

University of Mumbai
Civil Engineering Examination

Sub: CE-DLO 5063 Building Services & Repairs
Max. Marks: 80

Year/Sem: - TE/ V
Duration: - 2Hrs

Q1. Attempt all the MCQS

(20 X 2 mark= 40 marks)

Q. 1. In a building, to provide ultimate comfort to occupants _____ can be used.

- a) AC
- b) HVAC
- c) Ventilators
- d) HAC

Q. 2. How many types of ventilation are there?

- a) 2
- b) 3
- c) 4
- d) 5

Q. 3. For compacting large sections of mass concrete in structures, the type of vibrator used is _____

- a) Internal vibrator
- b) External vibrator
- c) Screed vibrator
- d) Internal and Screed vibrator

Q. 4. How many types of Batch Mixers are available?

- a) 3
- b) 4
- c) 5
- d) 6

Q. 5. Which are the major types of boilers that are operated in world today?

- a) Natural circulation boiler
- b) Forced circulation boiler
- c) Fire tube boiler
- d) Once through boiler

Q. 6. How many types of pumps are present in plumbing?

- a) 1
- b) 2
- c) 3
- d) 4

Q. 7. Which of the following is not a component of the plumbing drainage system?

- a) Water closets
- b) Taps
- c) Vent pipes
- d) Urinals

Q. 8. Which of the following is not true about lead pipes?

- a) Lead pipes are highly resistant to corrosion
- b) They have a low hydraulic coefficient of flow
- c) Lead pipes are highly flexible
- d) When lead goes into solution, it has a cumulative poisoning effect

Q. 9. Which of the following is not true about plastic pipes?

- a) Plastic pipes are cheaper than the metal pipes
- b) Plastic pipes are light in weight
- c) Plastic pipes can be installed with ordinary tools
- d) Plastic pipes are corrosive

Q. 10. Which of the following is not a type of water closets?

- a) Indian-type water closet
- b) Spanish-type water closet
- c) European-type water closet
- d) Anglo-Indian type water closet

Q. 11. Which of the following is a disadvantage of Asbestos cement pipe?

- a) They are light weight
- b) They have smooth internal surface
- c) They are anti corrosive
- d) They are soft and brittle.

Q. 12. Typical luminous efficiency of incandescent bulbs is

- a) 46-60lm/W
- b) 8-18lm/W
- c) 60-80lm/W
- d) 101-175lm/W

Q. 13. _____ is subtended at a point and is enclosed by two straight lines lying in the same plane.

- a) plane angle
- b) specific output
- c) solid angle
- d) candle power

Q. 14. What is earthing?

- a) connecting electrical machines to earth
- b) providing a connection to the ground
- c) connecting the electrical machines to source
- d) providing a source of current

Q. 15. _____ is referred to the loss of the surface portion of concrete (or mortar) as a result of the freezing and thawing

- a) Delamination
- b) Scaling
- c) Disintegration
- d) Cracking

Q. 16. Which of the following is not a Deterioration Mechanism by Chemical Agents?

- a) Carbonation
- b) AAR
- c) Chloride Ingress
- d) Freezing & Thawing

Q. 17. _____ is the deformation in the concrete due to long term loading, the effects are usually not visible in the fresh structure, but it takes years to show up

- a) Fatigue
- b) Creep
- c) Bleeding
- d) Cavitation.

Q. 18. Deterioration of concrete surface as a result of particles in moving water scrubbing the surface is known as?

- a) Erosion
- b) Abrasion
- c) Disintegration
- d) Delamination

Q. 19. Which of the following data is not required during preliminary inspection of building for condition survey?

- a) History of previous repairs
- b) Age of building
- c) Seasonal problems
- d) Cost of construction

Q. 20. Process of protecting concrete from moisture penetration is called as _____ ?

- a) Waterproofing
- b) Jacketing
- c) Corrosion Protection
- d) Guniting

Q2. Attempt any FOUR

(04 X 05 marks= 20 marks)

- 1) Compare Lifts and Escalators
- 2) Discuss about Fire Alarm Systems
- 3) Requirements of a good water distribution system
- 4) Explain different types of wiring systems.
- 5) Explain Core cutting test.
- 6) In which conditions we will use non destructive methods.

Q3. Attempt any TWO

(02 X 10 marks= 20 marks)

- 1) Explain different methods of water distribution with their advantages and disadvantages.
- 2) Discuss complete procedure of conducting a condition survey
- 3) Explain in brief various types of fire.
- 4) What are various corrosion protection methods? Explain in brief.

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