

**SLR-TX – 61**

Seat No.	
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Set P

**T.E. (Civil) (Part – I) (Old – CGPA) Examination, 2018
BUILDING PLANNING AND DESIGN**

Day and Date : Wednesday, 12-12-2018
Time : 2.30 p.m. to 6.30 p.m.

Total Marks : 70

- Instructions :** 1) Q. No. 1 is **compulsory**. It should be solved in **first 30 minutes** in Answer Book Page No. 3. **Each** question carries **one** mark.
2) **Answer MCQ/Objective type questions on Page No. 3 only. Don't forget to mention, Q.P. Set (P/Q/R/S) on Top of Page.**
3) Figures on **right** indicate **full** marks.
4) Draw neat diagram **wherever** necessary.

MCQ/Objective Type Questions

Duration : 30 Minutes

Marks : 14

1. Write "Correct" or "Incorrect" for following sentences. **(14×1=14)**

- 1) In hospitals, Area of ward per bed is 8 to 10 sq. m. _____
- 2) For cinema hall, ratio of height to width to length is taken as 1 : 2: 3 _____
- 3) In hospital, IPD needs 1 w.c. for every 8 beds _____
- 4) For cinema auditorium floor area should be in the range of 3.5 to 4.2 sq. m. per person.
- 5) In a post office counter height from the floor is 1.6 m. to 1. 8 m. _____
- 6) Around 15 sq. m. per bus shall be considered in the design of the bus station towards the parking area _____
- 7) Station point is a point from where the observer is looking at the object/building _____
- 8) Unit for fire load is Kcal _____
- 9) Reverberation is the part of thermal insulation _____
- 10) Ramps provided at hospitals are usually with 1 in 10 slopes _____

P.T.O.



- 11) The shape of a room is not important factor affecting its acoustical properties _____
 - 12) Total absorption is calculated for fire resistance of a building.
 - 13) Now-a-days rain water harvesting is not having any significance for existing and proposed structures _____
 - 14) In an auditorium concave surfaces are more preferred than convex surfaces _____
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Marks : 56

- Instructions :** 1) Figures on **right** indicate **full** marks.
2) Draw neat diagram **wherever** necessary.
3) Use full imperial sheet for section **I** and answer book for Section **II**.

SECTION – I

2. Attempt **all** : **28**

A) A commercial bank proposes to build its branch office in a village. The branch is to have following accommodation

- a) Hall with counter 45 sq. m.
- b) Store and record 20 sq.m.
- c) Strong room 12 sq. m.
- d) Agents room 15 sq. m.
- e) Store room 10 sq. m.
- f) Safe deposit vault 20 sq. m.
- g) Toilets according to NBC.

Assume additional data if required

Draw

1) A detailed plan for the building (Scale 1 : 100) **13**

2) A sectional elevation Passing through a Toilet room
(Scale 1 : 100)

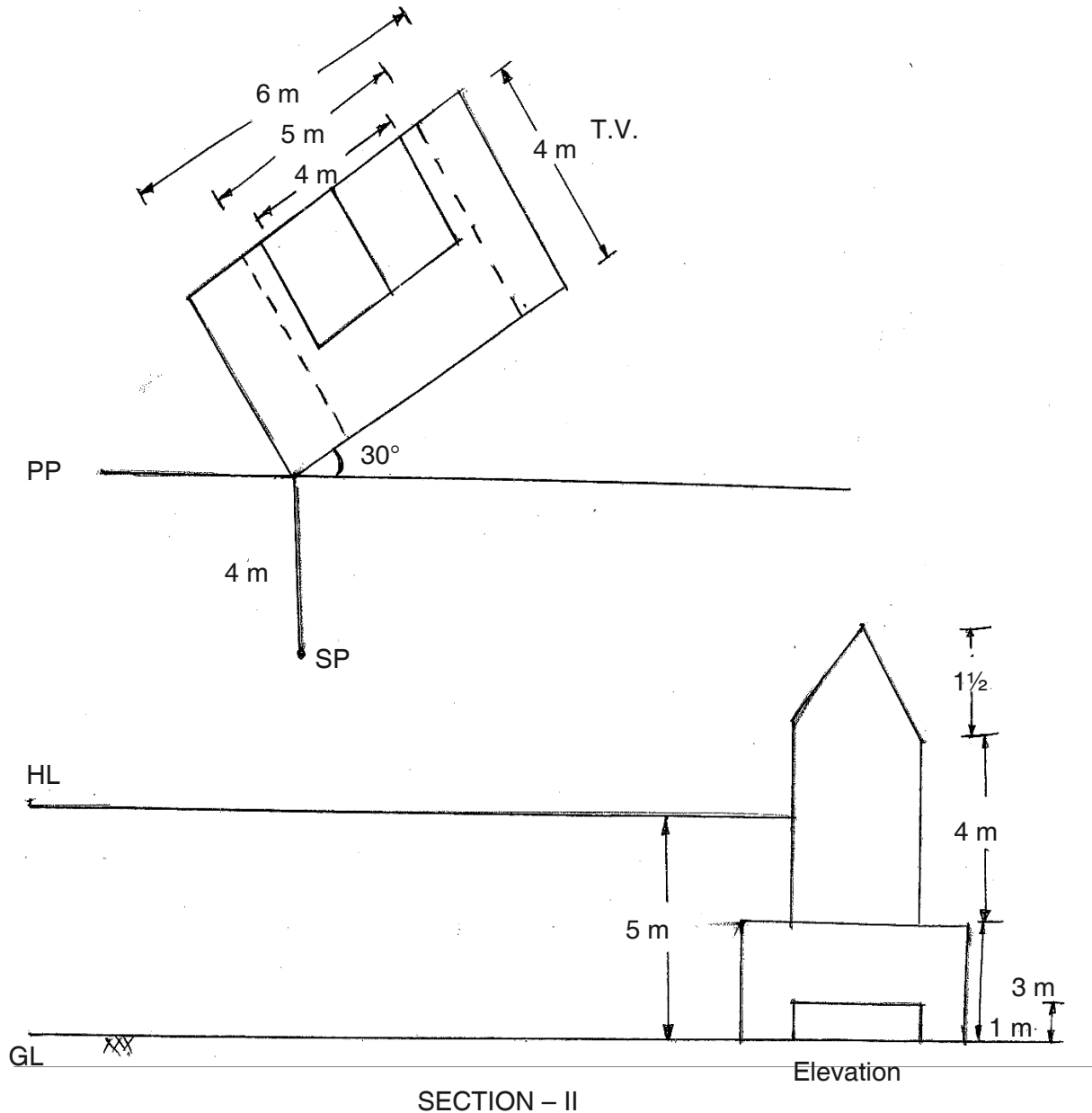
7

Set P



B) Draw perspective for given sketch. Use scale 1: 100. Symbols have usual meaning.

8



3. Attempt **any seven** :

28

- 1) Draw sketch for sound insulation treatment to a RCC floor slab.
- 2) Explain reverberation and reverberation time.
- 3) Explain structure borne noise and its insulation
- 4) Write note on "Automatic Sprinkler System" with sketch.
- 5) How fire can be confined ?
- 6) Explain design of rain water harvesting scheme for a bungalow with area 50 sq. M. Also state components of rain water harvesting structure.
- 7) Discuss about Computer aided design and drawing of building.
- 8) Explain any two components of aesthetics with sketch.
- 9) Explain acoustic design of a broadcasting room.

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Set Q

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- 12) In a post office counter height from the floor is 1.6 m. to 1. 8 m. _____
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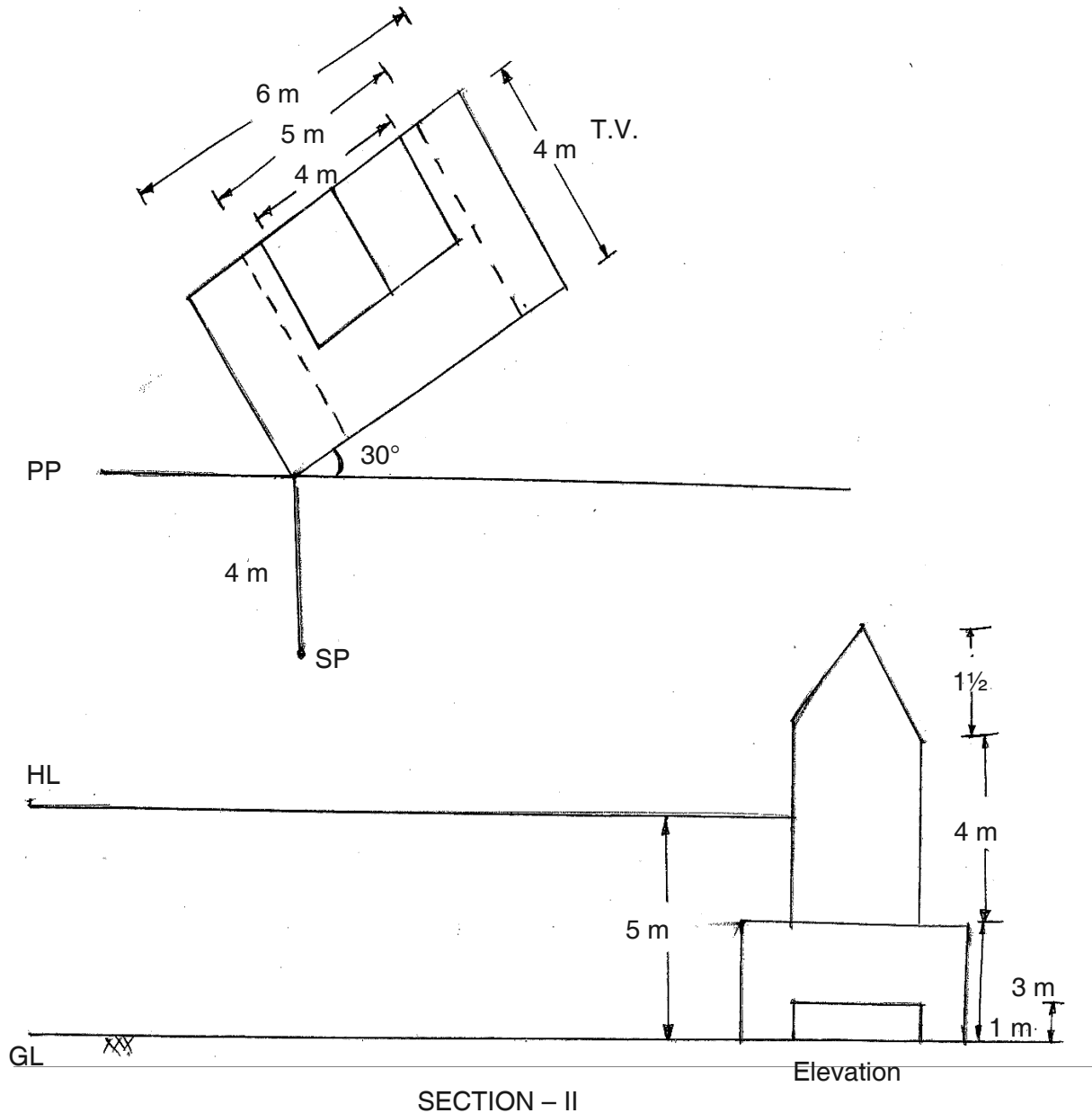
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Set Q



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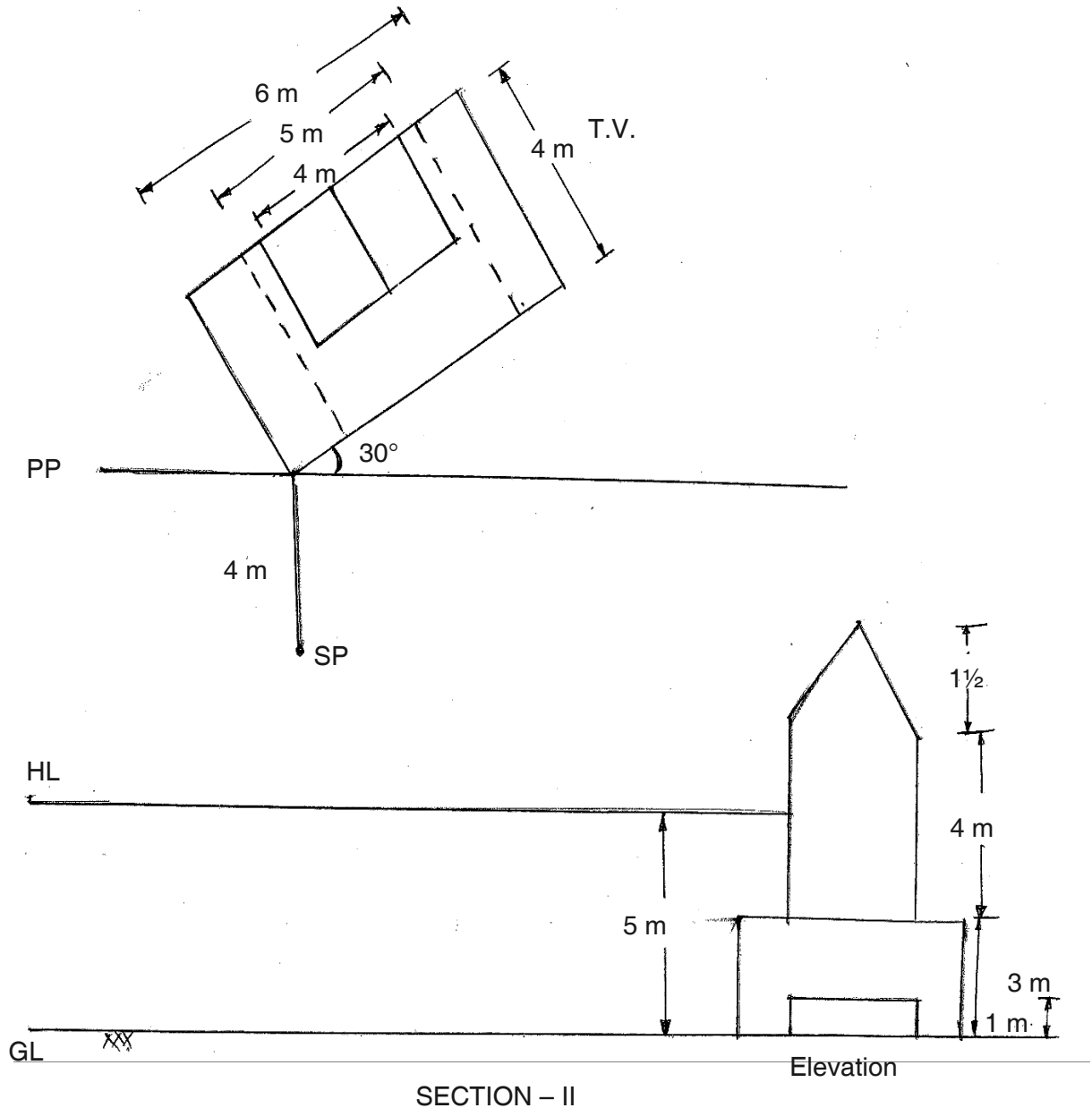
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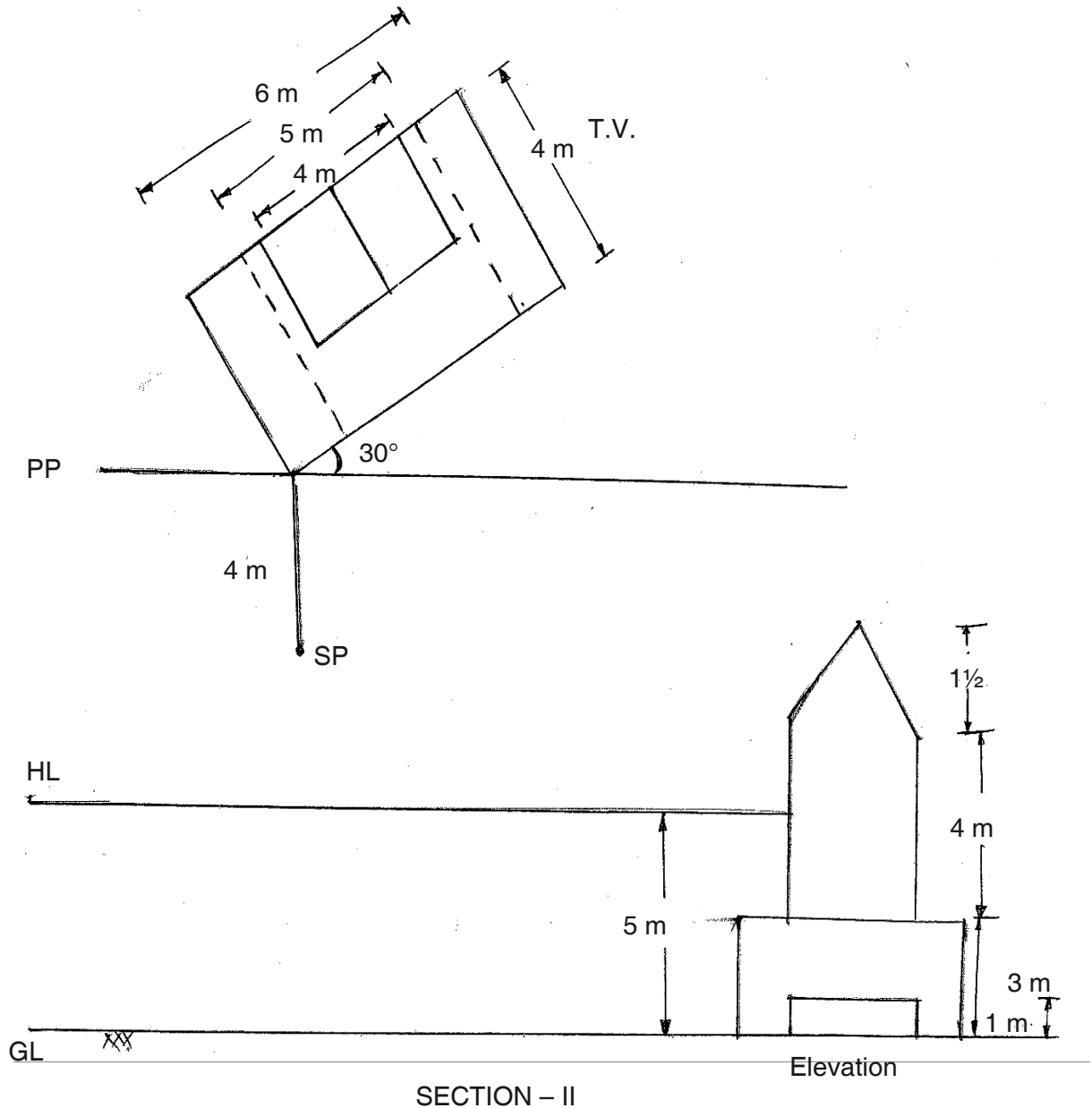
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