## BACHELOR OF ARCHITECTURE (CBCS - 2015 COURSE) B. Arch. Sem-VIII :WINTER - 2021

## SUBJECT: BUILDING CONSTRUCTION AND MATERIALS - VIII

Day **Time:** 10:00 AM-01:00 PM Wednesday Date Max. Marks: 60 22-12-2021 W-13579-2021 N.B. 1) Q.No. 1 is COMPULSORY. Out of remaining solve ANY TWO questions from Section -I. 2) Attempt ANY THREE questions from Section – II. Answer to both sections should be written in SEPARATE answer book. 3) 4) Figures to the RIGHT indicate FULL marks. 5) Assume suitable data if necessary. SECTION - I Q.1 Write short notes on ANY TWO of the following. (10)Function of Balancing tank in swimming pool Basic considerations while designing seating in a stadium b) Roofing materials for stadium c) Q.2 Draw plan and section to scale 1:50 of private swimming pool labeling important (10) parts and give dimensions. Q.3 Draw plan and section of Indoor Badminton (7 m x 13m) Stadium with 5000 seats (10) scale 1: 100. Q.4 Explain with sketches 'shotcrete swimming pool'. (10)SECTION - II **Q.5** Discuss high rise systems in steel material. (10)Discussion (5 marks) Sketches with annotations and dimensions. (5 marks) Q.6 A semi-permanent structure for 30 stalls is to be provided for exhibition of new building materials. Draw plan to scale 1:100 and details of roof covering material. Labeled and dimensioned plan - (5 marks) Details - (5 marks) Q.7 Discuss roll of wind pressure and seismic considerations in design of high rise (10) structures. With labeled sketches role of Wind pressure - (5 marks) With labeled sketches seismic load - (5 marks) **Q.8** Discuss any two types of form work system for high rise structure. (10)Each type discussion with labeled sketch - (5 marks per type)