[Total No. of Printed Pages-2 Total No. of Questions-8] Seat [5668]-102 No. S.E. Civil (I Semester) EXAMINATION, 2019 **BUILDING TECHNOLOGY AND MATERIALS** (2015 **PATTERN**) Time : Two Hours Maximum Marks : 50 Answer Q. Nos. 1 or 2, 3 or 4, 5 or 6, 7 or 8. (i) ) *N.B.* :--(*ii*) Figures to the right indicate full marks. Assume suitable data, if necessary (iii) State various components of Building. Explain step-by-step 1. (a)procedure of plinth filling with sketch. [6] State the requirements of partition walls. Explain needle beam *(b)* method of underpinning. [6] Write short notes on 2. (a)[6] Flemish Bond (i)Cantilever footing. (ii)Draw the sketch of formwork for beam and slab. Explain composite *(b)* [6] masonry. Explain lean to State the functional requirements of flooring 3. (a)roof with sketch. [6] Draw the sketch of door and show on it (i) Frame (ii) Hold fast (iii) Horn (iv) Lock rail. (b)[6] P.T.O.

Or: Explain the following with sketches : [6] **4**. (a)Canoid (i)Gable (ii)Ridge cover (iii)Write short notes on : (*b*) [6] Arch construction (i)Bay window. (ii)Plan a dog legged stair for residential building with the following **5**. (a)detail . [7]F/F-Height-3.60 m (i)The stair hall measures 2.50 m × 5.00 m. (ii) Write short notes on : (*b*) [6] Dots in plastering i) (ii) Pointing. Explain the following terms with sketches : **6**. (a)[7]Riser (i)Pitch of stair (ii)Nosing (*iii*) (iv)Scotia Newel Post (v)[6] [6] Explain the defects in plastering. (*b*) 11:5-5×1 7. Enlist engineering properties of : (a)Timber (i)(ii)Glass N Aluminium. (iii)State safety precautions to be taken for construction of high *(b)* rise building in crowded area. [7]Or 8. (a)Write short notes on : [7]Aluminium cladding (i)Ecofriendly materials. (ii)Explain the storage of materials at site. *(b)* [6] [5668]-102  $\mathbf{2}$