Pop Quiz – week 8 [10 mins]

Name:
Student ID:

1) [2] Having separate world and object coordinate systems help in
   a) Creating multiple copies of the same object in the scene
   b) Allowing for different view positions
   c) Defining each object in their own coordinates without worrying about world coordinate
   d) Allowing for different image planes

2) Consider the projection transformation in the graphics pipeline.
   a) [1] It consists of
      i) Shear followed by a scaling followed by a perspective projection
      ii) Scale followed by a shear followed by a perspective projection
      iii) Perspective projection followed by scaling followed by a shear
      iv) Shear followed by a perspective projection followed by a scaling
      v) Scaling followed by a perspective projection followed by a shear
   b) [2] It is applied
      i) After view transformation
      ii) After window coordinate transformation
      iii) Before view transformation
      iv) Before window coordinate transformation
   c) [2] Its parameters depend on six planes which define the left, right, top, bottom, near and far boundaries of the view frustum.

3) [1] Which of the following illumination models are view dependent
   a) Ambient
   b) Diffused
   c) Specular (or Phong)

4) [1] Which of the following shading models capture the effect of changing normal on illumination the best?
   a) Faceted
   b) Gouraud
   c) Phong
5) **[1]** What does z-buffer help in?
   a) Illumination
   b) Shading
   c) **Resolving occlusion**
   d) Scan conversion
   e) Transformation of vertices