



NBP-1601390101021000 Seat No. _____

First Year B. A. (ID) (Sem. II) Examination

April / May - 2017

Materials & Construction - II

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 50

Instructions :

- (1) All questions are compulsory.
- (2) Any ambiguity will be considered as a wrong answer.

1 Mark the following as true or false : **10**

- (1) Span is the clear horizontal distance between the supports.
- (2) Crown is the highest central wedge-shaped block of an arch.
- (3) Haunch is the vertical distance between the springing line and the highest point on the intrados.
- (4) Skew-back is the surface of the abutment on which the arch rests.
- (5) Rise is the horizontal upper part of a step on which foot is placed in stair
- (6) Winders are tapering steps which are provided for changing the direction of a stair.
- (7) Scotia is a molding provided under nosing to beautify the elevation of the step.
- (8) Pitch is the under surface of a stair.
- (9) Shape, size, finish, color are mechanical properties of metals.
- (10) Aluminum is an example of ferrous metals.

- 2** Describe the following : (any two) **10**
- (1) Types of doors and windows.
 - (2) Terminologies of arch.
 - (3) Types of stairs.
- 3** Write the short notes on the following : (any two) **10**
- (1) Metal and its properties.
 - (2) Plywood and its properties.
 - (3) Types of wood products.
- 4** Design a stair for the management institute. **10**
The dimensions of the space are 4 m (L), 3 m (B), 2.4 m (H).
Scale of the drawing is 1:20. Draw plan and elevation of the stair. Minimum flight width is 1 m and minimum landing width is 0.75 m. Stair should be with handrail and baluster.
- OR**
- 4** Design a door for the management institute. The dimensions **10**
of the door are 1200 mm × 2100 mm. Scale of the drawing
is 1:20. Draw plan and elevation of the door.
- 5** Draw the details of the Q.4 (minimum 4 details) : **10**
Scale 1:5 or 1:2.
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