

B.E. (Civil Engineering) Seventh Semester (C.B.S.)
Elective-I : Advanced Construction Materials

P. Pages : 2

Time : Three Hours



NIR/KW/18/3524

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Assume suitable data whenever necessary.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Write the various types of Finishes & treatments. 7
- b) Classify various special purpose cements. Explain high alumina cement. 7

OR

2. a) Explain light weight aggregate with it's advantages. 7
- b) Write a notes on high strength concrete. 7
3. a) Explain light gauge structural steel. 7
- b) Write a short note on physical characteristics of aluminum profile. 7

OR

4. a) Write a note on New Alloy Steels. 7
- b) Differentiate between TMT & HYSD steel bar. 7
5. a) Write note on polymer & its composites. 7
- b) Write a short note thermal insulating materials. 6

OR

6. a) Write the advantages & disadvantages of ceramic and its composites. 6
- b) What is Ferro cement & state it's application. 7
7. a) What are geo-synthetics? What are their applications. 7
- b) Difference between Tar & Bitumen. 6

OR

8. a) What are Disposable materials? Explain briefly. 7
b) What are Agro Waste materials. 6
9. a) What are different causes of failure of farm work. 7
b) What is plywood? Why odd number of laminates used in Plywood? 6

OR

10. a) What do you understand by Veneer? Explain its usage. 6
b) What are various types of finishes. 7
11. a) What is Dielectric Elastomer? Write in brief about self Healing materials. 7
b) Describe the use of shape memory alloys & polymers. 6

OR

12. a) What is Bio-cement? Write in brief about Photo mechanical materials. 7
b) Describe water proofing compound. 6
