Assignment 10

The deadline for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. How many branches are required on an n-stage pipelined processor? 1 point
   - 1
   - n
   - n+1
   - Not specified
   
   
   2. The answer is incorrect.
   
   Accepted Answers:
   - n+1

3. We need to execute the following code. What is the easiest way to do this without violating any correctness criteria? 1 point
   
   - Only branching
   - Only forwarding
   - Forwarding with data hazards
   - Forwarding with branch hazards
   
   
   4. The answer is incorrect.
   
   Accepted Answers:
   - Forwarding with branch hazards

5. Principles of Pipelining Part I 1 point
   
   - 1000 MHz
   - 2000 MHz
   - 1 GHz
   - Not specified

6. Principles of Pipelining Part II 1 point
   
   - 500 MHz
   - 1 GHz
   - 2000 MHz
   - Not specified

7. Data Assignment 10 1 point
   
   - 308
   - 309
   - 310
   - Not specified

8. Week 10 Feedback Form 1 point
   
   - 200 MHz
   - 500 MHz
   - 1 GHz
   - Not specified

9. Test Transcripts 1 point
   
   - 100
   - 200
   - 300
   - Not specified

10. Download Videos 1 point
    
    - 100
    - 200
    - 300
    - Not specified

11. The following code snippet will have which type of hazard? 1 point
    
    - Data hazard
    - WAM hazard
    - WRF hazard
    - No hazard

12. Flushing a pipeline refers to 1 point
    
    - Loading new instructions
    - Disabling instructions from the pipeline
    - None of the above
    - Both (a) and (b)

13. The answer is incorrect.

   Accepted Answers:
   - Disabling instructions from the pipeline

14. (a) refers to the periods of time when the unit is idle. 1 point
    
    - WAF
    - WDR
    - WRR
    - Both stalls and bus stalls

15. The answer is incorrect.

   Accepted Answers:
   - Both stalls and bus stalls

16. In the ______ condition, instructions in the wrong path are never executed. 1 point
    
    - Branch Lock
    - Data Lock
    - WAF
    - None of the above

17. The answer is incorrect.

   Accepted Answers:
   - Branch Lock

18. The following code snippet will have which type of hazard? 1 point
    
    - Data hazard
    - WAM hazard
    - WRF hazard
    - No hazard

19. The answer is incorrect.

   Accepted Answers:
   - WRF hazard

20. Hazards due to resource conflicts are called 1 point
    
    - GAF hazards
    - Structural hazards
    - Control hazards
    - Both GAF and structural hazards

21. The answer is incorrect.

   Accepted Answers:
   - Structural hazards

22. To ensure the data hazard condition in a pipeline (without hoisting), the conflict of an instruction in the DF stage is checked with - 1 point
    
    - Only the DI stage
    - Only the CI stage
    - Only the CI and WIP stages
    - Only the CI and WRF stages
    - Only the DI, CI, and WRF stages

23. The answer is incorrect.

   Accepted Answers:
   - Only the CI and WRF stages