

STARTING FROM THE BOTTOM Final Exam

1. A basic problem making it possible for mold to thrive is the unintentional creation of what is termed a _____.
 - a. Mold-friendly environment
 - b. Moisture sandwich
 - c. Meeting of requirements
 - d. Lack of competing organisms

2. Which of the following is often a source of incoming moisture?
 - a. Migration up from the earth
 - b. Water coming over the top of grade
 - c. Drainage off the structure
 - d. All of the above

3. Moisture content is the weight of the moisture contained in wood, compared to how much the wood weighs _____.
 - a. When it is dry
 - b. In average ambient temperatures
 - c. Just prior to harvesting
 - d. At the point of initial installation

4. Which of the following is not an external parameter affecting assembly performance?
 - a. Material substitutions
 - b. Design professional specifications
 - c. The climate in the project location
 - d. Evolving codes

5. Subfloor panels should be installed with their _____ perpendicular to the framing members.
 - a. Perimeter fasteners
 - b. Strong axis or long edge
 - c. Cross panel diaphragm
 - d. Short side or cross grain pattern

6. Table N1102.1.1 requires _____ floor insulation be used in climate zones 1-2.
 - a. R-13
 - b. Closed cell foam insulation
 - c. Loose fit batt
 - d. R-19

7. Different parts of Indiana are located in what two U.S. Climate zones?
- 5A, 6B
 - 6B, 4A
 - 5A, 7B
 - 5A, 4A
8. If the heating and cooling loads for the region are roughly balanced, some choose _____. .
- To use passive heating and cooling methods to save expense
 - To omit a vapor barrier from the assembly
 - To use only minimum mandated insulation levels
 - To forego installing any insulation at all
9. Water vapor's tendency to migrate from areas of higher temperature and higher relative humidity to areas of lower temperature and lower relative humidity is called _____ .
- Net zero displacement
 - Thermal displacement
 - Foreseeable moisture movement
 - Vapor drive
10. _____ is the atmospheric temperature below which water droplets begin to condense.
- Dew point
 - Point of saturation
 - 45 degrees, 75% humidity
 - 0 degrees Celsius
11. If a building must be built on a site with poor drainage, it is better to place it over _____ than over _____ .
- An open source of moving water, a lens aquifer
 - A basement, pressure treated pilings
 - An open crawl space, a wall-vented crawl space
 - 15 mil Visqueen, tar-impregnated felt
12. When installing a floating floor system directly over a slab, _____ should be maintained around the perimeter.
- A gap for expansion
 - A vapor barrier to resist moisture migrating up the drywall
 - Close proximity so trim can conceal poor workmanship
 - Enough space to insert a prybar if needed
13. If large amounts of water accumulate in crawl spaces or basements, this is usually expelled using _____ .
- A sump pump
 - Gravity flow
 - Perimeter drain tiles exiting to daylight
 - An internal gutter

14. When designing basements, the design goal is to make sure that water _____ .
- Does not make it inside at all
 - Has an easy path of escape
 - Can be captured and rechanneled for use as exterior irrigation
 - Can be used as grey water for interior non-potable use
15. _____ is not a term used to describe a barrier to the movement of moisture.
- Vapor barrier
 - Vapor dissipater
 - Vapor retarder
 - Vapor diffusion retarder
16. A Class _____ Water Vapor Retarder is rated between 1.0-10 perms.
- V
 - II
 - III
 - I
17. The easiest wooden floor framing system members through which to run piping and ductwork are _____ .
- Laminated joists
 - Wood joists of dimensional lumber
 - I-Joists
 - Floor trusses
18. When foam insulation is installed, _____ must also be sealed.
- Known sources of water
 - Fastener locations
 - Penetrations
 - Metal joist hangars
19. Which is not a basic type of mechanical fastener, used between subfloor panels and framing members?
- Smooth shank nails
 - Ring shank nails
 - Wood screws
 - Hangars
20. _____ is the industry standard for how to fasten subfloor panels to framing.
- Adhesives
 - Mechanical fasteners
 - Adhesives and mechanical fasteners
 - None of the above

21. The amount of force required to withdraw a fastener from a material is defined as _____ and directly corresponds to _____ .
- Withdrawal rating, fastener length
 - Fastener holding power, material density
 - Fastener grip, type and diameter
 - Ease of withdrawal, force used in application
22. Which of the following is not one of the primary means to avoid subfloors being installed with deflection?
- Hire only certified flooring installers
 - Use direct glue down hardwood flooring, to pull subfloor panels back up to level.
 - Use thicker hardwood flooring in greater lengths
 - Install blocking between joists or floor trusses at 24" O.C.
23. If moisture content is held below ____ %, this will substantially reduce mold growth in subflooring.
- 8
 - 22
 - 12
 - 18
24. The "X" used in plywood designations means _____ is part of its composition.
- Exterior grade glue
 - A face veneer of excellent quality
 - An internal veneer not suitable for surface appearance
 - Ten plies of very thin veneer
25. Integral spacers are used in high-performance subfloor panels to prevent workers onsite from _____ .
- Erasing suggested locations of fasteners
 - Installing panels so they don't act in cohesion
 - Hammering panels together to eliminate gaps
 - Stealing them for personal use