CHAPTER 4 – OCE 1001 (Introduction to Oceanography, Professor Chiappone)
MARINE SEDIMENTS (Trujillo and Thurman, 11th edition)

SAMPLE QUESTIONS

Matching Questions

Match the term or person with the appropriate phrase. You may use each answer once, more than once or not at all.

A) lithogenous (terrigenous) sediment
B) biogenous sediment
C) hydrogenous sediment
D) cosmogenous sediment

1) abyssal clay
2) coccolithophores
3) diatomaceous ooze
4) halite
5) manganese nodules
6) metal sulfides
7) oolites
8) siliceous ooze
9) stromatolites
10) tektites

Match the term or person with the appropriate phrase. You may use each answer once, more than once or not at all.

A) depth at which all calcium carbonate is in solution (i.e. dissolved)
B) depth at which calcium carbonate begins to dissolve
C) particle size classification
D) associated with glacial deposits
E) associated with submarine canyons and deep-sea alluvial fans
F) microscopic biogenous sediment

11) CCD
12) ice rafting
13) lysocline
14) turbidite

15) Wentworth Scale

**True/False Questions**

16) Texture refers to the size and shape of sediment particles.

17) Coastal sand dunes are usually well sorted due to winds.

18) The Wentworth scale is used to arrange the amount of sorting in a sediment deposit.

19) The organisms that contribute to biogenous sediment are chiefly algae and protozoans.

20) The deposition of radiolarian oozes is affected by the carbonate compensation depth.

21) Calcareous ooze is found in cooler waters at depth around the world.

22) Organisms that live on the ocean floor may be responsible for keeping manganese nodules from being buried in the sediment.

23) Tektites are glassy rock fragments created during impact events.

**Multiple Choice Questions**

24) Sediment that begins as rocks on continents or islands is called:
   A) lithogenous (terrigenous) sediment.
   B) biogenous sediment.
   C) hydrogenous sediment.
   D) cosmogenous sediment.
   E) All of the above.

25) Sediments that are poorly sorted were most likely deposited by:
   A) a glacier.
   B) a river delta.
   C) organisms
   D) a volcanic eruption.
   E) the wind.

26) Sediments derived from pre-existing rocks on land are called:
   A) cosmogenous.
   B) biogenous.
   C) hydrogenous.
   D) lithogenous.
   E) volcanogenic.
27) Which of the following contains calcium carbonate (CaCO₃)?
A) diatoms
B) foraminiferans
C) glauconite
D) phosphorites
E) radiolarians

28) Calcium carbonate is most likely to dissolve in water with which characteristics?
A) low carbon dioxide and warmer temperatures
B) lots of carbon dioxide and colder temperatures
C) lots of carbon dioxide and warmer temperatures
D) low pressure and warmer temperatures
E) low pressure and colder temperatures

29) All of the following are hydrogenous sediments except:
A) evaporites.
B) halites.
C) manganese nodule.
D) phosphates.
E) stromatolites.

30) The most likely place to find abundant manganese nodules is on the:
A) abyssal plain far from a continent.
B) continental rise.
C) continental shelf.
D) crest of a mid-ocean ridge.
E) All of the above locations contain manganese nodules.

31) Sediments with an extraterrestrial origin are called:
A) cosmogenous.
B) biogenous.
C) hydrogenous.
D) lithogenous.
E) volcanogenic.

32) The particles found in some sediment that suggests that an extraterrestrial impact event are:
A) tektites.
B) oozes.
C) clays.
D) silt.
E) evaporites.

33) Sediments found on continental margins are called:
A) continental.
B) estuarine.
C) neritic.
D) oceanic.
E) pelagic.
34) Pelagic clays contain lots of material that settles to the seafloor through the water column and are:
A) less than 30% biogenous material.
B) more than 30% biogenous material.
C) more than 30% hydrogenous material.
D) less than 30% neritic material.
E) more than 30% neritic material.

35) All of the following are true concerning neritic sediment deposits except:
A) they may contain coarse-grained sand and rock fragments in the sediments.
B) they may contain sediments of lithogenous origin.
C) they may contain sediments transported from rivers onto the continental shelf.
D) they may form in shallow coastal waters.
E) they are primarily composed of calcareous deposits of biological origin.

36) Which of the following is not an important control on oceanic sediment accumulation?
A) degree of preservation
B) dilution
C) input from other sediment types
D) rate of deposition
E) All of the above factors are important.

**Word Relationships**

Examine the five words and/or phrases and determine the relationship among the majority of words/phrases. Choose the one option that does not fit the pattern.

37) 
A. biogenous
B. calcareous
C. cosmogenous
D. hydrogenous
E. lithogenous

38) 
A. glaciers
B. rivers
C. siliceous ooze
D. turbidity currents
E. volcanic ash

39) 
A. chalk
B. coccolithophores
C. diatoms
D. limestone
E. stromatolites