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180755-A

**5th Sem / Branch : Civil, Constr. Mgmt.,/Brick Tech.**  
**Sub. : Repair & Maintenance of Buildings**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

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

- Q.1 Majority of the maintenance problems fall in the category of (CO-1)  
a) Remedial maintenance  
b) Special maintenance  
c) Preventive maintenance  
d) Routine maintenance
- Q.2 Maintenance activities undertaken at predetermined interval to attend the defects is known as (CO-1)  
a) Emergency maintenance  
b) Special maintenance  
c) Remedial maintenance  
d) Routine maintenance
- Q.3 Rate of deterioration depends upon \_\_\_\_\_ capability of materials. (CO-2)  
a) Blistering                      b) Resisting  
c) Blooming                      d) Efflorescence
- Q.4 White deposits of salts on the surface of the brick indicates? (CO-2)  
a) Mortar                          b) Spalling

- c) Efflorescence                  d) Biological
- Q.5 Breaking of the concrete pieces from the reinforcement is called. (CO-3)  
a) Spalling                          b) NDT  
c) Leaching                        d) Cracking
- Q.6 Equipments which is used for assessing cover to reinforcement, diameter of bars and locations of bar is known as (CO-3)  
a) Ultrasonic  
b) Windsor probe  
c) Cover meter  
d) Visual inspection probes
- Q.7 Main causes of dampness is due to (CO-4)  
a) Shoring                          b) Spalling  
c) Clogging                        d) Absence of DPC
- Q.8 Anti corrosion coating are also called (CO-5)  
a) Curing                          b) Rebar primer  
c) Both A & B                      d) None of these
- Q.9 Which of the following are different types of repair material? (CO-5)  
a) Anti corrosion coating      b) Adhesive aids  
c) Repair mortars                d) All of the above
- Q.10 Which of the following are used as a sealant in repairing work? (CO-6)  
a) Bitumen sealants  
b) Polysulphide sealants  
c) Sealing strips  
d) All of the above

### SECTION-B

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

- Q.11 The maintenance operation done before the defects occurred or damage developed in structure is called \_\_\_\_\_. (CO-1)
- Q.12 Plastic creep under \_\_\_\_\_. (CO-2)
- Q.13 Acidic ground water can cause \_\_\_\_\_ of concrete. (CO-2)
- Q.14 Relative strength of concrete is determined by \_\_\_\_\_. (CO-3)
- Q.15 Dampness causes \_\_\_\_\_ on different surface of buildings. (CO-4)
- Q.16 Excessive deflection and lateral bulging are the defects mainly found in \_\_\_\_\_? (CO-4)
- Q.17 INP stands for \_\_\_\_\_? (CO-5)
- Q.18 The process of keeping the finished concrete surface moist to enable it to gain strength is called \_\_\_\_\_. (CO-6)
- Q.19 DPC stands for \_\_\_\_\_? (CO-6)
- Q.20 Contraction of floor result in \_\_\_\_\_? (CO-6)

### SECTION-C

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

- Q.21 Describe maintenance of a structure is necessary? (CO-1)
- Q.22 Write a short note on preventive maintenance. (CO-1)
- Q.23 Write a short note on deterioration in buildings (CO-2)
- Q.24 Enlist any five factors responsible for painting defects? (CO-2)

- Q.25 Explain the various factors that affect the durability of concrete? (CO-2)
- Q.26 Enlist any five objectives of the investigation of defects in buildings? (CO-3)
- Q.27 Define investigation and diagnosis. (CO-3)
- Q.28 Describe the steps involved in systematic approach of investigation. (CO-3)
- Q.29 Enlist the various sources of dampness in a building? (CO-4)
- Q.30 Define sealants. Discuss their desirable properties and functions. (CO-5)
- Q.31 Explain compatibility of repair material. (CO-5)
- Q.32 Define rebar primer. Write any four ideal characteristics for a Rebar primer. (CO-5)
- Q.33 Enlist the different methods of surface preparation for repair work? (CO-6)
- Q.34 Writes a short note on epoxy injection? (CO-6)
- Q.35 Describe any two types of water proofing materials available in the market. (CO-6)

### SECTION-D

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

- Q.36 Explain in brief different factors which influence the repair and maintenance. (CO-1)
- Q.37 Describe various water proofing material used for roofs. (CO-5)
- Q.38 Discuss birds mouth technique and dry packing techniques of material placement with sketches. (CO-6)

**Note :** Course outcome (CO) mentioned in the question paper is for official purpose only.