

Structures Level 3 Quiz

1) What were the earliest materials used for building bridges?

Select one:

- a) Wood, Steel, and Concrete
- b) Trees, Rocks, and Vines
- c) Sand, Cement, and Stone
- d) Girders and Beams

2) What caused the collapse of the Kansas City indoor walkway in 1981?

Select one:

- a) Earthquake
- b) Faulty design and structural stress
- c) Corrosion of materials
- d) Overloaded piers

3) Which force involves tearing and sliding actions on a bridge?

Select one:

- a) Compression
- b) Torsion
- c) Shear
- d) Bending

4) What is the primary issue with using early natural materials for bridges?

Select one:

- a) Lack of flexibility
- b) Heavy weight
- c) Susceptibility to rot and deterioration
- d) High cost

5) Which modern material is excellent under compressive forces but weak under tensile forces?

Select one:

- a) Steel
- b) Concrete
- c) Aluminum
- d) Timber

6) What type of bridge is the least expensive and easiest to build?

Select one:

- a) Suspension bridge
- b) Arch bridge
- c) Truss bridge
- d) Beam bridge

7) What feature of suspension bridges allows them to cover very long distances?

Select one:

- a) Beam structures
- b) Curved abutments
- c) Suspended road surface with cables
- d) Solid piers resting on bedrock

8) Which type of bridge was used by the Romans for aqueducts?

Select one:

- a) Suspension bridge
- b) Arch bridge
- c) Beam bridge
- d) Truss bridge

9) What is a box girder bridge known for?

Select one:

- a) Simplicity and low cost
- b) Wind resistance and rigidity
- c) Use of cables for suspension
- d) Decorative designs

10) What are caissons used for in bridge construction?

Select one:

- a) As a structural material for towers
- b) To distribute loads to abutments
- c) For underwater bridge foundations
- d) To anchor suspension cables