UNIVERSITY COLLEGE LONDON

University of London

EXAMINATION FOR INTERNAL STUDENTS

For The Following Qualification:–

M.Sc.

ESGA19: Principles of Spatial Morphology

COURSE CODE   :   **ENVSGA19**

DATE   :   **13–MAY–05**

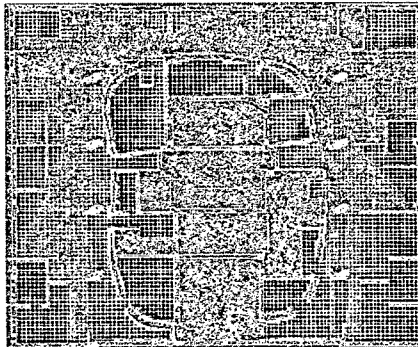TIME   :   **10.00**

TIME ALLOWED   :   **3 Hours**

Principles Examination Questions

ANSWER THREE QUESTIONS: 3 hours
Wherever possible you should illustrate your answer by reference to examples from your experience or from the literature.

1. The axial map is often used in space syntax research. What kinds of axial maps are you aware of? Describe the procedure you would use to prepare a fewest line map. What difficulties might you expect to encounter and how would you overcome these? The axial map is sometimes criticised as being "ill defined". Outline the grounds for this criticism and assess its validity.

2. You have been asked to design a project to introduce space syntax research methods to architecture students at Master's level. Describe the structure of the project. What aspects of the methodology would it be essential to include and why?

3. There are a range of measures of the graph used in space syntax research. Describe four measures you consider to be useful. Define these and, using examples, describe how they might be used in an investigation of the relationship between spatial design and the social function of a building or urban area.

4. Describe what you understand by the term 'isovist field'. Give an example of the way in which you might use isovists and isovist field measures in architectural or urban research. The diagram below shows "type-1 isovist integration" or "visibility graph analysis integration". Explain how the diagram was produced, and describe the way it differs from other isovist field measures.

5. What do you understand by the words 'quantitative' and 'qualitative' analysis? Discuss their relative merits in understanding the relationship between the design of the built environment and social organisations.

6. You are asked to devise a study to analyse the social-spatial outcomes of the movement of an immigrant population from the first place of settlement to semi-permanent residences in the suburbs of a major city. Which methods would you use to gather data on social cohesion, use of public space, internal communal activities? Are there any other factors you think are relevant to be analysed in such a study?

7. Space syntax methods describe the state of an architectural environment in terms of its geometry and topology, however, people experience these environments through time. What approaches to the inclusion of the temporal dimension in space syntax analysis are you aware of? Choose two of these and using examples compare them.

8. Compare and contrast two research strategies that solicit information directly from building users and describe one research method for capturing information that is appropriate to each strategy. Describe the advantages and disadvantages of each approach? Illustrate your answer by reference to examples.

END OF PAPER