Con. 7946-13.   **LJ-10627**

(4 Hours)   **[Total Marks : 100**

N. B. : (1) Question No. **1** is **compulsory**.

(2) Answer any **four** questions from the remaining.

(3) **All** questions carry **equal** marks.

(4) Assume any suitable data, if necessary.

1. It is proposed to construct (G+2) Storied Apartment Residential building as R.C.C. framed structre on a plot of 50 m. × 40 m. in a public sector township.

Each floor consits of Type-'A' and Type - 'B' Apartments. Comman Staircase is provided as a vertical circulation. Assume floor to floor height as 3.3 m. Following are the requirements.

Type – 'A' Apartment : 2 B.H.K.

[1 living Room

2 Bed Rooms

1 Kitchen

1 Dining Hall

1 Comman Toilet

1 Attached toilet with are Bed Room]

Type – 'B' Apartment : 1 B.H.K.

[1 living Room

1 Bed Rooms

1 Kitchen–cum–Dining

1 Comman Toilet]

Assume the carpet areas for each facility as per Bye-Laws and Regulations. Draw the following:–

Ground Floor Plan   **20**

2. Draw the Sectional Elevation for the building you have proposed in Q. No. 1.   **20**

3. (a) Draw the Front Elevation for the building you have proposed in Q. No. 1.   **15**

(b) Draw the SITE PLAN for the building.   **5**

4. Draw the detailed FOUNDATION PLAN and Section of one FOOTING for the building   **20**
you have proposed in Q. No. 1

[TURN OVER

2nd Half-13(9)-PKL-32

Con. 7946-LJ-10627-13.   2

5. (a) Explain ZONING Regulations and Building Bye-Laws in detail.   **10**

    (b) Draw the constructional details (Sectional Elevation) for a KING-POST-ROOF TRUSS.   **10**

6. (a) Write in detail about "Principles of Planning" for Residential Buildings.   **10**

    (b) Write short notes on the following:–

         (i) WIND-ROSE (Circulation) Diagram   **5**

         (ii) Sun-Path Diagram.   **5**

7. (a) Draw the Roof Terrace Plan and Section of the same for the building you have   **10**
         proposed in Q. No. 1.

    (b) Draw the plan, Elevation and Section for a Quarter - turn Staircase in a Residential   **10**
         building assuming Floor-to-Floor height as 3.3 m. (shows all calculations).

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