# BRAC UNIVERSITY

## Department of Computer Science and Engineering

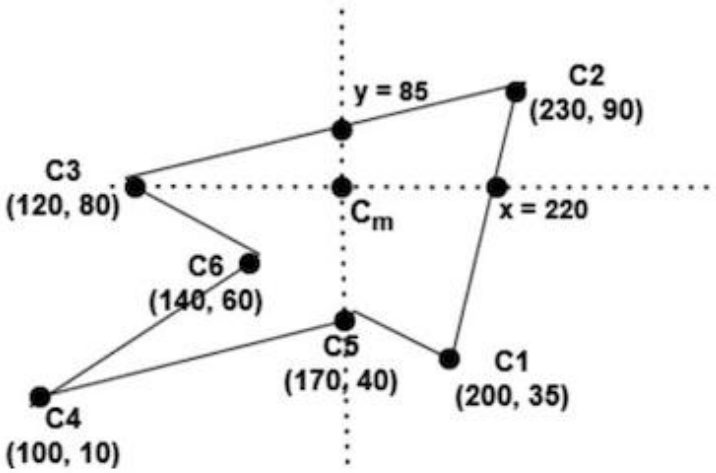
Quiz 03 — Semester: Spring 2025
Duration: 35 minutes — Full Marks: 20

## CSE 423: Computer Graphics

| Name: | ID: | Section: |
|---|---|---|

Answer **all** the following questions.
Figures in the right margin indicate marks.

**1.**




**CMY values** at C1 = (0.2,0.35,0.4); C2 = (0.7,0.7,0.7); C3 = (0.25,0.55,0.45);
The color at C4, C5 and C6 is **white.**
Using Gouraud's shading, find the color at $\mathbf{C_m}$. Convert it to the HSV color model. **[10]**

**2.** A **square mirror** surface lies on the **xz** plane. A light source situated at (1,1,4) with intensity 10, illuminates the center of the mirror where the vertices are (2,5),(12,5),(2,15) and (12,15). The viewer is standing at (3,2,6) and the shininess factor of the mirror is **5.** The ambient, diffuse and specular coefficients are **0.5 each.**
Find the diffuse and specular components using Phong's reflection model. **[10]**