

## Unit 7 - Week 5: Viewing Pipeline

Course outline
How does an NPTEL online course work?
Week 0: Prerequisite
Week 1 : Introduction
Week 2: Object Representation
Week 3: Modeling Transformation
Week 4 : Lighting
Week 5: Viewing Pipeline
<input type="radio"/> Lec 17: Color models and texture synthesis
<input checked="" type="radio"/> Lec 18: View transformation
<input type="radio"/> Lec 19: Projection transformation
<input checked="" type="radio"/> Lec 20: Windows-to-viewport transformation
<input type="radio"/> Quiz : Assignment 5
<input type="radio"/> Feedback form
<input type="radio"/> Solution: Assignment 5
Week 6: Clipping & Hidden Surface Removal
Week 7: Scan Conversion
Week 8: Graphics Hardware and Software
Live Session
Text Transcripts

### Assignment 5

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

**Due on 2020-10-21, 23:59 IST.**

- 1) Stimulation of all the three cone types gives us the color perception – this is known as the tristimulus theory of vision. 1 point
- a. True  
 b. False
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
a. True
- 2) The fourth stage of 3D graphics pipeline essentially simulates the process of taking of a photograph. 1 point
- a. True  
 b. False
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
a. True
- 3) Vision accomplished with cones is called \_\_\_\_\_ vision. (fill in the blank) 1 point
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- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
(Type: String) photopic
- 4) In the fourth stage of graphics pipeline, we transfer the 3D view coordinate scene to the 2D view plane using \_\_\_\_\_ transformation. (fill in the blank) 1 point
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- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
(Type: String) projection
- 5) Which of the following is not a color model? 1 point
- a. RGB  
 b. XYZ  
 c. CMY  
 d. ABC
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
d. ABC
- 6) In order to simulate viewing transformation, first we need to define the view coordinate system, and then we perform the actual transformation. 1 point
- a. True  
 b. False
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
a. True
- 7) The different spectra of light that result in the sensation of the same color are known as 1 point
- a. monomers  
 b. polymers  
 c. alikemers  
 d. metamers
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
d. metamers
- 8) Transformations required to align View Coordinate with World Coordinate are translation and \_\_\_\_\_ 1 point
- a. scaling  
 b. shearing  
 c. rotation  
 d. shifting
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
c. rotation
- 9) In \_\_\_\_\_ projection, the projectors converge to a center of projection at finite distance. 1 point
- a. parallel  
 b. perspective  
 c. distant  
 d. finite
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
b. perspective
- 10) Which of the following is not a perspective projection anomaly? 1 point
- a. Perspective foreshortening  
 b. Vanishing points  
 c. Clipping window  
 d. View confusion
- No, the answer is incorrect.  
Score: 0  
Accepted Answers:  
c. Clipping window