Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY FACULTY OF ENGINEERING & TECHNOLOGY M.Tech., Summer 2017-18 Examination

Some Crame: Advanced respective processory. 1. All questions are compulsory. 2. Figures to the right indicate full marks. 3. Make suitable assumptions wherever necessary. 4. Start new question on new page. Q1 A) What are the different loads acting on the Gantry Girder. Explain in detail. (B) Explain the design steps involved in the design of Gantry Girder. (C) What do you mean by Cold Formed Steel? Explain it advantages and disadvantages. (B) Explain the design steps involved in the design of Gantry Girder. (B) Explain the design steps involved in the design of Gantry Girder. (C) What do you mean by Cold Formed Steel? Explain it advantages and disadvantages. (B) Explain Plane stress and Plane strain? (C) Explain Plane stress and Plane strain? (C) Explain Plane stress and Plane strain? (D) Explain Texca's Theory and Von Misca's theory? (D) What are the yield criteria? What is Flow Rule? (Q.3 A) Explain SL Venant's theory of plastic flow? (B) Explain Gantry Girder for a single crane M.O.T for the Following Data: (Crane Capacity=300kN Span of Crane Girder=5m Self Weight of the crane girder excluding trolley=250kN Minimum Hook Approach 1.0m Wheel Base of Crane=3.2m Span of Gantry Girder to carry two E.O.T cranes opera	Semester: 2ISubject Code: 032091537Subject Name: Advanced Design of Steel Structures7		te: 23-05-2018 ne: 02:00PM to 04:30PM tal Marks: 60
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		The portal frames support a gantry girder at 3.25 m height, over which an electr	ic overhead
travelling (EOT) crane is to be operated. The crane capacity is to be 300 kN and the crane girder		travelling (EOT) crane is to be operated. The crane capacity is to be 300 kN and	the crane girder
weighs 300 kN while the crab (trolley) weight is 60 kN.		weighs 300 kN while the crab (trolley) weight is 60 kN.	c

