

**Exam of Puu-28.5010 Industrial Wood Construction
27.01.2009**

Exam consists of true/false statements and essays.

True or false? (1 point/question)

- 1. Main idea of platform frame structure is that vertical structures give way to a new platform.**

- 2. In screw glued ribbed elements production (like in Sibelius Hall) the material cost of the glue is higher than the cost of the screws.**

- 3. It is the vertical load problem that often determines the type of load-resisting system used in a building. In general, there are only a few mechanisms commonly used, alone or in combination, for assuring lateral stability. These methods are: diagonal braces, shear walls, and joint rigidity (frames).**

- 4. In the USA there is typically to use OSB outside of the wall as a wind shield board but in Canada conifer plywood.**

- 5. In the ready made one family wooden prefab house the material cost of basic wooden components is more than 10 % the total cost.**

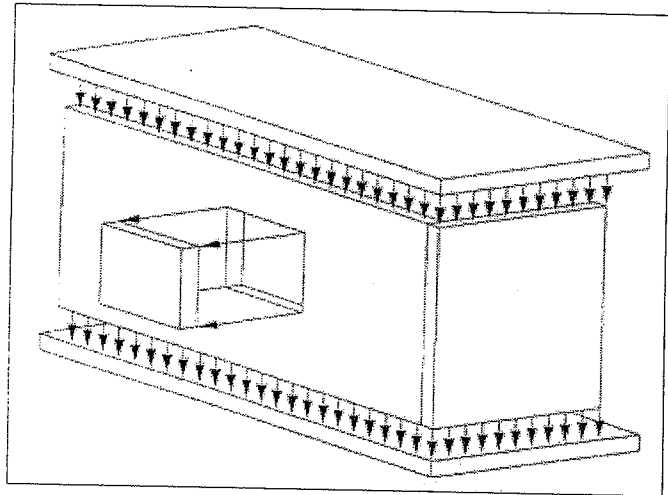
- 6. Comparing component construction vs stick building the saving of man-hours in the building site is more than 50 %.**

- 7. For post and beam systems, the gravity loads are transferred to the ground using a simply supported "post and beam" type system where the walls act as axial-loaded, (or combined axial plus bending), members.**

Essays

8. What is industrial construction and what is its aim? (6 points)

9. Slab System is a further development of the Joist and Beam systems. List the integrated functions, which the construction parts/members can have! (6 points)



10. SWOT Analysis is a strategic and creative planning tool used to evaluate the:
Strengths,
Weaknesses,
Opportunities and
Threats
involved in a project or in a business venture.

Explain the SWOT of

- Pre-cut system (4 points) -
- Small panel system(4 points)
- Wall-size panel system(4 points)