CHAPTER 9 - MASS WASTING

Testing your knowledge. Answers to the end-chapter questions (from the 15th edition)

Question 1

1a. Vertical Cliff  
1b. Flat Horizontal Plane  
1c. 45° slope

- Gravity
- Normal Force
- Shear Force
- Shear Resistance

Question 2
a. Gravity; b. Water; c. triggers (pages 208 to 210)

Question 3
a. Rate of Movement; b. Type of Material; c. Type of Movement (pages 210 to 212)

Question 4
Draw four figures like the ones in Figure 9.3, page 211 in your textbook
Question 5
In a rotational slide (or slump) movement occurs along a curved surface; in a translational slide movement occurs along a plane approximately parallel to the slope of the surface (page 212)

Question 6
Water is a critical factor in mass wasting (page 209).
See the appropriate section (Creep, page 212; Flows, page 213; Falls, page 219; Slides, page 220 and also Underwater Landslides, page 224) to complete this answer

Question 7
See figures 9.4 nd 9.5, page 212 for an answer to this question

Question 8
A debris flow is flow involving soil in which coarse material (gravel, boulders) is predominant (page 216). A mudflow differs from a debris flow in that fine-grained material (sand, silt, clay) is predominant (page 217)

Question 9
See *Solifluction and Permafrost*, pages 214 to 216 for an answer to this question

Question 10
See Flows (page 213) and Slides (page 220 to answer this question

11. C
12. A
13. C
14. A
15. B
16. A
17. A
18. D
19. A
20. A, C, D