

C.U.SHAH UNIVERSITY

Winter Examination-2015

Subject Name : Building Planning

Subject Code : 4TE04BLP1

Branch : CIVIL

Semester : IV

Date : 23/11/2015

Time : 2:30 To 5:30

Marks : 70

Instructions

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

- Q-1** **Attempt the following questions:** **(14)**
- (MCQ/Short Type of Questions=1 mark*14=14 marks)
- a) The minimum width of a stair in residential buildings, is 1
(A) 55 cm (B) 70 cm (C) 85 cm (D) 100 cm
 - b) If height of the first story of a building is 3.2 m and riser is 13 cm, the number of treads required is 1
(A) 12 (B) 18 (C) 24 (D) 30
 - c) The ceiling height of a building is 1
(A) between ceiling and ground level (B) between eiling and floor level
(C) upto roof above ground level (D) upto ceiling from the ground level
 - d) The service area in a building means the area occupied by 1
(A) stairs (B) toilets (C) light and shafts (D) all of the above
 - e) Which one of the following factors is considered for the orientation of buildings 1
(A) the direction of the prevailing winds in the area
(B) the exposure of the walls and roof of the buildings to the rays of sun
(C) the extent up to which the sunrays penetrate with the verandah
(D) all of the above
 - f) Exposed portion of vertical surface at right angles to the door or windows frame, are known as, 1
(A) jambs (B) lintels (C) revels (D) soffits
 - g) Thickness of a reinforced brick partition wall is generally kept 1
(A) 5cm (B) 10 cm (C) 20 cm (D) 25 cm
 - h) As per the building bye-laws, if the plot area is less than 200 m² then minimum margin value from front side is 1
(A) 3 m (B) 6 m (C) 4.5 m (D) 9 m
 - i) Minimum ventilation in room is the _____ percentage of floor 1
(A) 20 (B) 30 (C) 35 (D) 10
 - j) Draw symbol of hot or cold water drain off 1
 - k) Draw symbol for tor steel 1
 - l) Draw symbol for plaster 1



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| m) | Give the definition of plinth area. | 1 |
| n) | Define floor area ratio (FAR) | 1 |

Attempt any four questions from Q-2 to Q-8

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| Q-2 | Attempt all questions | (14) |
| a) | Give detailed classifications of the buildings. | 7 |
| b) | Enlist and describe the information collected during site visit prior to planning. Also describe the information collected from client while conducting the discussions prior to planning. | 7 |
| Q-3 | Attempt all questions | (14) |
| a) | Explain Objectives, Scope and Applicability of Building Bye Laws. | 7 |
| b) | List the various principles of building planning and explain privacy and roominess in detail. | 7 |
| Q-4 | Attempt all questions | (14) |
| a) | What is perspective view of an object? Explain picture plane, Horizontal plane, Vanishing point, angle of vision. | 7 |
| b) | Explain building bye-law “plinth area regulations in plot” | 7 |
| Q-5 | Attempt all questions | (14) |
| a) | Explain different building components in detail. | 7 |
| b) | Define landscaping. Write merits and demerits of landscaping. | 7 |
| Q-6 | Attempt all questions | (14) |
| a) | Draw the neat sketch of the following
(i) Site plan (ii) Layout plan (iii) Key plan | 7 |
| b) | Draw the line sketch of electrical layout & drainage plan of a residential building. | 7 |
| Q-7 | Attempt all questions | (14) |
| | Prepare working drawings (Ground Floor plan, First Floor plan, front elevation and sectional elevation) after planning as per building bye-laws, principles of planning and principles of architecture for two storied residential detached house for a family of a doctor having six family members on land area of 19m X 24m, with drawing scale of 1:100. | 14 |
| Q-8 | Attempt all questions | (14) |
| a) | Draw foundation plan, stair details and details of openings for working drawing planned in Q.7 | 7 |
| b) | Draw a line plan for the hospital. | 7 |

