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| https://upload.wikimedia.org/wikipedia/commons/thumb/4/4e/VU_Logo.png/260px-VU_Logo.png | **Software Quality Assurance**  **(CS706)**  **Special Assignment (Mid Term Exam)**  Fall 2020 | **Total Marks = 50**  **Due Date:4-1-2021** |
| **Please carefully read the following instructions before attempting the assignment.**  **RULES FOR MARKING**  **It should be clear that your assignment would not get any credit if:**   * **The assignment is submitted after the due date.** * **The submitted assignment does not open or the file is corrupt.** * **Strict action will be taken if the submitted solution is copied from any other student.**   **Note for Research Based Questions:**   * **You can consult internet but don’t copy as it is from any online resource, mention reference where needed. Try to write in your own words and provide complete reference.**   **You are supposed to submit your assignment in Doc or Docxformat.**  Any other formats like Scan Images, PDF, Zip, Rar, Ppt, and BMP,etc will not be accepted. | | |
| **For any query, feel free to email at:**  [**cs706@vu.edu.pk**](mailto:cs706@vu.edu.pk) | | |

**Question No. 1**  **Marks (10)**

Following are some of the points of Inspection meeting. You are required to map them on ETVX model.

1. How many defects were found  
2. How long the meeting took  
3. Preparedness check (moderator)   
4. Read the work product (reader)  
5. Identify defects (inspectors)  
6. Inspectors have adequately prepared  
 7. Scope of the inspection meeting has been defined  
 8. Data is available to update the process data base  
 9. Any associated deviations or risks are noted  
10. Decision on re-engineering has been addressed.

**Question No.2 Marks (10)**

Read the following code carefully and identify errors/defects (not syntax/compile time errors) and explain each defect (at most 3 lines each).

**Note:** Do not rewrite the code. Just mention the line numbers which have defect and explain them briefly.

1. #include <iostream>
2. using namespace std;
3. void generateTable(int x, int y){
4. int result = y / x;
5. for(int i = 1; i <= 10; i++){
6. cout<<result<<" \* "<<i<<" = "<<i\*result<<endl;
7. }
8. }
9. main(){
10. int found;
11. int data[10];
12. for(int i = 0; i < 10; i++){
13. for(int j=0; j < 10; j++){
14. found++;
15. }
16. }
17. cout<<"Loops executed "<<found<<" times"<<endl;
18. for(int i = 0; i<= 10; i++){
19. data[i] = 0;
20. }
21. int first, second;
22. cout<<"Enter first number: ";
23. cin>>first;
24. cout<<"Enter second number: ";
25. cin>>second;
26. cout<<"Subtract first number by second and show math table of resut"<<endl;
27. generateTable(first, second);
28. int rem = first%2;
29. if(rem = 0){
30. cout<<"First number is even"<<endl;
31. }
32. else{
33. cout<<"First number is odd"<<endl;
34. }

}

**Research Based Questions**

**Question No.3 Marks (20)**

**Give a brief description of at least ten real life examples where the software development failure caused huge loss for international companies.**

**Question No.4 Marks (10)**

**Software Assurance Technology center (SATC) has defined some quality metrics for Object Oriented Systems. Write a note on the quality metrics for Object Oriented Systems.**

**Note: Number of words not exceeding 250 words.**