

25

Indian Institute of Technology Kharagpur

End - Spring Semester Examination
Session: 2010 – 11
Subject No: AR 52006
Subject Name: **Barrier Free Environment**

Final Year, B. Arch
Time: 3 hours
Full Marks: 60

NOTE: 1. Answer ALL Questions. Answer the parts of the same question together.
2. Answer should be brief and specific.
3. Analytical Approach and Contemporary outlook will be appreciated

1. a) What are the various physical and psycho – somatic barriers faced by people with impaired mobility in a railway station?

b) Suggest remedial measures for three barriers which you consider to be the most severe. The proposed design solutions should be low cost, culturally acceptable by Indian people, require reasonably low energy and be easily implementable. Clarification on the choice of a particular design solution and its expected benefit over other probable solutions will be appreciated. (5+15 = 20)
2. An aged person accompanied by his wife enters a general hospital for carrying out some diagnosis prior to treatment. Explain how the various elements of spatial stimuli known for generating stress are to be treated so that the person gets a positive vibe from the environment. (15)

OR

Give a very good example of inclusive design from India. It could be a building, or a service. Give justification for your answer. (15)

3. Highlight the role of various stakeholders in promoting barrier free tourism with reference to the changed profile of present day tourists. (15)

OR

You are to conduct access audit in a school for children studying from class IV to class X. The school is meant for both boys and girls. The school is a four storey building with its own playground, prayer hall and other ancillary facilities. As a part of the access audit you need to interview the head mistress. Prepare a questionnaire for interview that would help you to understand the various physical, psychological and attitudinal barriers faced by children with disability. This interview will be in addition to the access audit checklist, contents of which need not be mentioned here. (15)

4. Write short notes on (any two) (5*2 = 10)
 - a) Principles of Universal Bus Stop Design as adopted by DTDC.
 - b) Smart wayfinding devices for people with cognitive impairment
 - c) Attitudinal barriers in transportation system