

B.E. CONSTRUCTION ENGINEERING THIRD YEAR SECOND SEMESTER EXAM 2018

Subject: PROCESS OF CONSTRUCTION [Part-2]

Time: Three hours

Full Marks: 50

*Different parts of the same question should be answered together.***PART - II**

CO4 [10]	<p>Answer all questions in this block</p> <p>[1] Describe Arch welding technique with neat sketch used for steel construction.</p> <p style="text-align: right;">[10]</p>
CO5 [15]	<p>[1] Discuss well foundation technique with neat sketch. What kind of faults generally faced during this technique and explain the technique to solve this faults. [15]</p> <p style="text-align: center;">OR</p> <p>[2] Which part of an excavator is changed during the operation of this machine and explain cause of changing. [15]</p> <p>[2] a) For deep excavation processes which structural element we used to support? Draw a sketch of this element and explain how this element helps for safe excavation process.</p>
CO6 [25]	<p>[1] Explain every step of steel "K" type truss bridge construction with the help of a "Derrick Crane". River is full of flowing water in this case. Neat sketch is to be drawn showing every step. [25]</p>

CO1: Describe and identify of different types of structural elements and configuration (K1)

CO2: Classify and identify different method of scaffolding and shuttering technique (K2)

CO3: Discuss and explain concreting method including mixing pouring (K2).

CO4: Classify and describe of different technique of structural steel construction (K2).

CO5: Discuss and explain different method of excavation and foundation construction (K2).

CO6: Discuss and discussion of cantilever construction of bridges (K2).

Process of Construction

Ref:Ex/Con/T/224/2018

Time : Three hours

PART - I

Full Marks : 100

CO1: Name four different types of shell roof. Explain why shell roof is economical for roof structure in construction industry? 5

CO2: (i) Draw a sketch showing different parts of slip form works of a RCC chimney. Describe the slip form technique and also discuss the challenges faced during execution. 15

(ii) Why form work is very important step for civil construction. 5

CO3:A. (i) For transportation of green concrete -which machine is mostly preferred in construction industry?

(ii) Draw a sketch of that machine showing the details of parts.

(iii) Explain unloading process of concrete from the said machine. 15

B. (i) Explain the working methodology of 'Double Cylindrical Concrete Pump'. 10

OR

(i) Draw neat sketches for reinforcement details both in cross section and long section of a column.

CO1: Describe and identify of different types of structural elements and configuration (K1)

CO2: Classify and identify different method of scaffolding and shuttering technique (K2)

CO3: Discuss and explain concreting method including mixing pouring .(K2).

CO4: Classify and describe of different technique of structural steel construction (K2).

CO5: Discuss and explain different method of excavation and foundation construction .(K2).

CO6: Discuss and discussion of cantilever construction of bridges .(K2).