

PREVIOUS YEARS QUESTION PAPERS CONSTRUCTION MATERIAL

PAPER-2019

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory.

(10×1=10)

1. Marble is an example of _____ rock.
2. The principal constituent of every kind of brick earth is _____.
3. The initial setting time of rapid hardening cement should not be less than _____.
4. The central part of a tree is called _____.
5. The liquid part of the paint is called _____.
6. The material which breaks easily into pieces is known as _____.
7. Main constituent of glass is _____.
8. The process of mixing clay, water and other ingredients to make bricks, is known as _____.
9. The defect caused by imperfect seasoning is called as _____.
10. Le-Chatelier apparatus is used to determine _____ of element.

SECTION-B

Note: Very short answer type questions. Attempt any **ten** questions out of **twelve** questions.

(10×2=20)

11. Define Igneous Rocks.
12. What is seasoning of Timber?
13. Explain Thermosetting plastic.
14. What is efflorescence?
15. What do you mean by setting of cement?
16. What is Emulsion paint?
17. Write a short note on stratified Rocks.
18. What is the difference between Ferrous and Non-Ferrous metals?
19. Enumerate different types of varnishes.
20. Write a brief note on Floor Tiles.

21. Define following defects in Timber :

(a) Burls (b) Rindgalls

22. Write short note on Thermocole.

SECTION-C

Note: Short answer type questions. Attempt any *eight* questions out of *ten* questions. (8×5=40)

23. What is pug mill? Explain with the help of diagram.

24. Write a note on Laminated Board.

25. Describe characteristics and uses of sandstone.

26. Write down properties and uses of cast iron.

27. Draw flow diagram of manufacturing of cement by Wet process.

28. Write a note on Thermal Insulation and name the materials used for Heat insulation.

29. Describe Dimensions Tolerance Test of Bricks.

30. What is spirit varnish? Describe its properties.

31. Describe Dry Rot and explain prevention from Dry Rot in Timbers.

32. Write a note on Termite Proofing.

SECTION-D

Note: Long answer type questions. Attempt any *three* questions out of *four* questions. (3×10=30)

33. Explain with the help of diagram the Bull's Trench Kiln.

34. Describe Portland Pozzolana Cement with its properties and uses.

35. Explain various plastic products being used in Buildings in detail

36. Describe Preservation of Timber with its objects and requirements of a good preservative.

CONSTRUCTION MATERIAL

PAPER-2020

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory

(10 × 1 = 10)

1. The place or site from where stones are taken out is called _____.
2. The calcareous rocks have _____ as the main constituent.
3. The bricks after moulding should be dried in _____.
4. Gypsum is added in the manufacture of portland cement in order to _____.
5. The defect caused by imperfect seasoning is called _____.
6. For one cubic meter of brick masonry the no. of bricks required _____.
7. The chief ingredient of a paint is _____.
8. The maximum percentage of carbon in wrought iron is _____.
9. Main constituent of glass is _____.
10. The purpose of seasoning of timber is to _____.

SECTION-B

Note: Very Short answer type questions. Attempt any **ten** parts out of **twelve** questions.

(10 × 2 = 20)

11. What is dressing of stones?
12. What do you mean by Grade 33?
13. What do you mean by slurry?
14. Define distemper.
15. What is bark?
16. Write commercial forms of copper.
17. What is POP?
18. Write size of brick.
19. What is initial and final setting time of cement?
20. What is refractory brick?
21. What is Thermosetting plastic?
22. What is Igneous rocks?

SECTION-C

Note: Short answer type questions. Attempt any **eight** questions out of **ten** questions. (8×5=40)

23. Write the characteristics of good building stone.
24. Compare the clamp burning with kiln burning.
25. Draw flow diagram of manufacturing of cement by wet process.
26. Write short note on defects of timber.
27. Describe composition of paint briefly.
28. Write uses of wrought iron.
29. Describe classification of plastic in brief.
30. What is difference between soft wood and hard wood?
31. What precautions should be taken while storage of cement?
32. Write short note on fibre board.

SECTION-D

Note: Long answer type questions. Attempt any **three** questions.

(3×10=30)

33. What is seasoning of timber? Explain its purpose and its types in detail.
34. What are the different types of paint? Explain.
35. Explain Intermittent kiln of bricks with diagram.
36. (a) Explain process of quarrying of stones by blasting and into effect on environment.
(b) Explain types and uses of insulating materials for sound and thermal insulation.

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No. of Printed Pages : 4
Roll No.

180734/170734/
120734/030734

3rd Sem. / Civil, GE, Brick Tech, Constr. Mgmt,
Highway Engg
Subject : Construction Materials

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

- Q.1 The strength of a stone depends on (CO-1)
a) Degree of packing of constituents
b) Chemical composition
c) Structure of Rock d) All of above
- Q.2 The standard dimension of an Ideal Brick as BIS are (CO-2)
a) 22.5x11.5x7 cms b) 18x10x10 cms
c) 19x9x9 cms d) None of above
- Q.3 The water absorption capacity of brick should not be more than (CO-2)
a) 10% b) 15%
c) 20% d) None of above
- Q.4 Efflorescence is seen on bricks which are made from soil containing too much of (CO-2)
a) Lime b) Silica
c) Alkalies d) Iron Oxides

(1)

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Q.5 The Initial setting time for OPC as specified (CO-3)

- a) shall not less than 30 minutes.
- b) shall not less than 25 minutes.
- c) shall not more than 30 minutes
- d) shall not less than 45 minutes.

Q.6 Quarrying of stones is the process of (CO-1)

- a) Breaking it from its natural
- b) Applying a coat of a chemical to save it from deterioration.
- c) Giving a suitable shape to stone
- d) None of above

Q.7 The liquid part of paint is called (CO-5)

- a) Pigment
- b) Vehicle
- c) Solvent
- d) Drier

Q.8 In a mortar, the binding material is (CO-3)

- a) Sand
- b) Cement
- c) Surkhi
- d) Cinder

Q.9 The frog of the brick in brick masonry is generally kept on. (CO-2)

- a) Bottom face
- b) Shorter side
- c) Longer side
- d) Upper side

Q.10 Excess of alumina in brick earth makes the brick (CO-2)

- a) Brittle and weak
- b) Impermeable
- c) To crack and warp on drying
- d) To lose cohesion

(2)

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SECTION-B

10x2=20

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

- Q.11 Define natural bed of stone. (CO-1)
Q.12 Define frog. (CO-2)
Q.13 The term OPC stands for ? (CO-3)
Q.14 Define seasoning of timber. (CO-4)
Q.15 What is cement paint ? (CO-5)
Q.16 Define thermoplastic. (CO-7)
Q.17 What is dressing of stone ? (CO-1)
Q.18 Define sedimentary rock. (CO-1)
Q.19 Define cement. (CO-3)
Q.20 What is sound insulation ? (CO-7)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. 10x6=60

12x5=60

- Q.21 What are various uses of stones ? (CO-1)
Q.22 Enumerate chemical Constituents of cement. (CO-3)
Q.23 What are advantages and disadvantages of timber over other Construction Materials (CO-4)
Q.24 Compare Cast Iron, Wrought Iron and steel. (CO-6)
Q.25 What are characteristics of a good paint? (CO-5)
Q.26 Classify insulating materials. (CO-7)

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- Q.27 What are natural defects in timber? (CO-4)
- Q.28 Name various Laboratory tests on cement.
- Q.29 Explain geological classification of rocks (CO-3)
- Q.30 What are the characteristics of good bricks? (CO-1)
- Q.31 What are various methods of termite proofing. (CO-2)
- Q.32 Enumerate different types of paints. (CO-4)
- Q.33 Explain soundness test of cement. (CO-5)
- Q.34 What are various ingredients of paint? (CO-3)
- Q.35 Write a short note on Floor tiles. (CO-2)

SECTION-D - $1 \times 10 = 10$

Note: Long answer type questions. Attempt any two questions out of three questions. $2 \times 10 = 20$

- Q.36 Explain various methods of seasoning of timber. (CO-4)
- Q.37 Explain various types of cement.
- Q.38 Explain working of Hoffman's kiln for burning of bricks with help of a neat sketch. (CO-2)

(5160)

(4)

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