

DDD-161001010106

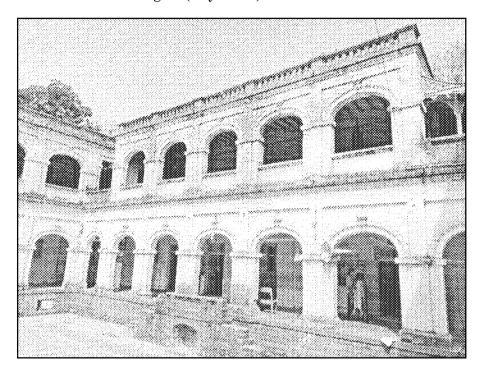
Seat No. _____

B. Arch. (Sem. I) Examination May - 2022

Structure - I

Time: 2 Hours] [Total Marks: 50

- 1 State whether the following statements are true or false: 10 (any five)
 - (a) Beam is essentially a linear element, subject to transverse load; must develop internal resistance to shear and bending and resist excessive deflection (sag).
 - (b) Flat arch is non structural element for spanning an opening to support a vertical load.
 - (c) Floor is considered as a rigid planner structural element.
 - (d) The mechanics of forces applied to bodies, which are not moving. They are considered to be in static equilibrium.
 - (e) Rigid frame and post & lintel system are same as per structural system.
 - (f) IPSA school campus building is the example of rigid structural system.
- 2 Explain in brief with neat sketches or diagrams: (any four) 20
 - (a) Stress
 - (b) Tension
 - (c) Strain
 - (d) Co-linear non concurrent forces
 - (e) Trabeated structural system



- (a) Identify and discuss the system adapted in above mentioned building.
- (b) Discuss any one system having rigid and non rigid structural element.
- (c) Discuss wind load and dead load coming to the building.