**SLR-TX – 25**

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**Set P**

## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Max. Marks : 70
Time : 10.00 a.m. to 2.00 p.m.

***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) Figure to the **right** indicate **full** marks.*
*4) Assume suitable data **wherever** necessary and mention it **clearly**.*

### MCQ/Objective Type Questions

Duration : 30 Minutes Marks : 14

1. State whether following statement is correct or incorrect. **(1×14=14)**
   1) If depth of footing is less than or equal to width of footing then it is called as shallow foundation.
   2) Style is part of door frame.
   3) Landing width is equal to flight width of staircase.
   4) In case of roofs water flows from valley to ridge.
   5) Lintel is provided to carry load of wall above opening provided in wall.
   6) Extrados is inner curve of an arch.
   7) In two pipe system separate soil pipe (S.P.) and waste pipe (W.P.) are provided.
   8) Purpose to providing traps in drainage system to avoid entry foul gases in building.

**P.T.O.**

9) Plastering is the process of covering rough surfaces of wall, column and ceiling etc.

10) The term pointing is applied to the finishing of mortar joints in masonry.

11) Driers are used to accelerate the process of drying in painting.

12) As per IS : 3362-1965 in living rooms and bedrooms minimum of three air change per hour should be provided.

13) Flooring of terrazzo, mosaic tiles and marble gives good appearance.

14) Varnish is applied on wood surfaces.

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## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Marks : 56
Time : 10.00 a.m. to 2.00 p.m.

***Instructions** : 1) **All** questions are **compulsory**.*
*2) Section – **I** to be written in answer book.*
*3) Section – **II** to be drawn on **half** imperial drawing sheet. **Use** both sides of the sheet.*
*4) Figure to the **right** indicate **full** marks.*
*5) **Assume** suitable data **wherever** necessary and mention it **clearly**.*
*6) Retain **all** projection/construction lines on drawing sheet.*

SECTION – I

2. Attempt **any seven** questions : **(7×4=28)**

a) Write down about functional requirements of building as whole.

b) Enlist various types of bonds in brick masonry. Explain with neat sketch any two bonds.

c) Differentiate between stone masonry and brick masonry.

d) Discuss requirement of good stair with neat sketch.

e) Enlist the types of doors. Explain any one type of door in detail with sketch.

f) Draw a detailed labelled diagram of arch and explain components of arch.

g) Explain in brief various systems of mechanical ventilation.

h) What are the causes of breaking of water seal in the traps ?

i) Explain in brief the objective of plastering and pointing.

j) Explain various defects in painting.

**Set P**

## SECTION – II

3. A) Draw to scale of 1 : 10, detailed section, front elevation and sectional elevation for framed T.W. Double leaf door full paneled. Use following data (All dimensions are in mm) **14**

   a) Clear opening = 1000 × 2100

   b) Wood section for frame = 100 × 75

   c) Wood section for styles and rails = 100 × 40

   d) Panel – 20 mm thick plywood

   e) Show various fixtures at proper location.

   OR

   Draw to the scale of 1 : 10 elevation and plan of alternate course of L shaped one brick and one and half brick thick wall in English bond also draw the isometric view of the masonry.

   B) Design and draw to scale 1 : 30, plan and vertical section for quarter turn RCC stair for residential building. Use following data : **14**

   1) Storey height = 3100 mm

   2) Width of flight = 1000 mm

   3) Railing - 50 mm thick RCC pardi

   4) Reinforcement details not expected

   5) Write step by step calculation on sheet with pencil only.

   OR

   Draw to scale 1 : 20 cross section of a RCC slab floor with ceramic tile flooring laid on cement mortar bed with cement float. Use following data and dimension.

   1) RCC slab thickness = 150 mm

   2) Cement mortar bed thickness = 30 mm

   3) Cement float thickness = 02 mm

   4) Ceramic tile thickness = 15 mm

   5) Ceramic tile size in plan = 300 × 300 mm

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**Set Q**

## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Max. Marks : 70
Time : 10.00 a.m. to 2.00 p.m.

***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) Figure to the **right** indicate **full** marks.*
*4) Assume suitable data **wherever** necessary and mention it **clearly**.*

### MCQ/Objective Type Questions

Duration : 30 Minutes Marks : 14

1. State whether following statement is correct or incorrect. **(1×14=14)**
   1) Purpose to providing traps in drainage system to avoid entry foul gases in building.
   2) Plastering is the process of covering rough surfaces of wall, column and ceiling etc.
   3) The term pointing is applied to the finishing of mortar joints in masonry.
   4) Driers are used to accelerate the process of drying in painting.
   5) As per IS : 3362-1965 in living rooms and bedrooms minimum of three air change per hour should be provided.
   6) Flooring of terrazzo, mosaic tiles and marble gives good appearance.
   7) Varnish is applied on wood surfaces.
   8) If depth of footing is less than or equal to width of footing then it is called as shallow foundation.

**P.T.O.**

9) Style is part of door frame.

10) Landing width is equal to flight width of staircase.

11) In case of roofs water flows from valley to ridge.

12) Lintel is provided to carry load of wall above opening provided in wall.

13) Extrados is inner curve of an arch.

14) In two pipe system separate soil pipe (S.P.) and waste pipe (W.P.) are provided.

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## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Marks : 56
Time : 10.00 a.m. to 2.00 p.m.

***Instructions** : 1) **All** questions are **compulsory**.*
*2) Section – **I** to be written in answer book.*
*3) Section – **II** to be drawn on **half** imperial drawing sheet. **Use** both sides of the sheet.*
*4) Figure to the **right** indicate **full** marks.*
*5) **Assume** suitable data **wherever** necessary and mention it **clearly**.*
*6) Retain **all** projection/construction lines on drawing sheet.*

SECTION – I

2. Attempt **any seven** questions : **(7×4=28)**

a) Write down about functional requirements of building as whole.

b) Enlist various types of bonds in brick masonry. Explain with neat sketch any two bonds.

c) Differentiate between stone masonry and brick masonry.

d) Discuss requirement of good stair with neat sketch.

e) Enlist the types of doors. Explain any one type of door in detail with sketch.

f) Draw a detailed labelled diagram of arch and explain components of arch.

g) Explain in brief various systems of mechanical ventilation.

h) What are the causes of breaking of water seal in the traps ?

i) Explain in brief the objective of plastering and pointing.

j) Explain various defects in painting.

**Set Q**

## SECTION – II

3. A) Draw to scale of 1 : 10, detailed section, front elevation and sectional elevation for framed T.W. Double leaf door full paneled. Use following data (All dimensions are in mm) **14**

   a) Clear opening = 1000 × 2100

   b) Wood section for frame = 100 × 75

   c) Wood section for styles and rails = 100 × 40

   d) Panel – 20 mm thick plywood

   e) Show various fixtures at proper location.

   OR

   Draw to the scale of 1 : 10 elevation and plan of alternate course of L shaped one brick and one and half brick thick wall in English bond also draw the isometric view of the masonry.

   B) Design and draw to scale 1 : 30, plan and vertical section for quarter turn RCC stair for residential building. Use following data : **14**

   1) Storey height = 3100 mm

   2) Width of flight = 1000 mm

   3) Railing - 50 mm thick RCC pardi

   4) Reinforcement details not expected

   5) Write step by step calculation on sheet with pencil only.

   OR

   Draw to scale 1 : 20 cross section of a RCC slab floor with ceramic tile flooring laid on cement mortar bed with cement float. Use following data and dimension.

   1) RCC slab thickness = 150 mm

   2) Cement mortar bed thickness = 30 mm

   3) Cement float thickness = 02 mm

   4) Ceramic tile thickness = 15 mm

   5) Ceramic tile size in plan = 300 × 300 mm

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**SLR-TX – 25**

| Seat No. | |
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**Set R**

## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Max. Marks : 70
Time : 10.00 a.m. to 2.00 p.m.

***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) Figure to the **right** indicate **full** marks.*
*4) Assume suitable data **wherever** necessary and mention it **clearly**.*

### MCQ/Objective Type Questions

Duration : 30 Minutes Marks : 14

1. State whether following statement is correct or incorrect. **(1×14=14)**
   1) Lintel is provided to carry load of wall above opening provided in wall.
   2) Extrados is inner curve of an arch.
   3) In two pipe system separate soil pipe (S.P.) and waste pipe (W.P.) are provided.
   4) Purpose to providing traps in drainage system to avoid entry foul gases in building.
   5) Plastering is the process of covering rough surfaces of wall, column and ceiling etc.
   6) The term pointing is applied to the finishing of mortar joints in masonry.
   7) Driers are used to accelerate the process of drying in painting.
   8) As per IS : 3362-1965 in living rooms and bedrooms minimum of three air change per hour should be provided.

**P.T.O.**

9) Flooring of terrazzo, mosaic tiles and marble gives good appearance.

10) Varnish is applied on wood surfaces.

11) If depth of footing is less than or equal to width of footing then it is called as shallow foundation.

12) Style is part of door frame.

13) Landing width is equal to flight width of staircase.

14) In case of roofs water flows from valley to ridge.

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## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Marks : 56
Time : 10.00 a.m. to 2.00 p.m.

***Instructions** : 1) **All** questions are **compulsory**.*
*2) Section – **I** to be written in answer book.*
*3) Section – **II** to be drawn on **half** imperial drawing sheet. **Use** both sides of the sheet.*
*4) Figure to the **right** indicate **full** marks.*
*5) **Assume** suitable data **wherever** necessary and mention it **clearly**.*
*6) Retain **all** projection/construction lines on drawing sheet.*

SECTION – I

2. Attempt **any seven** questions : **(7×4=28)**

a) Write down about functional requirements of building as whole.

b) Enlist various types of bonds in brick masonry. Explain with neat sketch any two bonds.

c) Differentiate between stone masonry and brick masonry.

d) Discuss requirement of good stair with neat sketch.

e) Enlist the types of doors. Explain any one type of door in detail with sketch.

f) Draw a detailed labelled diagram of arch and explain components of arch.

g) Explain in brief various systems of mechanical ventilation.

h) What are the causes of breaking of water seal in the traps ?

i) Explain in brief the objective of plastering and pointing.

j) Explain various defects in painting.

**Set R**

SECTION – II

3. A) Draw to scale of 1 : 10, detailed section, front elevation and sectional elevation for framed T.W. Double leaf door full paneled. Use following data (All dimensions are in mm) **14**

a) Clear opening = 1000 × 2100

b) Wood section for frame = 100 × 75

c) Wood section for styles and rails = 100 × 40

d) Panel – 20 mm thick plywood

e) Show various fixtures at proper location.

OR

Draw to the scale of 1 : 10 elevation and plan of alternate course of L shaped one brick and one and half brick thick wall in English bond also draw the isometric view of the masonry.

B) Design and draw to scale 1 : 30, plan and vertical section for quarter turn RCC stair for residential building. Use following data : **14**

1) Storey height = 3100 mm

2) Width of flight = 1000 mm

3) Railing - 50 mm thick RCC pardi

4) Reinforcement details not expected

5) Write step by step calculation on sheet with pencil only.

OR

Draw to scale 1 : 20 cross section of a RCC slab floor with ceramic tile flooring laid on cement mortar bed with cement float. Use following data and dimension.

1) RCC slab thickness = 150 mm

2) Cement mortar bed thickness = 30 mm

3) Cement float thickness = 02 mm

4) Ceramic tile thickness = 15 mm

5) Ceramic tile size in plan = 300 × 300 mm

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**Set S**

## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Max. Marks : 70
Time : 10.00 a.m. to 2.00 p.m.

***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) Figure to the **right** indicate **full** marks.*
*4) Assume suitable data **wherever** necessary and mention it **clearly**.*

### MCQ/Objective Type Questions

Duration : 30 Minutes Marks : 14

1. State whether following statement is correct or incorrect. **(1×14=14)**
   1) The term pointing is applied to the finishing of mortar joints in masonry.
   2) Driers are used to accelerate the process of drying in painting.
   3) As per IS : 3362-1965 in living rooms and bedrooms minimum of three air change per hour should be provided.
   4) Flooring of terrazzo, mosaic tiles and marble gives good appearance.
   5) Varnish is applied on wood surfaces.
   6) If depth of footing is less than or equal to width of footing then it is called as shallow foundation.
   7) Style is part of door frame.
   8) Landing width is equal to flight width of staircase.

**P.T.O.**

9) In case of roofs water flows from valley to ridge.

10) Lintel is provided to carry load of wall above opening provided in wall.

11) Extrados is inner curve of an arch.

12) In two pipe system separate soil pipe (S.P.) and waste pipe (W.P.) are provided.

13) Purpose to providing traps in drainage system to avoid entry foul gases in building.

14) Plastering is the process of covering rough surfaces of wall, column and ceiling etc.

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# SLR-TX – 25

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## S.E. (Civil) (Part – I) (CBCS) Examination, 2018
## BUILDING CONSTRUCTION AND DRAWING (New)

Day and Date : Tuesday, 11-12-2018 Marks : 56
Time : 10.00 a.m. to 2.00 p.m.

***Instructions** : 1) **All** questions are **compulsory**.*
*2) Section – **I** to be written in answer book.*
*3) Section – **II** to be drawn on **half** imperial drawing sheet. **Use** both sides of the sheet.*
*4) Figure to the **right** indicate **full** marks.*
*5) **Assume** suitable data **wherever** necessary and mention it **clearly**.*
*6) Retain **all** projection/construction lines on drawing sheet.*

SECTION – I

2. Attempt **any seven** questions : **(7×4=28)**

a) Write down about functional requirements of building as whole.

b) Enlist various types of bonds in brick masonry. Explain with neat sketch any two bonds.

c) Differentiate between stone masonry and brick masonry.

d) Discuss requirement of good stair with neat sketch.

e) Enlist the types of doors. Explain any one type of door in detail with sketch.

f) Draw a detailed labelled diagram of arch and explain components of arch.

g) Explain in brief various systems of mechanical ventilation.

h) What are the causes of breaking of water seal in the traps ?

i) Explain in brief the objective of plastering and pointing.

j) Explain various defects in painting.

**Set S**

## SECTION – II

3. A) Draw to scale of 1 : 10, detailed section, front elevation and sectional elevation for framed T.W. Double leaf door full paneled. Use following data (All dimensions are in mm) **14**

   a) Clear opening = 1000 × 2100

   b) Wood section for frame = 100 × 75

   c) Wood section for styles and rails = 100 × 40

   d) Panel – 20 mm thick plywood

   e) Show various fixtures at proper location.

   OR

   Draw to the scale of 1 : 10 elevation and plan of alternate course of L shaped one brick and one and half brick thick wall in English bond also draw the isometric view of the masonry.

   B) Design and draw to scale 1 : 30, plan and vertical section for quarter turn RCC stair for residential building. Use following data : **14**

   1) Storey height = 3100 mm

   2) Width of flight = 1000 mm

   3) Railing - 50 mm thick RCC pardi

   4) Reinforcement details not expected

   5) Write step by step calculation on sheet with pencil only.

   OR

   Draw to scale 1 : 20 cross section of a RCC slab floor with ceramic tile flooring laid on cement mortar bed with cement float. Use following data and dimension.

   1) RCC slab thickness = 150 mm

   2) Cement mortar bed thickness = 30 mm

   3) Cement float thickness = 02 mm

   4) Ceramic tile thickness = 15 mm

   5) Ceramic tile size in plan = 300 × 300 mm

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