Question Bank (K Scheme)

Name of Course: Maintenance and Repairs of Structures Subject code: 316309
Semester: Sixth Programme: Civil Engineering

Unit test II

Unit 4: Maintenance and Repair Methods for Masonry Work

2 Marks Questions

1. List any four causes of crack formation in wall.
2. Write any four techniques used to reduce the rate of damping in building.
3. Explain any one stage of repair in case of masonry wall.
4. Define: grouting, shotcreting.
5. State any four harmful effects of dampness.
6. State any four causes of foundation settlement.

4 Marks Questions

7. Enlist eight probable locations of occurrence of cracks in buildings.
8. Explain with cause and sketch any 2 commonly observed crack locations in masonry.
9. Explain repairing of cracks using grouting.
10. Explain repairing of cracks using patch spalling replacement.
11. Explain repairing of cracks using epoxy injection.
12. Explain repairing of cracks using shotcreting.
13. Explain the procedure for repair of major cracks in masonry.
14. Explain any one repair technique against dampness.
15. Explain any one soil improvement technique in detail.
16. Suggest any two materials necessary to repair the following: i) Dampness of RCC roof slab. ii) Dampness in the exterior brick wall iii) repair of 0.4 mm wide crack for total depth of a RCC slab iv) Concrete surface protection.
17. Explain the terms : i) Grouting ii) Shotcreting.

Unit 5: Maintenance and Repairs for Concrete Work

2 Marks Questions

1. State any four common locations/reasons of crack occurrence in RCC structures.
2. Enlist any four causes of failure of RCC structures.
3. State any two causes of dampness in roof slab.
4. Differentiate between guniting and shotcreting.
5. List any two materials that can be used as corrosion resistant reinforcement.

4 Marks Questions

1. Explain various causes of wall cracks and show their probable location with neat sketch.
2. Define the dampness. Also State the causes of dampness in roof slab.
3. Suggest any two materials necessary to repair the following:
   i)Dampness of RCC roof slab.
   ii)Dampness in the exterior brick wall.
4. Explain the stepwise procedure for ferrocement wter proofing technique of roof slab.
5. Explain water proofing technique for roof slab by using brick bat coba with suitable sketch.
6. State any three repairing methods for major cracks and explain any one.
7. Name the two situations where jacketing is done and where collars are provided and also describe where shotcreting is done.
8. Explain with neat sketch the stitching method of repair of RCC beam when it cracks at excessive bending moment.
9. Explain the step by step procedure of grouting repair method of crack in RCC structure.
10. State the stepwise procedure to repair corrosive affected RCC element.
11. A damaged RC column need to be repair to restore its original state, write the step by step procedure to repairs this damaged RC column using method of jacketing and collaring along with neat sketch.

4 Marks Questions

6. Write the step by step procedure for the following repair methods: i) Gunitting ii) Jacketing.

7. List out any four systems of waterproofing. Explain any one in detail.

8. State the step by step procedure of repair of crack in RCC slab by using epoxy injection method and also draw suitable sketch.

9. State any two reasons of reinforcement corrosion and explain the repair technique of it using rebar.

10. Enlist any four methods of preventing/repairing corrosion in reinforcement. Explain any one method in detail.