Code No: R05310103 **R05** **Set No. 2**

III B.Tech I Semester Examinations,November 2010
CONCRETE TECHNOLOGY
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain quality of water to be used for mixing concrete.
   (b) Explain the effect of sea water for mixing concrete. [12+4]
2. Explain the classification of aggregates based on size and shape of the aggregates. [16]
3. (a) Explain the phenomenon of gain of strength with age.
   (b) With a table explain the age factors and gain of permissible compressive strength in concrete as per British code. [6+10]
4. (a) What is the filed corrctions to be carried out for concrete mixes? explain?
   (b) Explain about effective water/cement ratio.
   (c) Explain the duriability considerations in the design of concrete mixes as per IS 456-2000. [6+4+6]
5. (a) Explain relation between Modulus of elasticity and strength.
   (b) Explain factors effecting elasticity. [6+10]
6. (a) With neat diagram of the testing equipment describe the procedure for evaluation of compressive strength of concrete.
   (b) Explain effect of Height to diameter ratio of cylinder on strength of concrete. [10+6]
7. Explain advantages and disadvantages of concrete as a building material. [16]
8. (a) Explain salient features of self-compacting concrete.
   (b) Explain various aspects that render self-compacting concrete beneficial over other conventional concretes. [6+10]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: R05310103 **R05** **Set No. 4**

III B.Tech I Semester Examinations,November 2010
CONCRETE TECHNOLOGY
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain quality of water to be used for mixing concrete.
   (b) Explain the effect of sea water for mixing concrete. [12+4]
2. (a) Explain salient features of self-compacting concrete.
   (b) Explain various aspects that render self-compacting concrete beneficial over other conventional concretes. [6+10]
3. (a) Explain relation between Modulus of elasticity and strength.
   (b) Explain factors effecting elasticity. [6+10]
4. Explain the classification of aggregates based on size and shape of the aggregates. [16]
5. (a) Explain the phenomenon of gain of strength with age.
   (b) With a table explain the age factors and gain of permissible compressive strength in concrete as per British code. [6+10]
6. (a) With neat diagram of the testing equipment describe the procedure for evaluation of compressive strength of concrete.
   (b) Explain effect of Height to diameter ratio of cylinder on strength of concrete. [10+6]
7. (a) What is the filed corrctions to be carried out for concrete mixes? explain?
   (b) Explain about effective water/cement ratio.
   (c) Explain the duriability considerations in the design of concrete mixes as per IS 456-2000. [6+4+6]
8. Explain advantages and disadvantages of concrete as a building material. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: R05310103 **R05** **Set No. 1**

III B.Tech I Semester Examinations,November 2010
CONCRETE TECHNOLOGY
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain the phenomenon of gain of strength with age.
   (b) With a table explain the age factors and gain of permissible compressive strength in concrete as per British code. [6+10]
2. (a) Explain quality of water to be used for mixing concrete.
   (b) Explain the effect of sea water for mixing concrete. [12+4]
3. Explain the classification of aggregates based on size and shape of the aggregates. [16]
4. (a) What is the filed corrctions to be carried out for concrete mixes? explain?
   (b) Explain about effective water/cement ratio.
   (c) Explain the duriability considerations in the design of concrete mixes as per IS 456-2000. [6+4+6]
5. (a) With neat diagram of the testing equipment describe the procedure for evaluation of compressive strength of concrete.
   (b) Explain effect of Height to diameter ratio of cylinder on strength of concrete. [10+6]
6. (a) Explain salient features of self-compacting concrete.
   (b) Explain various aspects that render self-compacting concrete beneficial over other conventional concretes. [6+10]
7. (a) Explain relation between Modulus of elasticity and strength.
   (b) Explain factors effecting elasticity. [6+10]
8. Explain advantages and disadvantages of concrete as a building material. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: R05310103 **R05** **Set No. 3**

III B.Tech I Semester Examinations,November 2010
CONCRETE TECHNOLOGY
Civil Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain relation between Modulus of elasticity and strength.
   (b) Explain factors effecting elasticity. [6+10]
2. (a) What is the filed corrctions to be carried out for concrete mixes? explain?
   (b) Explain about effective water/cement ratio.
   (c) Explain the duriability considerations in the design of concrete mixes as per IS 456-2000. [6+4+6]
3. (a) Explain quality of water to be used for mixing concrete.
   (b) Explain the effect of sea water for mixing concrete. [12+4]
4. (a) Explain the phenomenon of gain of strength with age.
   (b) With a table explain the age factors and gain of permissible compressive strength in concrete as per British code. [6+10]
5. (a) With neat diagram of the testing equipment describe the procedure for evaluation of compressive strength of concrete.
   (b) Explain effect of Height to diameter ratio of cylinder on strength of concrete. [10+6]
6. Explain advantages and disadvantages of concrete as a building material. [16]
7. (a) Explain salient features of self-compacting concrete.
   (b) Explain various aspects that render self-compacting concrete beneficial over other conventional concretes. [6+10]
8. Explain the classification of aggregates based on size and shape of the aggregates. [16]

⋆ ⋆ ⋆ ⋆ ⋆