

5th Sem / Civil, Brick Tech., Constr. Mgmt.
Subject:- Repair and Maintenance of Buildings

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Maintenance activities undertaken before the defects occur or damage developed in the structure is known as (CO1)
a) Routine maintenance
b) Preventive maintenance
c) Special maintenance
d) Remedial maintenance
- Q.2 Routine maintenance is also known as (CO1)
a) Emergency maintenance
b) Preventive maintenance
c) Fixed time maintenance
d) Remedial maintenance
- Q.3 Blistering is due (CO2)
a) Trapping of water vapours
b) Loss of brightness
c) Fading
d) Blooming
- Q.4 In masonry problems, paint blistering indicates (CO2)
a) Indicates the wall is broken
b) Indicates movement with wall

- Q.5 c) Indicates excessive moisture
d) Absorbs moisture trapped in the paint
Breakdown of surface mortar accompanied with loss of surface aggregates is known as (CO3)
a) Leaching
b) Scaling
c) Staining
d) Carbonation of concrete
- Q.6 Removal of soluble matter from brickwork is called (CO3)
a) Scaling b) Spalling
c) Leaching d) Rusting
- Q.7 Which is the main cause of defects in building.(CO4)
a) Dampness
b) Relative movement of components
c) Effects of environmental factor
d) All of the above
- Q.8 Which of the following is the example of water borne adhesive (CO5)
a) Epoxies b) Latex powder
c) Silicons d) Polyester
- Q.9 Most commonly used adhesives in repair work are (CO5)
a) Solvent free adhesive b) Waterborne adhesive
c) Both a and b d) None of these
- Q.10 Air bubbles trapped at the surface of cast-in-situ concrete during placement of components is due to (CO6)
a) Bug holes b) Form tie holes
c) Honeycomb d) Contraction

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Durability and Serviceability of building structures depend upon careful design _____ and _____. (CO1)

Q.12 _____ is the most widely used plastic material in buildings. (CO2)

Q.13 Efflorescence is the effect of _____ on the brick. (CO2)

Q.14 NDT stands for _____? (CO3)

Q.15 Accumulation of grease and dirt causes _____ of traps. (CO4)

Q.16 The main cause of spalling in flat roof is _____ to reinforcement. (CO4)

Q.17 A good repair material should have the best combination of low shrinkage, Mechanical properties and adhesion in _____ and wet conditions. (CO5)

Q.18 A good repair material should possess good _____ and bond strength With existing substrate. (CO5)

Q.19 A good quality concrete must be _____. (CO6)

Q.20 Improper mixing and inadequate compaction result into _____ in concrete. (CO6)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain any five important factors that influence the repair and maintenance. (CO1)

Q.22 Enlist the various steps involved in the process of remedial maintenance. (CO1)

Q.23 Describe any five human factors causing deterioration of buildings? (CO2)

Q.24 What factors governing choice of constructional material. (CO2)

Q.25 Explain how rusting of reinforcement causes deterioration of concrete? (CO2)

Q.26 What are the salient features of non destructive testing? (CO3)

Q.27 Describe any five objectives of the investigation of defects in buildings? (CO3)

Q.28 Write short note on rebound hammer test. (CO3)

Q.29 Describe various causes of defects in new buildings? (CO4)

Q.30 Explain five basic properties of good repair material? (CO5)

Q.31 List different types of repair materials. (CO5)

Q.32 What is caulking? Where it is useful. (CO5)

Q.33 Write a short note on shotcreting. (CO6)

Q.34 Explain grooving and sealing method of crack repair? (CO6)

Q.35 What are the common sources of leakage of flat roofs? (CO6)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain the various steps involved in the process of remedial maintenance. (CO1)

Q.37 Describe various water proofing materials used for roofs. (CO3)

Q.38 Discuss various methods of controlling corrosion in RCC structures. (CO6)