3) ________ is one of the two major flow mechanisms in a glacier.
A) Basal slip
B) Crevasses slip
C) Frost heaving
D) Morainal sliding

4) Where is the world's largest ice sheet located today?
A) Greenland
B) Russia, Siberia
C) Iceland
D) Antarctica

5) Approximately how long ago did the last of the great North American ice sheets melt?
A) 1500 yrs
B) 1.5 million yrs
C) 15,000 yrs
D) 150,000 yrs

6) ________ has have speeds comparable to those of a flowing alpine glacier.
A) Soil creep
B) Streams
C) Mudflows
D) Basaltic lava flows

9) Abrasion and plucking generally involve what part of a glacier?
A) the internal, flowage zone
B) the snout zone
C) the surface, brittle zone
D) the basal, sliding zone

10) A ________ cross-valley profile is typical of canyons and valleys eroded and deepened by alpine or valley glaciers.
A) U
B) Y
C) V
D) S

11) ________ are erosional features produced by valley/alpine glaciers.
A) Moraines
B) Cirques
C) Eskers
D) Drumlins

12) A(n) ________ is a depositional feature composed of till and only associated with continental glaciation, not with alpine glaciers.
A) till
B) outwash
C) solid rock
D) outwash deposit

21) Which of the following glacial features would typically be found in close proximity?
A) cirque and terminal moraine
B) outwash plain and horn
C) hanging valley and truncated spur
D) drumlin and fiord

22) A(n) ________ represents a former meltwater channel or tunnel in glacial ice that was filled with sand and gravel.
A) esker
B) yazoo ridge
C) valley plain
D) kettle
23) What type of moraine would be most useful for tracing diamond-bearing kimberlite fragments directly to their bedrock source area?
A) terminal, valley or alpine glacier
B) terminal, continental ice sheet
C) recessional, continental ice sheet
D) lateral, valley or alpine glacier

24) Which one of the following samples and experimental measurements would provide the most information about the Earth's climate over the last 100,000 years or so?
A) cores from sea ice in the Arctic Ocean; NaCl content
B) sediment cores from a terminal moraine in Ohio; sand-to-clay ratio
C) sediment cores from a Pleistocene loess deposit in the state of Mississippi; SiO2 content
D) cores from the Greenland ice sheet; ratios of the oxygen isotopes (0-18/0-16)

25) ______ is the best explanation for a glacial surge.
A) The climate cools suddenly and a retreating glacier begins to advance
B) Heavy snowfalls resulting in avalanches in the zone of accumulation
C) Melting at the base of the glacier resulting in increased rates of basal slip
D) Crevasses opening suddenly near the snout of a glacier

26) All of the following descriptions apply to stratified drift (not glacial till) except for ______.
A) deposited directly from melting ice
B) sand and gravel beds
C) deposits are often layered and well-sorted
D) deposited by glacial meltwater streams

27) A(n) ______ is similar in appearance to a sinkhole of a karst area.
A) moraine
B) esker
C) cirque
D) kettle

28) Which one of the following prominent landforms, located from the Wasatch Range, UT, westward to the Sierra Nevada, CA, formed during the Pleistocene glacial episodes?
A) terminal moraines of continental ice sheets that moved south from Canada
B) old shorelines of large, pluvial lakes
C) erosional features produced by continental glaciation
D) subaerial deltas submerged by the post-glacial rise in sea level

29) A fiord is ______.
A) a stream valley, deepened by glacial erosion, that floods as sea level rises
B) a glacier-cut valley that is dammed by an end moraine and a large lake is formed
C) a glacier-cut valley which sinks below sea level due to glacial rebound after the ice melts
D) a large, kettle-pocked moraine left as an island when sea level rises following melting of the ice

30) Which process occurs where a glacier enters the sea?
A) kaming
B) calving
C) surging
D) drowning

31) The ______ of the geologic time scale represents the time of the most recent "Ice Age."
A) Pleistocene era
B) Pliocene epoch
C) Pleistocene epoch
D) Pliocene era

34) A ______ is an erosional feature specifically produced by alpine glaciation.
A) lateral moraine
B) drumlin
C) crevasse spur
D) U-shaped valley

In the northern reaches of Canada, eskers are used to travel on.
35) A(n) ________ is likely to host a waterfall or steep rapids today.
A) outwash plain
B) hanging valley
C) striated drumlin
D) horn peak

36) A ________ is a glacier-cut valley that partly flooded as sea level rose.
A) till crevasse
B) fiord
C) hanging cirque
D) kettle trough

37) A drumlin is a ________.
A) smooth, tapering ridge of till; formed and shaped beneath a continental ice sheet
B) bowl-shaped depression eroded largely by frost action and glacial plucking
C) till mound of outwash deposited by meltwater streams at the snout of a glacier
D) smooth, striated, bedrock ridge shaped and polished by a glacier

38) ________ are both deposited by meltwater streams.
A) Terminal moraines and cirques
B) Outwash plains and valley trains
C) Valley moraines and ice sheet trains
D) Recessional kettles and erratics

39) Where is the world's second largest continental ice sheet?
A) Iceland
B) Greenland
C) Antarctica
D) Siberian Russia

40) How do icebergs in the North Atlantic Ocean originate?
A) by calving of large piedmont glaciers in Greenland
B) as large masses of sea ice that float northward from Antarctica
C) as masses of sea ice that float southward from the Arctic Ocean
D) as calved blocks of glacial ice that float northward from Antarctica

41) Which of the following best describes the term glacial drift?
A) floating of icebergs southward from the north polar seas
B) slow, plastic flow movement in the brittle zone of a glacier
C) the sedimentary materials outwash and till
D) the slow, southward advance of the continental ice sheets over Canada and North America during the Pleistocene

42) Which one of the following statements concerning glacial deposits is not true?
A) Till is deposited directly from the ice; outwash is deposited by meltwater streams.
B) Glacial erratics are blocks of rock that are too large for the glacier to move.
C) Tills are poorly sorted and the fragments are mostly angular.
D) Outwash is mainly stratified sand and gravel.

43) What type of moraine is formed by the merging of two lateral moraines at a junction of two valley glaciers?
A) medial
B) recessional
C) ground
D) kettle

44) A ________ forms when stagnant, glacial ice melts after being buried by drift.
A) tarn
B) kettle
C) drumlin
D) pluvial delta
45) Which one of the following could not have significantly affected climatic variations and advances and retreats of ice sheets during the Pleistocene epoch?
   A) movements of Earth's tectonic plates
   B) variations in the Sun's energy output
   C) precession of Earth's orbit
   D) wobbling of Earth's rotational axis

46) ________ was a very large, pluvial lake in Utah during the Pleistocene Epoch.
   A) Lake Caspian
   B) Lake Aral
   C) Lake Mead
   D) Lake Bonneville

47) A(n) ________ would logically be situated next to a large end moraine or terminal moraine.
   A) cirque
   B) fiord
   C) pluvial lake
   D) outwash plain

48) Which of the following is often associated with a cirque basin in high, mountainous terrain?
   A) loon lake
   B) kettle pond
   C) tarn lake
   D) arête pond

49) ________ is an irregular, usually thin till layer laid down by a retreating glacier.
   A) Terminal moraine
   B) Outwash blanket
   C) Kame sheet
   D) Ground moraine

50) All of the following are thought to possibly contribute to the formation of glaciers except for ________.
   A) eccentricity
   B) precession
   C) comets
   D) plate tectonics

51) The upper 40 meters or so of a glacier is known as the zone of ________.

52) Unusually rapid, forward movements of glaciers are called ________.

53) List the two, major mechanisms of glacial flow. plastic flow, basal slip

54) What term describes open fissures in the brittle, surface ice of a glacier? crevasse

55) What general term denotes wastage of a glacier? ablation

56) Bridal Veil Falls in Yosemite National Park is an example of a ________.

57) Bowl-shaped depressions in bedrock at upstream ends of alpine glacial valleys are called ________.

58) The wobbling motion of a spinning object is known as ________.

59) During the Pleistocene glacial epoch, pluvial lakes were common in valley regions of what part of the United States? Basin & Range or Great Basin

60) What is the name for the very large, pluvial lake that once existed in northwestern Utah? Lake Bonneville

61) ________ are smoothly tapered, elongated hills of till shaped by an overriding, continental ice sheet.

62) What is the oldest, Pleistocene, glacial stage in North America?

63) A(n) ________ is a closed depression formed by melting of an ice block buried in a moraine or outwash plain.

64) A(n) ________ is a narrow, winding ridge composed of outwash deposited in a tunnel or channel cut into stagnant, glacial ice.