

Department of Civil Engineering

CE8404-CONCRETE TECHNOLOGY

Unit II - MCQ Bank

- 1. What do you mean by admixtures?
 - a) Ingredients which are added to in cement before or after concrete mix
 - b) Ingredients which are added to make aggregates healthier
 - c) Ingredients added in cement to make it shinier
 - d) Ingredients added in concrete to make good workability

ANS: a) Ingredients which are added to in cement before or after concrete mix

2. Which of the following statement is incorrect about the function of admixtures?a) To increase the strength of concrete by reducing the water content and by densification of concrete

b) To increase the durability of concrete to enhance its resistance to special conditions of exposure

c) To increase the capillary flow of water through concrete and to increase its impermeability to liquids

d) To control the alkali-aggregate expansion or alkali silica reaction ANS: c) To increase the capillary flow of water through concrete and to increase its impermeability to liquids

- 3. Which of the following option doesn't come in chemical admixtures?
 - a) Plasticizers
 - b) Pozzolanic
 - c) Super plasticizer
 - d) Accelerators

ANS: b) Pozzolanic

- 4. Classification of admixtures are classified into ______ types.
 - a) 1 b) 2 c) 3 d) 5 ANS: b) 2

- 5. Which of the following option doesn't come in mineral admixtures?
 - a) Set retarders
 - b) Blast Furnace Slag
 - c) Flyash
 - d) Silica Fume
 - ANS: a) Set retarders
- 6. Admixtures which cause early setting, and hardening of concrete are called _____
 - a) Plasticizers
 - b) Retarders
 - c) Super plasticizer
 - d) Accelerators
 - ANS: d) Accelerators
- 7. What is the main function of set retarders?
 - a) Increase curing rate
 - b) Slows curing rate
 - c) Improves workability at low w/c ratio
 - d) Speeds up start of finishing operations

ANS: b) Slows curing rate

- 8. Super plasticizers reduce water requirement by ______%.
 - a) 12-30
 - b) 10-15
 - c) 30-42
 - d) 48
 - ANS: a) 12-30
- 9. Retarders are used to _____
 - a) Offset the accelerating effect of cold weather on the setting of concrete
 - b) Offset the accelerating effect of hot weather on the setting of concrete
 - c) Offset the Retarding effect of cold weather on the setting of concrete
 - d) Offset the Retarding effect of hot weather on the setting of concrete
 - ANS: b) Offset the accelerating effect of hot weather on the setting of concrete
- 10. Damp proofing ______ the process of water absorption.
 - a) Increase
 - b) Slows
 - c) Doesn't affect
 - d) Depends on the mixture
 - ANS: b) Slows

11. Damp proofing cracks along with the foundation.

a) True b) False

ANS: a) True

12. Nomenclature of water proofing agent.

- a) PC
- b) KIM
- c) PCKIM
- d) WP

ANS: b) KIM

13. The addition of the admixture to the mix ______ the surface tension.

- a) Lowers
- b) Higher
- c) Don't affect
- d) No change
- ANS: a) Lowers

14. Entrapped air normally exists in the form of relatively ______ air voids.

- a) Small
- b) Absent
- c) Large
- d) Medium
- ANS: c) Large

15. What is water proofing admixtures?

- a) Water repellent materials
- b) Water fair material
- c) Water absorption material
- d) Water adsorption material
- ANS: a) Water repellent materials

16. Water proofing admixtures are available in powder, paste or liquid and gaesous form.

- a) True
- b) False

ANS: b) False

air voids

17. Which one is not a chemically active pore filling material?

- a) Silicate of soda
- b) Aluminium
- c) Chalk
- d) Zinc
- ANS: c) Chalk

18. Which one is not a chemically inactive pore filling material?

- a) Aluminium
- b) Chalk
- c) Talc
- d) Fullers earth
- ANS: a) Aluminium

19. Entrapped air normally exists in the form of relatively _____

- a) Small
- b) Absent
- c) Large
- d) Medium
- ANS: c) Large

20. What are plasticizers?

a) Which adds water for workability

b) Which reduces water for workability

- c) Which decreases workability at the same water content
- d) Which oxidizes water for workability
- ANS: b) Which reduces water for workability
- 21. Which one is an anionic surfactants?
 - a) Polyglycol esters
 - b) Hydroxylated carboxylic acids
 - c) Lignosulphonates
 - d) Carbohydrates
 - ANS: c) Lignosulphonates
- 22. What is the limitation of plasticizers?
 - a) A good plasticizer is one which does not cause air-entrainment in concrete > .1-.2%
 - b) A good plasticizer is one which does not cause air-entrainment in concrete > 5%
 - c) A good plasticizer is one which does not cause air-entrainment in concrete > 10-20%
 - d) A good plasticizer is one which does not cause air-entrainment in concrete > 1-2%
 - ANS: d) A good plasticizer is one which does not cause air-entrainment in concrete > 1-2%

- 23. What is super plasticizers?
 - a) Which adds water for workability
 - b) Which reduces high range of water for workability
 - c) Which decreases workability at the same water content
 - d) Which oxidizes water for workability
 - ANS: b) Which reduces high range of water for workability
- 24. What is accelerator?
 - a) Which speed up the initial set of concrete
 - b) Which delays the initial set of concrete
 - c) Which speed up the final set of concrete
 - d) Which delays the final set of concrete
 - ANS: a) Which speed up the initial set of concrete
- 25. What is retender?
 - a) Which speed up the initial set of concrete
 - b) Which delays the initial set of concrete
 - c) Which speed up the final set of concrete
 - d) Which delays the final set of concrete
 - ANS: b) Which delays the initial set of concrete