

CE505 - Building Design and Drawing

P. Pages : 1

Time : Four Hours

**GUG/W/16/3678**

Max. Marks : 80

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- Notes :
1. Question No. 1 compulsory from remaining questions solve **any two**.
 2. Due credit will be given to neatness and adequate dimensions.
 3. Assume suitable data wherever necessary.
 4. Retain the construction lines.
 5. Illustrate your answers wherever necessary with the help of neat sketches.
 6. Use of nonprogrammable calculator is allowed.

1. A medical practitioner desires to built a residential house with a provision for a consulting chamber and examination room in the same building. The building will be single storyed framed structure with staircase. The plot size is 10x15m with road on the north side. The Kitchen and dining room combined provided on north east facing of plot. The commutation area should not exceed 50 sqm. Plan the building with minimum 3 bed rooms, Hall and Kitchen two bed room, should have attached toilets and another common toilet leave the margins as per the bye laws of municipal corporation. Draw the following views to a scale of 1:50 neatly dimensioned.
 - a) Ground floor plan. 15
 - b) Section passing through staircase, w/c bath and kitchen. 15
 - c) Site plan to a scale 1:200. 5
 - d) Schedule of doors and windows and area statement, FSI. 5
2.
 - a) Explain with neat sketch Building rules and Bye-laws. 5
 - b) Explain different plan sanctioning authorities in brief. 5
 - c) Explain orientation and its importance. 5
 - d) Draw a free hand sketch of Queen post truss (well labelled). 5
3. Draw a line plan on a full graph sheet for a school of 500 students. Other details of the units required are as under:- 20
 - i) Office and administrative block
 - ii) Principal's room.
 - iii) Class rooms:-
 - a) Students below 10 yrs – 200 (students)
 - b) Students above 10 yrs – 300 (students)
 - iv) Teachers room – male & female.
 - v) Drawing room.
 - vi) Laboratories – 03 Nos
 - vii) Assembly Hall.
 - viii) Library.
 - ix) Parking space and cycle stand.
 - x) Sanitary blocks – For male & Female
It includes (W. C., Urinals, Wash basin, Water taps)
4. Draw a perspective view of the building plan of Question No. 1, Neglect small details. Retain construction lines and points. 20
