

UNIVERSITY OF RUHUNA

Faculty of Engineering

End-Semester 4 Examination in Engineering: January 2019

Module Number: IS4205

Module Name: Aesthetics and Design

[Three Hours]

[Answer all questions]

- Q1. (a) Write short notes on any three of the following.
- Interior Design
 - Landscape Design
 - Art element 'Line'
 - Design Principle 'Balance'
- [3 Marks]
- (b) "Art elements & Design principles play an important role in any fields of design."
- What is the Design Principle 'Contrast'?
- [1 Mark]
- Draw sketches to show different ways to create 'Contrast' by using the following art elements.
 - Shapes
 - Texture
 - Line
 - Colour
- [2 Marks]
- (c) Assume that you are a school art teacher and you were taking a group of your school children to see an art exhibition. The paintings which were exhibited at the exhibition were depicting the ancient Colombo city streets & public spaces, etc. The Fig Q1 shows one of the best paintings displayed at the exhibition. How do you appreciate and admire the success of the artist's attempt to communicate his ideas or the images of ancient Colombo through the artist's painting?
- [5 Marks]

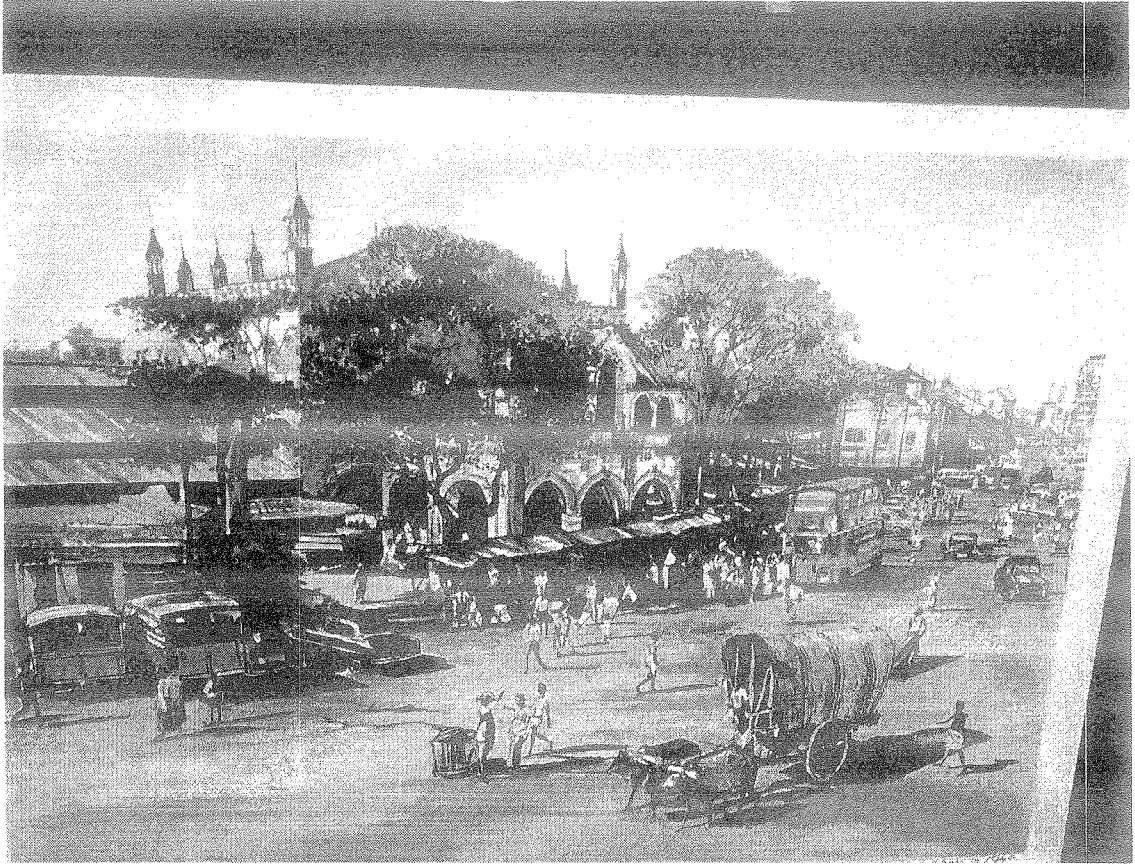


Figure Q1

- Q2. (a) Natural and Man-made environments can be observed from our surroundings. Explain the terms 'Natural Environment' and 'Man-made Environment'.

[3 Marks]

- (b) Imagine that you are employed in a leading company for environmental & building design in Colombo. Your company received a project of designing a hotel complex within the premises of a natural forest like 'Sinharaja' and you were appointed as the team leader of the project. As you are a designer, you should pay more attention on the effectiveness and sustainability of the design while protecting the natural environment. Attention should also be paid to achieve the aesthetically pleasing and beautiful environment which is essential for a hotel building to attract and make both the local & foreign guests happy. Discuss what sort of advices and instructions are given to the design team to follow during the process of designing to achieve the above requirement and to be completed as a successful project.

Note:

Your answer should include the ways you resolve the problems regarding the structure of the building, minimize the damage that may occur to the natural environment and how you achieve the required beauty & expression.

[7 Marks]

- (c) What is an Eco System? Briefly explain.

[2 Marks]

- Q3. (a) Art element 'Colour' is one of the most important art elements for any field of design. The main reason for that is each colour has its own characteristics and expressive qualities. By using these advantages designers would be able to create numerous designs with different expressions. Write important values or expressive qualities of the following colours.

- Red
- Blue
- Green

[6 Marks]

- (b) The colour wheel, colour value and colour schemes are the three main parts of the colour theory. Without an understanding of the colour theory, a successful artwork cannot be created.

Name two types of colour schemes that you learnt and explain them clearly.

Draw diagrams to clarify your answers.

[4 Marks]

- (c) Write the definitions for the following terms in the Colour theory.

- i) Intensity
- ii) Colour Value
- iii) Optical Colour
- iv) Arbitrary Colour

[2 Marks]

- Q4. (a) State the three objectives of aesthetic planning and explain one of them. [3 Marks]
- (b) The integration of 'Beauty' & 'Function' makes a home an ideal place for a family to live happily. Also, beautifully designed gardens & outdoor living spaces might be able to enhance the above family status very much.
Explain how you choose furniture, other material & garden accessories to design & decorate the indoor & outdoor garden spaces to achieve the required level of beauty & function while providing aesthetically pleasing environment. [5 Marks]
- (c) i) What is 'good taste' & 'bad taste'? Explain briefly. [1 Mark]
- ii) Write only the steps, that one has to follow to develop her/his abilities regarding 'good taste'. [1 Mark]
- Q5. (a) What is design? Explain Briefly. [1 Mark]
- (b) Basically, landscape or architectural design process is consisting with four steps. They are Site analysis, Conceptual plan, Preliminary plan and Finished plan. Explain clearly about the site analysis & state the importance of carrying out the site analysis before commencing any design work. [3 Marks]
- (c) Specially, when designing a small home garden, understanding the 'micro-climate' conditions of the site is essential.
Explain the above statement. [1 Mark]
- (d) Explain briefly the following terms relating to the design process. [2 Marks]
- i) Wish list & needs list
- ii) Base map
- (e) Imagine that your family is planning to move to a newly constructed house before the Sinhala & Tamil New year. However, your family would like to complete the outdoor garden works as well before moving to the new house. This

is a great opportunity to apply your knowledge & skills to create a new garden design for your own house. As you are a member of this family you are aware of the family needs and requirements very well. It is your responsibility of designing a well-functioning, beautiful garden with the demands of your family members.

Assume the details you gathered as follows.

- i. Five members in the family including mother & father.
- ii. The two younger brothers (7 & 15 years old) love playing and cycling outdoors.
- iii. Mother is a housewife and she loves gardening, growing vegetables and staying outdoors during free time listening to radio, doing needlework, etc.
- iv. Father is employed and loves to spend time with the family in the garden (on weekends). He likes to have tea, take meals in the outdoor living space, read newspapers, etc.
- v. Pet dog present.
- vi. Myself would like to have quiet areas for relaxation & reading books, also, areas for entertainment with friends & family. Beautiful flower beds in the front garden and a lawn with privacy from the neighbors are also considered.
- vii. Also, proper circulation from front garden to backyard, nicely paved driveway from main gate to the garage, proper place for garbage collecting bins, etc.
- viii. Preserve all existing fruit trees & coconut trees.

Considering the above details, choose the outdoor activities which your family need and prepare the 'Design program'. Now according to the design program, design & locate the outdoor activity areas on the sheet provided with the garden site layout in Fig Q5 and attach it to your answer scripts.

[9 Marks]

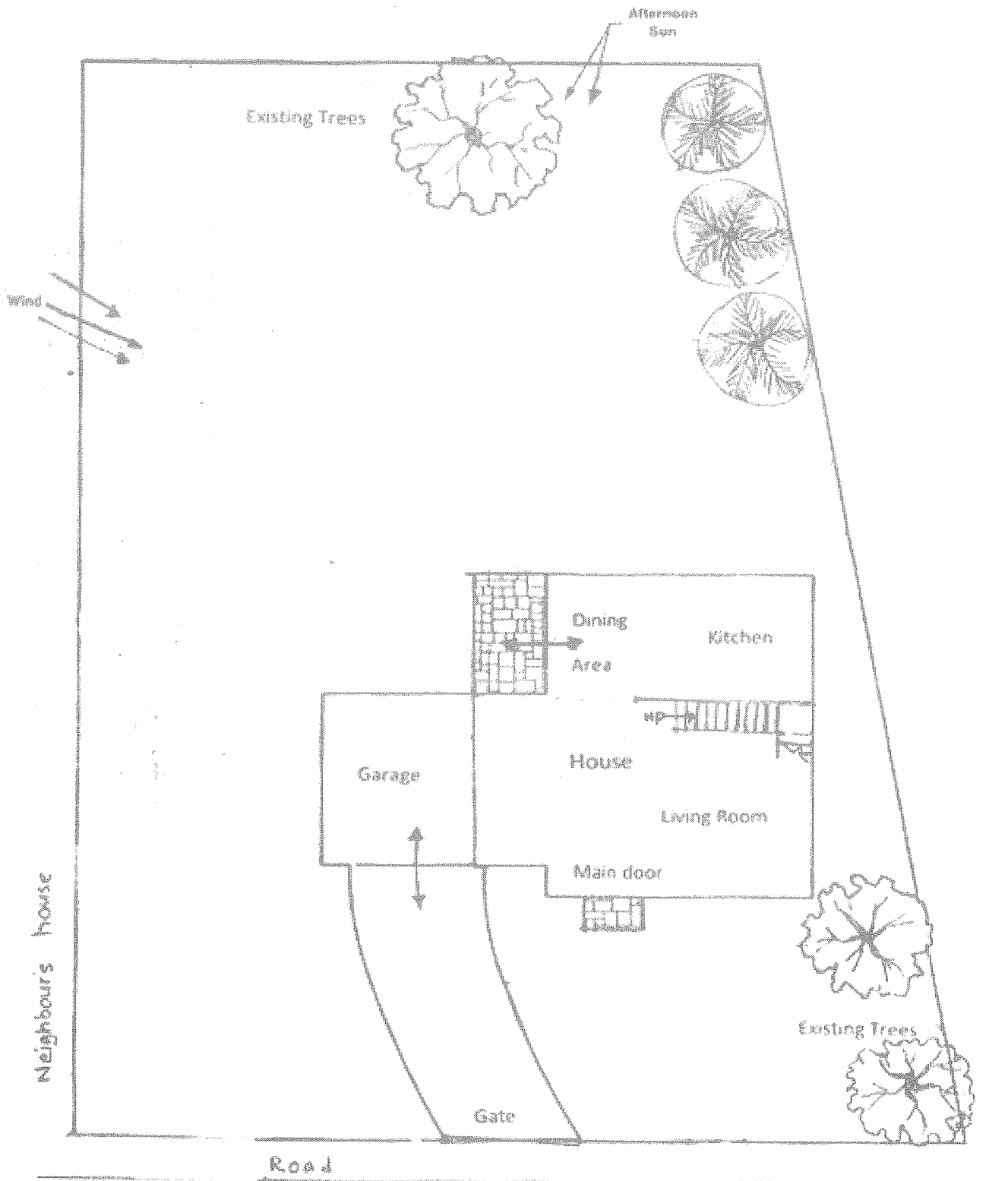


Figure Q5