

# Model Question Paper I

## Basic Civil Engineering – Theory

Total Marks: 90

### Part A

Choose the correct answer

15 × 1 = 15

1. Engineering drawing is a \_\_\_\_\_ language which consists of different types of lines and letters.  
a) Tamil                      b) western                      c) World wide                      d) Indian
2. The only line which intersects object line is \_\_\_\_\_.  
a) Hidden line                      b) Leader line                      c) Extension line                      d) Dimension line.
3. \_\_\_\_\_ software is mostly used to draw drawing.  
a) Auto Desk                      b) NISA                      c) Auto Cad                      d) ARCHICAD
4. \_\_\_\_\_ is mentioning the real dimension near the object.  
a) Dimension style                      b) Dimension text                      c) Dimension line                      d) None of the above
5. \_\_\_\_\_ rocks cannot split in to thin layers.  
a) Stratified                      b) Un-Stratified                      c) Foliated                      d) None of the above
6. The percentage of Iron oxide content in good brick earth is \_\_\_\_\_.  
a) 5-6%                      b) 3-4%                      c) 2-3%                      d) 4-5%
7. In a Layman's view cement means \_\_\_\_\_.  
a) Natural cement                      b) Artificial cement                      c) Quick setting cement  
d) Portland cement
8. The proportion of cement mortar used for brick work is \_\_\_\_\_.  
a) CM 1:4                      b) CM 1:6                      c) CM 1:3                      d) CM 1:2
9. The ratio of Reinforced cement concrete is \_\_\_\_\_.  
a) 1:4:8                      b) 1:3:6                      c) 1:5:10                      d) 1:2:4

10. \_\_\_\_\_ timber is used for ship building .  
 a) Teak                      b) Sal                      c) Mango                      d) Jack
11. The tile used to carry irrigation water is \_\_\_\_\_.  
 a) Corrugated tile    b) Drain tile                      c) Floor tile                      d) Roof tile
12. The foundation used to transmit heavy loads from steel column to the soil having low bearing capacity is \_\_\_\_\_.  
 a) Isolated footing    b) Continuous footing    c) Grillage foundation  
 d) Combined footing
13. The Layer of brick which is projecting at roof level of every floor is known as \_\_\_\_\_.  
 a) coping                      b) Plinth                      c) String course                      d) Cornice
14. The inner surface of an arch is termed as \_\_\_\_\_.  
 a) abutment                      b) intrados                      c) extrados                      d) Springing stone
15. The vertical wooden member which splits the doors or windows into two parts is \_\_\_\_\_.  
 a) Style                      b) Bottom rail                      c) Panel                      d) Mullion

### Part B

*Answer any ten questions in one or two sentences*

**10 × 3 = 30**

**Note : Question No 25 is Compulsory**

16. List the general classification of rocks.
17. Write any three uses of stones.
18. List the ingredients and its proportions of brick earth.
19. Write any three Properties of good mortar.
20. Write short note on : Fiber board
21. List any three types of ceramic tiles.
22. What are the objects of providing foundation?
23. Write the types of dressing of stones.
24. List the types of arches based on the materials for construction.
25. List and three types of hinges used in doors and windows.
26. List any three types of stairs based on the shapes.
27. List the types of pitched roof .
27. What are the materials used to constructed roofs ?

### Part C

*Answer any five questions in brief*

$5 \times 5 = 25$

*Note : Question No 30 is Compulsory*

29. Write briefly about set square with neat sketch.
30. Write any five advantages of using software to draw drawing .
31. List the steps involved in preparation of brick earth and explain any two of them.
32. List the field tests conducted on cement and explain any two of them.
33. What is seasoning of timber ? List the objects of seasoning of timber.
34. Write name and uses of any five tools used in masonry work.
35. Draw a straight stair and indicate its parts.

### Part D

*Answer all questions in detail*

$2 \times 10 = 20$

36. Explain any ten principles adopted in dimensioning with sketch.

(or)

Differentiate between River sand and Manufactured sand (M-sand).

37. Draw neatly a panel door and indicate its parts.

(or)

Explain about any four modern roofing sheets.

## Model Question Paper II

### Basic Civil Engineering– Theory

Total Marks: 90

#### Part A

Choose the correct answer.

$15 \times 1 = 15$

1. The ebony edge of drawing board should be projected \_\_\_\_\_ from the edge of drawing board.  
a) 6 to 10 mm      b) 5 to 6 mm      c) 2 to 3 mm      d) 7 to 8 mm
2. The software used for design of highways is \_\_\_\_\_.  
a) M.S. ROADS      b) KANAL ++      c) AQUA ++      d) GEO
3. The specific gravity of good stones should be more than \_\_\_\_\_.  
a) 1.8      b) 2.1      c) 2.5      d) 2.7
4. The clay content in brick earth should be \_\_\_\_\_.  
a) 20 to 30 %      b) 20 to 35 %      c) 35 to 50 %      d) 40 to 45 %
5. In block test, the cement block is immersed in water for \_\_\_\_\_.  
a) 5 days      b) 3 days      c) 7 days      d) 10 days
6. \_\_\_\_\_ is the small groove cut on the underside of cornice, coping and sill to drain the rain water.  
a) Layer      b) Throating      c) Plinth      d) Through Stone
7. The wedge shaped stones to form arch are called as \_\_\_\_\_.  
a) Voussoirs      b) Extrados      c) Springing stone      d) Springing line
8. The horizontal member which splits window frame into two parts is \_\_\_\_\_.  
a) Transome      b) Sash      c) Louver      d) Mullion
9. The minimum height of door is \_\_\_\_\_.  
a) 2.0 m      b) 1.5 m      c) 1.8 m      d) 2.2 m
10. The horizontal portion of the step where we rest the foot is \_\_\_\_\_.  
a) Rise      b) Tread      c) Riser      d) Going
11. The roof having sloped surface is known as \_\_\_\_\_.  
a) Shell roof      b) Pitched roof      c) Flat roof      d) Madras terrace roof
12. The weight of rose wood after seasoning is \_\_\_\_\_.  
a) 7900 N/m<sup>3</sup>      b) 6900 N/m<sup>3</sup>      c) 8600 N/m<sup>3</sup>      d) 7700 N/m<sup>3</sup>
13. The thickness of hard board is \_\_\_\_\_.  
a) 2 mm      b) 3 mm      c) 30 mm      d) 5 mm

14. The percentage of calcium oxide in fat lime is \_\_\_\_\_.  
a) 80 %                      b) 85 %                      c) 95 %                      d) 90 %
15. The other name of pot tiles is \_\_\_\_\_.  
a) Ceramic tiles              b) Mangalore tiles              c) Flat tiles                      d) Hand tiles

### Part B

*Answer any ten questions in one or two sentences*

**10 × 3 = 30**

**Note : Question No 25 is Compulsory**

16. Define centre line.
17. What are the uses of STAAD PRO – Software ?
18. What do you mean by 'Dimension text' ?
19. What are the physical classification of rocks ?
20. State the importance of 'Alumina' in brick earth.
21. Write short notes on hollow block.
22. What is meant by natural cement ?
23. Define lime mortar.
24. What are the methods of seasoning of timber ?
25. List any three types of locks.
26. State the types of staircases according to the materials used.
27. List the types of trussed roofs.
28. Mention the types of stone masonry.

### Part C

*Answer any five questions in brief*

**5 × 5 = 25**

**Note : Question No 30 is Compulsory**

29. Name any five commands used in Auto CAD.
30. What are the types of bricks ?
31. List any five types of artificial cement.
32. What are the uses of timber in construction ?
33. What are the types of shallow foundations ?
34. What are the differences between lintels and arches ?
35. Write any five uses of mortar.

### Part D

*Answer all the questions in detail*

**2 × 10 = 20**

36. Explain about Setsquare and Drawing pencils with sketch.  
(or)  
Tabulate the differences between stone masonry and brick masonry.
37. Explain revolving door with sketch.  
(or)  
List the timber products and explain any two of them in brief.