# C.U.SHAH UNIVERSITY Summer Examination-2016 

Subject Name : Building Planning
Subject Code : 4TE04BLP1
Branch: B.Tech(Civil)
Semester : 4
Date : 18/05/2016
Time : 02:30 To 05:30
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)
a) In India, wind direction in summer and monsoon is
(A) North east
(B) South east
(C) South west
(D) North west
b) Minimum width of W.C. required in residential building is
(A) 0.9 m
(B) 1.0 m
(C) 1.2
(D) 1.5 m
c) Minimum width of Habitable room is
(A) 1.8 m
(B) 2.1 m
(C) 2.5 Mm
(D) 3.0 m
d) Minimum headroom required on staircase landing is
(A) 1.5 m
(B) 1.8 m
(C) 2.1 m
(D) 2.5 m
e) A room which receives light and air from a specific direction is known as
(A) Aspect
(B) Prospect
(C) Elegance
(D) Circulation
f) For residential building window openings area should be minimum
(A) $5 \%$ of a floor area
(B) $10 \%$ of floor area
(C) $20 \%$ of floor area
(D) $25 \%$ of floor area
g) As per NBC-2005 the minimum width of staircase in residential building is
(A) 1.0 m
(B) 1.2 m
(C) 1.5 m
(D) 1.8 m
h) Define Building line
i) Draw conventional symbols of pump and India type WC
j) Draw conventional symbols of window and Revolving door. 1
k) Write the classification of perspective projection.
l) Draw line plan of dog-legged stair with dimension.
m) Draw conventional sign of wood and plaster.
n) What should be the minimum height of a habitable room when air-conditioned?

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

Attempt all questions
(a) Enlist various principles of planning. Explain any three of them.
(b) Explain the following terms:

(1) FSI
(2) Setback
(3) margin
(a) State the requirements of a Hospital building \& draw its line plan.
(b) Explain the following term with sketch
(1) station point
(2) horizontal plane
(3) vanishing point
(b) Draw the sectional elevation passing through stair of Q No 4 (a).
(a) Design and draw a residential building plan from the following requirement:
(1) Verandah (2) Living cum Dining (3) Two Bed room with attached toilet (4) Kitchen cum store (5) Stair room (Internal stair only).
Select the suitable area for above requirements and draw Ground floor plan to a scale of $1: 100$. Show north line. Assume other suitable data.

Attempt all questions
(a) Draw the Elevation of residential building design in Q No 4 (a).
(b) Sketch arrangement of furniture in the following (i) Drawing room 5.4m x 4.8 m
(ii) Bed room 5 mx 4 m . Write the dimension of furniture.
(a) Explain the necessity of building bye-laws. Explain Carpet area and Built up area.
(b) Draw a line plan of Residential building with following requirements.
(i) Living room 3.5 m x 4 m .
(ii) Kitchen cum dining 3 mx 4 m
(iii) Bed room 3.5 m x 4 m
(iv) Common toilet $1.20 \mathrm{~m} \times 2 \mathrm{~m}$
(v) Verandah $1.20 \mathrm{~m} \times 2 \mathrm{~m}$

Attempt all questions
(a) Explain any seven commands used in Auto CAD
(b) State the requirements of a Post office building \& draw its line plan.

Attempt all questions
Prepare the exterior two point perspective of a Security room of plan size $3 \mathrm{~m} x$


