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| **COMSATS Institute of Information Technology Lahore**  **Terminal Examination Lab – Semester SP 21**   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Course Title: | Computer Graphics | | | | Course Code: | | CSD353 | | Credit Hours: | 3(2,1) | | Course Instructor/s: | Aamer Mehmood | | | | Programme Name: | | BS Computer Sciences | | | | | Semester: | 5th,7th | Batch: | SP17-BCS | Section: | A,B,C | | Date: |  | | | | **Time Allowed:** | **3 Hours** | | | | **Maximum Marks:** | | | **50** | | | | Student’s Name: |  | | | | Reg. No. | CIIT/SDP-SP( )-BCS- /LHR | | | | | | . | | | | | | | | | | |   **Important Instructions / Guidelines:**   * All programs to be done using Visual Studio as the editor, notepad in worst case. * You are allowed to access the offline version of documentation installed in the lab computers * Anyone found using the internet will be disqualified immediately. * Call your instructor whenever you finish a task so that it can be graded on the spot. |

**Question 1:** Write a program to draw a 3D pyramid, sides with different colors. Centered at the origin. 15 marks  
**Demo:**



-- Complete Logic (5 marks)

-- Use of correct OpenGL Commands (5 marks)

-- Correct Output (slight variation is acceptable) (5 marks)

**Question 2:** Write a program to take House object and scale it half. Both houses should be shown but with different color. 15 marks

-- Complete Logic (5 marks)

-- Use of correct OpenGL Commands (5 marks)

-- Correct Output (slight variation is acceptable) (5 marks)

**Question 3:** Using the keyboard interaction, write a program which enable the user to draw circle, triangle, rectangle, polygon etc. just pressing the key. 20 marks  
**Hint:** If user press the “T”, triangle will be display. If “C” is pressed the circle will be drawn on the screen  
  
-- Complete Logic (5 marks)  
-- Use of correct OpenGL Commands (5 marks)  
-- Correct Output (slight variation is acceptable) (10 marks)