**6th Sem**

# CONCRETE TECHNOLOGY

1. **2 Marks questions.**

   (a) What is compaction of concrete ?

   (b) What do you mean by fresh concrete ?

   (c) What is the significance of water cement ratio ?

   (d) What do you mean by flexual strength of concrete?.

   (e) What do you mean by hydration of cement?

   (f) Why the evaluation of crack is necessary in concrete ?

   (g) Write down the different phases for production of concrete.

   (h) Write down the materials used in fibre reinforced concrete.

   (i) Define fineness modulus.

   (j) Calculate modulus of elasticity for $M_{20}$ grade concrete.

2. **5 Marks questions.**

   (a) Write down the uses and classification of concrete admixture.

   (b) What are concrete strength? What are factors affecting it?

   (c) What are data required for mix design?

   (d) Write advantages and disadvantages of concrete.

   (e) Give the difference between design mix concrete and nominal mix concrete.

   (f) Write down the advantages of quality control of concrete.

   (g) What are the requirements of workability ?

**10 Marks Questions**

3. Write down procedure for slump test.

4. Describe causes and effects of corrosion of steel reinforcement in RCC works.

5. Explain ready mix concrete in detail.

6. Classify the aggregate according to their shape and size.

7. What are physical properties of cement? Describe any one in detail.

# 5TH SEM
# Concrete Technology

## 2 Marks questions

a. What do you mean by M15 grade concrete?
b. What is gunniting?
c. State workability.
d. Define fineness modulus of aggregates.
e. What is creep in concrete?
f. What is hydration of cement?
g. Name the apparatus which is used to find out
   (i) Initial setting time of cement
   (ii) Soundness of cement
h. What is an admixture?
i. What do you mean by bulking of sand?
j. List out different tests used for measuring workability of concrete.

## 5 Marks Questions

a. Write down the advantages and disadvantages of concrete.
b. Describe briefly classification of aggregate based on their shape.
c. Write a short note on high performance concrete.
d. Write down the advantages of quality control.
e. Write down different functions of admixture.
f. What is alkali aggregate reaction and mention the factors promoting the alkali aggregate reaction.
g How does the presence of sugar and oil in water affect the concrete?

## 10 Marks Questions

3 a What do you mean by flexural strength of concrete
  b What are the types of deterioration of concrete and how it can be prevented?
4 Describe in detail the factors influencing the choice of mix proportion.
5 a What is the effect of water cement ratio on strength of concrete?
  b Define slump. How slump test is carried out in laboratory? Explain with neat Sketches.
6 a Differentiate between fine aggregate and coarse aggregate.
  b Describe in detail the methods of curing of concrete.
7 a What is initial setting time of cement?
  b Explain the function and property of any two types of admixture.