



## QUESTION BANK

Title of the Subject: <b>Basic Civil Engineering</b>	
Title of the Unit: Introduction to civil Engineering	Unit No:- 1

Multiple Choice Questions		
Question No.	Question Description	Expected Marks
1	A badly mixed cement concrete results in A. Segregation B. Bleeding C. honey combing D. none to these. Answer: Option C	1
2	Pick up the correct statement regarding low heat cement from the following: A. It possesses less compressive strength B. Its initial setting time is about one hour C. Its final setting time is about 10 hours D. Its mainly used for mass concrete work E. All the above. Answer: Option E	1
3	Chemically, marble is known as A. metamorphic rock B. argillaceous rock C. calcareous rock D. silicious rock. Answer: Option C	1
4	Mastic asphalt is generally used for A. damp proof course B. water proof layer C. partition walls D. both (a) and (b). Answer: Option D	1
5	Seasoning is A. a process of removing sap B. creosoting C. painting with sodium silicate	1

	D. coating with tar. Answer: Option A	
6	Minimum required water cement ratio for a workable concrete, is A. 0.30 B. 0.40 C. 0.50 D. 0.60 E. 1.0. Answer: Option B	1
7	Clay and silt content in a good brick earth must be at least A. 50% B. 40% C. 30% D. 25% E. 20% Answer: Option A	1
8	Cement is said to be of good quality if A. its colour is not greenish grey B. one feels cool by thrusting one's hand in the cement bag C. it is not smooth when rubbed in between fingers D. a handful of cement thrown into a bucket of water does not float E. none of these Answer: Option E	1
9	The minimum compressive strength of IInd class bricks should be A. 75 kg/cm <sup>2</sup> B. 90 kg/cm <sup>2</sup> C. 100 kg/cm <sup>2</sup> D. 120 kg/cm <sup>2</sup> E. 150 kg/cm <sup>2</sup> . Answer: Option A	1
10	Seasoning of timber is done for A. increasing moisture content B. decreasing moisture content C. increasing strength of timber D. none to these. Answer: Option B	1
Short Answer Question		
Question No.	Question Description	Expected Marks
1	Enlist various civil engineering branches	2
2	Enlist various engineering materials used in construction of building	2
3	Enlist types of cement	2

4	Define aggregate	2
5	Define mortar	2
6	Deference between cement mortar and cement concrete	2
7	What are composite materials	2
8	Enlist types of bricks	2
9	Write types of steel in various construction industry	2
10	What is FRP	2

Long Answer Question		
Question No.	Question Description	Expected Marks
1	Write properties of good bricks	6
2	Explain seasoning of timber	8
3	Write short note on types of cement	6
4	Write properties of concrete	6
5	Explain uses of aggregate in construction activity	6
6	Write applications of bitumen in various construction activity	4
7	Differentiate between stone masonry and brick masonry	8
8	Applications of glass in commercial buildings	6
9	Explain role of civil engineer in various construction activities	8
10	Write various properties of soil and its applications in construction activities	8



## QUESTION BANK

<b>Title of the Subject: Basic Civil Engineering</b>	
<b>Title of the Unit: Building Components and Building Planning</b>	<b>Unit No:- 2</b>

Multiple Choice Questions		
Question No.	Question Description	Expected Marks
1	<p>The foundation in which a cantilever beam is provided to join two footings, is known as</p> <ul style="list-style-type: none"><li>A. strip footing</li><li>B. strap footing</li><li>C. combined footing</li><li>D. raft footing</li><li>E. none of these.</li></ul> <p><b>Answer: Option B</b></p>	1
2	<p>The 9 cm x 9 cm side of a brick as seen in the wall face, is generally known as Stretcher</p> <ul style="list-style-type: none"><li>A. face</li><li>B. front</li><li>C. header</li><li>D. side.</li></ul> <p><b>Answer: Option D</b></p>	1
3	<p>The under surface of an arch, is called</p> <ul style="list-style-type: none"><li>A. Soffit</li><li>B. Intrados</li><li>C. haunch</li><li>D. back.</li></ul> <p><b>Answer: Option A</b></p>	1
4	<p>The raft slab is projected beyond the outer walls of the structure by</p> <ul style="list-style-type: none"><li>A. 5 to 10 cm</li><li>B. 15 to 20 cm</li><li>C. 25 to 30 cm</li><li>D. 30 to 45 cm</li><li>E. 60 cm.</li></ul> <p><b>Answer: Option D</b></p>	1

5	<p>Black cotton soil is unsuitable for foundations because its</p> <p>A. bearing capacity is low  B. permeability is uncertain  C. particles are cohesive  D. property to undergo a volumetric change due to variation of moisture content</p> <p><b>Answer: Option D</b></p>	1
6	<p>The vertical faces of a door opening which support frame of the door, are</p> <p>A. jambs  B. posts  C. reveals  D. styles</p> <p><b>Answer: Option A</b></p>	1
7	<p>Pick up the correct statement from the following :</p> <p>A. The bearing capacity of a pile is defined as the load which can be sustained by the pile without producing excessive settlement  B. The ultimate bearing capacity of a pile is defined as the maximum load which the pile carries and continues to sink without any further increases of load  C. The safe bearing capacity of a pile is obtained by dividing the ultimate bearing capacity with a suitable factor of safety  D. All of the above</p> <p><b>Answer: Option D</b></p>	1
8	<p>A stair should not have pitch more than</p> <p>A. 25°  B. 30°  C. 40°  D. 50°  E. 60°</p> <p><b>Answer: Option C</b></p>	1
9	<p>The window which is provided on a sloping roof of a building, is called</p> <p>A. lantern window  B. dormer window  C. louvered window  D. rash window  E. air window.</p> <p><b>Answer: Option B</b></p>	1
10	<p>The minimum strength of the mortar used in load bearing brick masonry, is</p> <p>A. 50 N/cm<sup>2</sup>  B. 100 N/cm<sup>2</sup>  C. 150 N/cm<sup>2</sup>  D. 200 N/cm<sup>2</sup>.</p> <p><b>Answer: Option B</b></p>	1
<b>Short Answer Question</b>		
<b>Question No.</b>	<b>Question Description</b>	<b>Expected Marks</b>
1	Define foundation	2

2	Enlist types of foundations	2
3	Define plinth	2
4	Define substructure	2
5	Define superstructure	2
6	Enlist various building components	2
7	Define staircase	2
8	Enlist types of stair case	2
9	Enlist types of doors	2
10	Enlist types of windows	2

Long Answer Question		
Question No.	Question Description	Expected Marks
1	What is deep foundation? Explain any two with neat sketch	8
2	What is shallow foundation? Explain any two with neat sketch	8
3	<b>Write functions of foundation</b>	6
4	Explain various building components with neat sketch	8
5	Write short note on dog legged stair case with neat sketch	8
6	Draw 1 BHK plan with 12m X 10m plot area	12
7	<b>Write short note on types and uses of flooring materials</b>	6
8	<b>Write short note on types and uses of roofing materials</b>	6
9	Write short note on plumbing in residential building	6
10	What are general requirement of sanitation and plumbing in residential building	8

**QUESTION BANK**

<b>Title of the Subject: Basic Civil Engineering</b>	
<b>Title of the Unit: Surveying</b>	<b>Unit No:- 3</b>

<b>Multiple Choice Questions</b>		
<b>Question No.</b>	<b>Question Description</b>	<b>Expected Marks</b>
<b>1</b>	Hydrographic surveys deal with the mapping of A. large water bodies B. heavenly bodies C. mountaineous region D. canal system E. movement of clouds <b>Answer: Option A</b>	<b>1</b>
<b>2</b>	In chain surveying tie lines are primarily provided A. to check the accuracy of the survey B. to take offsets for detail survey C. to avoid long offsets from chain lines D. to increase the number of chain lines. <b>Answer: Option C</b>	<b>1</b>
<b>3</b>	Closed contours of decreasing values towards their centre, represent A. a hill B. a depression C. a saddle or pass D. a river bed. <b>Answer: Option B</b>	<b>1</b>
<b>4</b>	The main principle of surveying is to work A. from part to the whole B. from whole to the part C. from higher level to the lower level D. from lower level to higher level. <b>Answer: Option B</b>	<b>1</b>
<b>5</b>	For the construction of highway (or railway) A. longitudinal sections are required B. cross sections are required C. both longitudinal and cross sections are required D. none of these. <b>Answer: Option C</b>	<b>1</b>
<b>6</b>	A bearing of a line is also known as A. magnetic bearing B. true bearing C. azimuth	<b>1</b>

	D. reduced bearing <b>Answer: Option B</b>	
7	A. Pick up the method of surveying in which field observations and plotting proceed simultaneously from the following B. chain surveying C. compass surveying D. plan table surveying E. tacheometric surveying <b>Answer: Option C</b>	1
8	An imaginary line joining the points of equal elevation on the surface of the earth, represents A. contour surface B. contour gradient C. contour line D. level line none of these. <b>Answer: Option C</b>	1
9	The sensitiveness of a level tube decreases if A. radius of curvature of its inner surface is increased B. diameter of the tube is increased C. length of the vapour bubble is increased D. both viscosity and surface tension are increased <b>Answer: Option D</b>	1
10	During levelling if back sight is more than foresight A. The forward staff is at lower point B. The back staff is at lower point C. The difference in level, cannot be ascertained. D. none of these. <b>Answer: Option B</b>	1

#### Short Answer Question

Question No.	Question Description	Expected Marks
1	Define surveying	2
2	Define base line	2
3	Enlist instruments used in surveying	2
4	Enlist types of surveying	2
5	Define bench marks	2
6	Enlist types of bench marks	2
7	Define reduced level in surveying	2
8	Define contours	2
9	Define offset	2
10	What is bubble tube	2



<b>Long Answer Question</b>		
<b>Question No.</b>	<b>Question Description</b>	<b>Expected Marks</b>
<b>1</b>	Explain with neat sketch principle of surveying	<b>6</b>
<b>2</b>	<b>Write short note on angular measurement on ground level</b>	<b>6</b>
<b>3</b>	<b>Explain concept of bench mark</b>	<b>6</b>
<b>4</b>	Explain two methods to find reduced level	<b>6</b>
<b>5</b>	Write short note on plane table surveying	<b>6</b>
<b>6</b>	Write various applications of offset	<b>6</b>
<b>7</b>	<b>What is meridian and explain various types of meridian</b>	<b>6</b>
<b>8</b>	Write a short note on various types of maps	<b>6</b>
<b>9</b>	Write short note on surveying for road construction	<b>6</b>
<b>10</b>	Write short note on surveying for plotting of area	<b>6</b>