

BOS CHAIRMAN-CE

MODEL QUESTION PAPER FOR Ph.D., ENTRANCE EXAMINATION IN CIVIL ENGINEERING

DURATION: 90 minutes

MAX.MARKS:100

ALL QUESTIONS CARRY EQUAL MARKS

- (1) The property of a material by which it can be rolled into sheets is called
- Ductility
 - Plasticity
 - Elasticity
 - Malleability
- (2) A Solid cube is subjected to like equal normal forces on all its faces. The volumetric strain will be 'k' times the linear strain in any of the three axial directions when
- $k=3$
 - $k=4$
 - $k=2$
 - $k=1$
- (3) For a triangular dam section of height H for just no tension under the action of water pressure, self weight and uplift pressure the minimum base width required with usual notation is
- $H/S-1$
 - $H/(S-1)^2$
 - H/\sqrt{S}
 - $H/\sqrt{S-1}$
- (4) According to *Creager* for a gravity dam the crest width is most economical if it is about
- 14% of the height of the dam
 - 20% of the height of the dam
 - 28% of the height of the dam
 - 30% of the height of the dam
- (5) The slope of the upstream face of a flat slab type buttress dam
- Is always less than 35°
 - Is always more than 45°
 - Usually varies from 35° to 45°
 - Is always equal to 45°
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(100) Irrigation frequency is a function of

- Crop only
 - Soil, crop and climate
 - Soil, and fertilizer
 - Soil and climate
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