Roll No. \_ Total No of Pages: 2 4E1210 B. Tech. IV-Sem. (Back) Exam., Oct.-Nov. - 2020 **HSMC Civil Engineering** 4CE4 - 07 Building Planning Time: 2 Hours Maximum Marks: 65 Min. Passing Marks: 23 Instructions to Candidates: Attempt all five questions from Part A, four questions out of five questions from Part B and one questions out of three from Part C. Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly. Use of following supporting material is permitted during examination. (Mentioned in form No. 205) Half size drawing sheet 2. NIL PART - A (Answer should be given up to 25 words only) All questions are compulsory

## (Answer should be given up to 25 words only) All questions are compulsory Q.1 What is the height of a building for sloping roof when gable faces the road? Q.2 What is Roominess? Q.3 What is bioclimatic chart? Q.4 What are the characteristics of hot humid zone? Q.5 Define acoustics. [5×2=10] [5×2=10] [7 [2] [2] [2] [2]

## PART - B

PARI-D	
(Analytical/Problem solving questions)	[4×10=40]
Attempt any four questions	
Q.1 What are the orientation criteria for the Indian tropical climate?	[10]
Q.2 Write down the bye-laws regulations regarding -	[4×2½=10]
(a) Set back	
(b) Carpet area	
(c) Size of habitable rooms	
(d) F. A. R.	
Q.3 What is thermal comfort? How will you achieve thermal comfort for	or a residential
building in Rajasthan?	[10]
Explain the layout of different components of a residential building as	per the cardinal
directions in Vastu.	[10]
Q.5 What are the louvers? Explain their types with the help of a diagram.	[10]
PART - C	
(Descriptive/Analytical/Problem Solving/Design Questions)	[1×15=15]
Attempt any one questions	
Q.1 Draw a detailed plan of a secondary school for an area with population 15.	000. Estimate
the size of plot, size of classrooms and other components. Show the deta	iled plan of a
classroom with furniture plan and dimension detail.	[15]
Q.2. What is sun path diagram? What is its significance in building planning?	Explain the
method of drawing sun path diagram with a neat sketch.	[15]
Q.3 What are the remedial treatments for sound insulation of walls,	floors and