impact on the reduction of energy losses.

25. Characterize the terms: energy-saving building and passive building. Specify differences in the approach to the issue.

26. Give the classification of building height groups and present the design conditions associated with each of these groups.

27. Discuss the basic principles of designing communication (horizontal and vertical) inside a building.

28. Name, draw and discuss basic architectural solutions that determine the availability of space (outside and inside a building) for people with disabilities.

29. Characterize the factors determining human thermal comfort in a building.

30. Characterize the issue of human light comfort in a building.

31. Characterize the basic structural systems of buildings. Explain the relationship between the structural system and the function of an object.

32. Characterize the types of building foundations. Explain the relationship between the type of foundation and the geological conditions and structural system of an object.

33. Describe the types of stairs and the types of their structure.

34. Discuss the types of roof structures, give their advantages and disadvantages.

35. Discuss the types of external wall structures and their properties.

36. Explain the term 'monuments', discuss the legal forms of their protection.

37. Conservation and restoration of monuments: explain the terms, give examples.

38. Discuss the Greek and Roman architectural orders, give the main differences.

39. Describe the functional-spatial layout of a medieval city on the selected examples.

40. Discuss the medieval sacral architecture - spatial arrangements, examples of European objects (including Polish ones) .

41. Discuss the architecture of the Renaissance. Give the examples of European objects (including Polish ones ).

42. Discuss the baroque sacral architecture. Name the creators and works of art, selected examples of European objects (including Polish ones).

43. Discuss Neoclassicism in the architecture of the 18th century - the origin, ideological assumptions, selected examples of European objects (including Polish ones).

44. Discuss the architecture of the 19<sup>th</sup> century (the Secession and other styles being developed at the same time).

45. Discuss the architecture of "the international style" - doctrinal assumptions, main authors, exceptional examples.

46. Characterize the work of the architects, founders of our Faculty: Zygmunt Majerski and Tadeusz Teodorowicz-Todorowski.

47. Explain the difference between designing and programming in architecture.

48. How to understand the concept of pre-project studies? Discuss the basic issues involving it.

49. Discuss three methods of research used in architecture and associated with them research techniques and tools.

50. Discuss the role of digital technology and its impact on the workshop of a professional in the field of architectural and urban design as well as spatial planning.