

Practice Questions

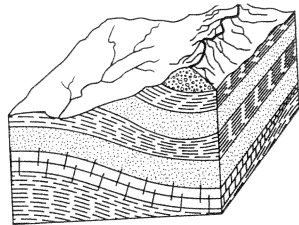
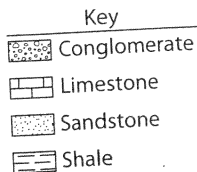
for the New York Regents Exam

Directions

Review the Test-Taking Strategies section of this book. Then answer the following questions. Read each question carefully and answer with a correct choice or response.

Part A

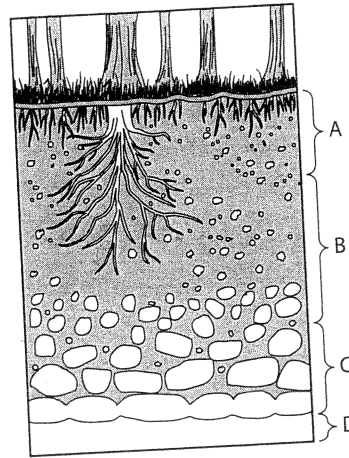
- In addition to its effects on living organisms, acid rain may cause changes in the landscape by
 - decreasing chemical weathering due to an increase in destruction of vegetation
 - decreasing physical weathering due to a decrease in frost action
 - increasing the breakdown of rock material due to an increase in chemical weathering
 - increasing physical weathering of rock material due to an increase in the circulation of ground water
- Chemical weathering will occur most rapidly when rocks are exposed to the
 - hydrosphere and lithosphere
 - mesosphere and thermosphere
 - hydrosphere and atmosphere
 - lithosphere and atmosphere
- Which factor has the most influence on the development of soil?
 - climate
 - longitude
 - amount of rounded sediment
 - age of the bedrock
- The following diagram represents a geologic cross section.



Which statement best explains why the conglomerate appears to be the most weathered bedrock?

- The conglomerate particles are large.
- The conglomerate is composed of quartz cobbles and pebbles.
- The conglomerate underlies a steeper-sloped surface.
- The conglomerate has been exposed to weathering the longest.

- Which change would cause the topsoil in New York State to increase in thickness?
 - an increase in slope
 - an increase in biologic activity
 - a decrease in rainfall
 - a decrease in air temperature
- The following diagram shows soil layers formed in an area of granite bedrock. Four different soil layers—A, B, C, and D—are shown.



Which soil layer contains the greatest amount of material formed by biological activity?

- A
- B
- C
- D

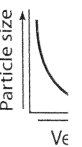
- Which is the best evidence that erosion has occurred?
 - a soil rich in lime on top of a limestone bedrock
 - a layer of basalt found on the floor of the ocean
 - sediments found in a sandbar of a river
 - a large number of fossils embedded in limestone
- Which erosional force acts alone to produce avalanches and landslides?
 - gravity
 - running water
 - winds
 - sea waves
- How are dissolved particles of sediment carried in a river?
 - by bouncing and rolling
 - by precipitation
 - in solution
 - in suspension

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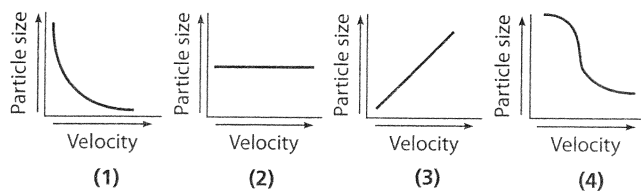
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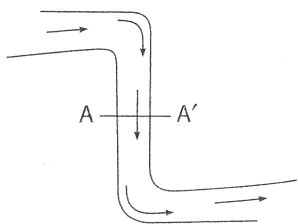
TOPIC 9 Weathering and Erosion

- 10 Which material would most easily be carried in suspension by a slow-moving stream?
 (1) clay (2) sand (3) silt (4) gravel
- 11 In summer, a small stream has a depth of 3 meters and a velocity of 0.5 meter per second. In spring, the same stream has a depth of 5 meters. The velocity of the stream in spring is more likely closest to
 (1) 0.1 m/sec (2) 0.5 m/sec
 (3) 0.2 m/sec (4) 0.8 m/sec
- 12 Two streams, A and B, carry the same volume of water, but stream A has a greater velocity. The most likely cause of this greater velocity would be that stream A
 (1) has more tributaries
 (2) has a wider streambed
 (3) flows down a steeper slope
 (4) travels over less resistant bedrock

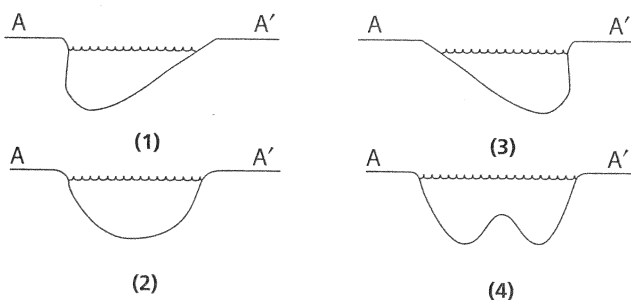
- 13 Which graph best represents the relationship between the maximum particle size that can be carried by a stream and the velocity of the stream?



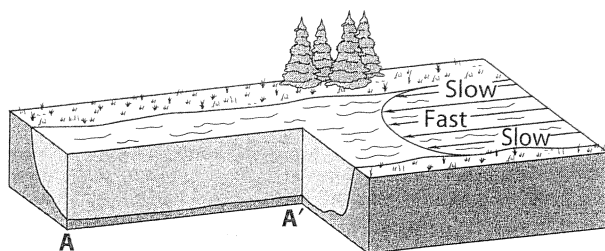
- 14 The following diagram is a map view of a stream flowing through an area of loose sediments. Arrows show the location of the strongest current.



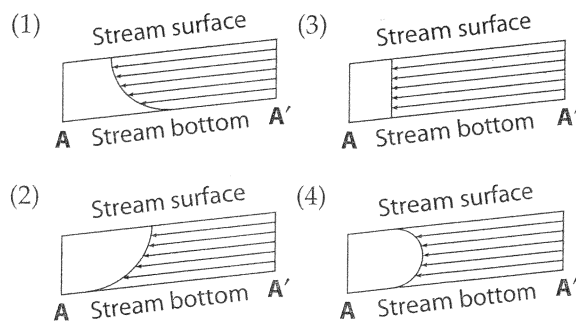
Which stream profile represents the cross section from A to A'?



- 15 Which evidence best supports the inference that the movement of the ice sheet was generally from north to south over New York State during the Pleistocene glaciation?
 (1) pieces of anorthositic rock from the Adirondacks found near Albany
 (2) scratches aligned east to west on bedrock near Utica
 (3) rocks of Devonian age found near Elmira
 (4) the direction of flow of the Niagara River at Niagara Falls
- 16 In the following diagram of a straight-flowing stream, the lengths of the arrows represent differences in relative stream velocity on the stream's surface.



Which diagram best represents the relative stream velocity from the surface to the bottom of the stream for the cross section from A to A'?



- 17 In the following diagrams, which rock fragment shows the least evidence of erosion?

