SUBJECT: HISTORY & BUILDING SCIENCES - I Time: 10.00 A.M. To 1.00 P.M Friday Max, Marks: 100 Date : 04.12.2015 N.B.: All questions are COMPULSORY. 1) Figures to the right indicate FULL marks. 2) Draw sketches WHEREVER necessary. Answers to both the sections should be written in SEPARATE answer books. SECTION - I [05] Q.1 A) Match the column: i) Citadel of Tyryns a) Trilithon ii) Greek entrance portal b) Dromos iii) Part of Egyptian building c) Gorge cornice iv) Treasury of Atreus d) Propylea Stonehenge V) e) Lion gate [05] B) Fill in the blanks: a) A richly carved coffin as seen in Egyptian architecture has called (Cenotaph, Sacrophagus). b) Gorge cornice is characteristic to \_\_\_\_\_ architecture (Egyptian, Greek). c) Tripylons are seen in the \_\_\_\_\_ palace (Persian, Assyrian). d) Tapering column are characteristic to \_\_\_\_\_ civilization (Minoan, Mycenaean). e) The land between rivers Tigris and Euphrates was called as (Mesopotamia, Meso America). Explain ANY FIVE of the following terms with reference to context: [20] Q.2 d) Ziggurat a) Mastaba b) Dolmen and menhir e) Megaron f) Corinthian order c) Entablature Draw neat labeled sketch of ANY ONE of the following: [10] 0.3 a) Greek amphitheatre – Epidaurus (plan + view). b) Egyptian cult temple - Karnak (plan + section). [20] Answer ANY TWO of the following: 0.4 a) Explain the architectural character of Egyptian period with respect to temple architecture in Egypt. b) Explain influence of geography on the west Asiatic architecture with examples. c) Explain the Greek optical correction with illustrations. SECTION - II [15] Explain factors affecting climate at Micro Scale. Q.5 [15] Answer ANY TWO of the following: Q.6 a) What do you mean by the phrase 'Design with climate'? Explain with help of example. b) Explain influence of topography on Macro Scale Climate. c) Explain role of vegetation in achieving comfort condition. [10] Write short notes on ANY TWO of the following: Q.7 a) Earth's thermal balance b) Urban climate

Thermal comfort indices

## MANOHARGAD – I (2010 COURSE): SUMMER – 2016 SUBJECT : HISTORY & BUILDING SCIENCES - I

Day	: 1	Monday Time: 2:00 P.M-T0 5:0 02-05-2016 Max. Marks: 100	OP.N					
	•	02-09-2010						
N.B.:	1) 2) 3) 4)	All questions are <b>COMPULSORY</b> . Figures to the right indicate <b>FULL</b> marks. Draw sketches <b>WHEREVER</b> necessary. Answers to both the sections should be written in <b>SEPARATE</b> answer books.						
SECTION - I								
Q.1	A)	<ul> <li>i) An Egyptian entrance portal is called (pylon, obelisk)</li> <li>ii) A Greek entrance portal is called (Propylea, Ishtar)</li> <li>iii) A Mycenaean entrance doorway in Citadel of Tyrins is (lion gate, dromos)</li> <li>iii) Egyptian pictorial script is known as (cuneiform, hieroglyphs)</li> </ul>	05]					
		v) A post and lintel system of construction is called (traceat,						
	B)	Match the following:	[05]					
	-,	a) Treasury of Atreus b) Catal Huyuk c) Palace of King Zerexes d) Sarcophagus e) Papyrus capital i) Persepolis ii) Egyptian coffin iii) Egyptian architecture iv) Neolithic civilization v) Mycenaean structure						
Q.2		e) Tapyrus capitur	[20]					
Q.3	a)		[10]					
Q.4		Explain ANY TWO in detail with sketches: Explain the planning and features of a West Asiatic Ziggurat complex citing examples. Explain the Aegean civilization architectural development on the island and						
	mainland. c) Discuss the evolution of the different types of the Egyptian burial monumer with appropriate examples and sketches.							
	SECTION - II							
Q.5		Explain factors affecting climate at Macro Scale.	[15]					
Q.6	a) b)	Architecture?  Explain heat exchange process between human body and environment.	[15]					
Q.'	c) 7 a) b	Write short notes on ANY TWO of the following:  Green house effect  Global wind pattern  Overlity and Quantity	[10]					

Day	: Saturday		Max. Marks: 100				
Date	= D	2-05-2015					
N.B.:	1) 2) 3) 4)	All questions are COMPULSO Figures to the right indicate FU Draw sketches WHEREVER Answers to both the sections sl	JLL marl	ks. y. written in <b>SEPARATE</b> answer books.			
. — — —		SEC	TION-	<u>I</u>			
0.1	4.	. Motab the column:			[05]		
Q.1	A)	Match the column: a) Abbey Aux Hommes	i)	French Gothic			
		b) Worms Cathedral	ii)	Roman			
		c) City Churches	iii)	French Romanesque			
		d) Pantheon	iv)	German Romanesque			
		e) Reims Cathedral	v)	English Renaissance			
		9,			1051		
	B)	Fill in the blanks:		1 ( 1 )-4	[05]		
	Δ,	a) is the cover	ered path	way around the courtyard (cloister,			
		, <del>_</del> , )					
		b) is the rounded eas	st end of	Gothic Cathedral (Chevet, Chapel).			
			rder ((tre	ek Koman).			
		d) A true arch has wedge sha	ped ston	es called as (voussoir,			
		•					
		e) Pointed arch is seen in	ar	chitecture (Gothic, Renaissance).			
					[20]		
Q.2		Explain ANY FIVE of the following terms with following					
	a)	Pinnacle and Spire d)	Sexpart	nte vaun			
	b)	Duttiess	Triforiu	partite vault			
	c)	Basilica f)	Quadri	partite vauit			
		Draw neat labeled sketch of ANY	ONE	f the following:	[10]		
Q.3		Draw neat labeled sketch of Aivi	on)	tile tolle was			
	a)	St Michele, Pavia (plan + elevation	m).				
	b)	Pont Du Gard, France (plan + vie	vv ).				
		A THE TOTAL OF the follow	vina.		[20]		
Q.4		Answer ANY TWO of the follow	anesalle	architecture? Give suitable examples			
	a)						
		and explain.	architect	ture in Europe with reference to types			
	b)						
		of castle in Medieval Europe.	et Andrea	a Palladio and Sir Christopher Wren in			
	c)	Renaissance architecture. Expla	in with p	roper illustrations.			
		Renaissance architecture.		•			
		SE	CTION	$-\Pi$			
					[15]		
Q.5		Explain climate characteristics, d	lesign gui	idelines and strategies for	[13]		
	)	Cold and Dry type of climatic zo	ne.				
					[15]		
Q.	6	Answer ANY TWO of the follow	wing:	· · · · · · · · · · · · · · · · · · ·			
		vyr , and arriagnal shading de	vices?	Explain various types with help o	1		
	a)			0.11			
	h'	E-mlain working of wind-scoop	in Hot an	d Dry type of climate.			
	b)	= 1 · · · · · · · · · · · · · · · · · ·	s used for	r opening.			
	c)				[10]		
0	7	Answer ANY TWO of the follo	wing:	1	[10]		
Q.		Degative mea	ne of the	rmal control with examples.			
	a b	Evolain Solar altitude angle and	Sulai az.	midul diigio			
	D	Explain factors affecting indoor	air flow.				

## MANOHARGAD - II (2010 COURSE): SUMMER - 2016 SUBJECT: HISTORY & BUILDING SCIENCES - II Time: 10:00AM-T01:00 P.M. : Saturday : 30-04-2016 Max. Marks: 100 Date N.B.: All questions are COMPULSORY. 1) Figures to the right indicate FULL marks. 2) Draw sketches WHEREVER necessary. 3) Answers to both the sections should be written in SEPARATE answer books. SECTION - I [05] Q.1 A) Fill in the blanks: The heart of Roman city was \_\_\_\_\_\_. (Forum, Agora) i) The area of intersection of nave chancel and transept is called ii) . (ambulatory, crossing) A courtyard with colonnaded passage around it is called \_\_\_\_\_. iii) (Atrium, Narthex) One of the fundamental characteristics of Gothic architecture was iv) . (pointed arch, semicircular arch) The leading Early Renaissance architect was \_\_\_\_\_. (Alberti, V) Michelangelo) [05] B) Match the following: Romanesque period i) a) Roman Bath Large spires b) Baptistery of Constantine ii) iii) Renaissance architect c) Raking arcade iv) Thermae d) Gothic Cathedrals are characterized by Octagonal V) e) Michelangelo Write short notes on ANY FOUR of the following: [20] 0.2 a) Roman Road Construction b) Parts of Basilican church d) Tiered arcade e) Peristylar dome Tracery windows c) Draw plan, section, view along with annotations (ANY ONE): [10] Q.3 b) St. Peters Basilica (old) a) Pantheon [20] Explain ANY TWO in detail with sketches: Q.4 a) Explain the structural system of Gothic architecture and use of materials with proper illustrations. What are the main characteristics of Romanesque Architecture? Give suitable examples and explain. Explain the highlight of Renaissance Architecture giving suitable examples. **SECTION - II** Explain climate characteristics, design guidelines and strategies for cold and dry [15] Q.5 type of climatic zone. [15] Answer ANY TWO of the following: Q.6 a) Explain air flow patterns with reference to position and size of openings in case of a room. b) Explain allocation of day and night areas in hot and dry type of climatic zone. e) Explain relationship between orientation and size of opening for various climatic zones. Write short notes on ANY TWO of the following: [10]

Q.7

a) Stack ventilation b) Control of openings

Vertical and horizontal shadow angle