

C.U.SHAH UNIVERSITY

Winter Examination-2015

Subject Name :Building Material

Subject Code : 2TE03BMT1

Branch : Diploma(Civil)

Semester : 3 Date :3/12/2015 Time :2:30 To 5:30 Marks :70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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- Q-1
- (a) Which of the following shows the chemical property of a material? 1
(A) Specific Gravity (B) Porosity (C) Corrosion (D) Creep
 - (b) Which of the following constituents make the brick Red? 1
(A) Magnesia (B) Iron oxide (C) Alkalies (D) Lime
 - (c) Which brick is used for breaking joints in English bond? 1
(A) King closer (B) Cornice (C) Queen closer (D) Voussiors
 - (d) Which one of the following constituents of brick clay is responsible for shrinkage of brick? 1
(A) Silica (B) Alumina (C) Lime (D) Magnesia
 - (e) Which one of the following stones is more fire resistive? 1
(A) Laterite (B) Lime stone (C) Sand stone (D) Gneiss
 - (f) Which one of the following stones is most suitable for partition wall? 1
(A) Slate (B) Granite (C) Dolerite (D) Synite
 - (g) Which one of the following stone is metamorphic? 1
(A) Marble (B) Granite (C) Lime stone (D) Sand stone
 - (h) Which one of the following is not the ingredient of varnish? 1
(A) Fillers (B) Driers (C) Solvents (D) Resinous material
 - (i) Which colour should be used for painting electric poles? 1
(A) Bronze (B) Casein (C) Asbestos (D) Aluminium
 - (j) For cement Le-chatelier apparatus decides 1
(A) Strength (B) Setting time (C) Permeability (D) Soundness
 - (k) It is suitable for mass concreting. 1
(A) Rapid hardening cement (B) Low heat cement
(C) Quick setting cement (D) Hydrophobic cement
 - (l) Which type of artificial wood is considered best for making furniture? 1
(A) Hard board (B) Block board (C) Compreg (D) Batten board
 - (m) Which one of the following limes is suitable for plaster work? 1
(A) Artificial hydraulic lime (B) Hydrated lime
(C) Quick lime (D) Eminently hydraulic lime
 - (n) Which lime is suitable for the preparation of mortar for construction of thick wall? 1
(A) Hydraulic lime (B) Hydrated lime (C) Fat lime (D) Quick lime



Attempt any four from Q-2 to Q-8.

- Q-2 (a) What is moulding? Explain different methods of moulding? 7
(b) Explain various types of cement. 7
- Q-3 (a) State the chemical composition of ordinary Portland cement and explain the importance of each component. 7
(b) What is seasoning of timber? Give names of various methods adopted for seasoning and explain any one of them in detail. 7
- Q-4 (a) With neat sketch explain Vicat apparatus. 5
(b) State characteristics of ideal paints. 5
(c) Distinguish between fat lime and hydraulic lime. 4
- Q-5 (a) Discuss classification of rocks in details. 7
(b) Explain the process of manufacturing of brick. 7
- Q-6 (a) Write short note on thermal insulating material. 5
(b) Write short note on structural properties of steel. 5
(c) Explain different types of paints. 4
- Q-7 (a) Explain requirements of good building stone. 7
(b) What is glass? Classify the glass with their uses. 7
- Q-8 (a) Explain various tests for bricks. 7
(b) Write full names for the following. 7
(a) ISMB, (b) ISHC, (c) ISMC, (d) ISA, (e) ISLT, (f) ISLB, (g) ISLC



Q-1 (a)

1

“ U Q i V I P H i G ” ¥ L U ” V P ‘ ® “ P i L E P i
 N Y Z , D ® L i Q D L G P i V U ® V I P H i
 R i

(A) “ O S P (B) Q R P M Y S P

(C) M H P Z (D) $\frac{3}{4}$ U ”

(b)

1

I V P i B “ P H H P “ U D P V U P i L E P i O V L
 I V “ i G P G F » “ U B “ P H i R i

(A) D i Á “ i Q I E P (B) A P E “ ®

A P i L K P C X (C) A P ë L G U T

(D) G P C D

(c)

1

I Á G U I B P ç X D P » E Ý H u K P » ’ P A P i

“ B S P F P i L H P D P V i L B I V P i
 ” D E P i N P E R i

(A) L U N L 1 G P i T F (B)

L P i “ P ® C K (C) L H U “ L 1 G P i T F







(D) H P D T K ®



(d) I V P i B “ P H H P “ U D P V U P i L E P i O V L
 “ i G P G F » N U B P H i R i
 (A) Q K Q G L P (B) A i ë E Y D U P



(e) (C) G P C D (D) D i Á “ i Q I E P
 “ U Q i V I P ® H i G ” ¥ L U L E P i ” Õ ‘ F H Y
 A P N ” o Q S F P i L R i
 (A) G i V F P C V (B) G P C D V P i “
 (C) K ç x Õ V P i “ (D) “ P C K
 (f) L E P i ” Õ ‘ F ” P Q V ® I V U H P G D P V i
 E P i Á E R i
 (A) Õ G i i V (B) N ° i “ P C V
 (C) X P i G i F P C V (D) K P C “ P C V
 (g) “ U Q i V I P ® H i G ” ¥ L U L E P i ” Õ ‘ F
 Q H 3/4 W S R i







(A)  (B) 



(C)  (D) 


(h)  




 


(A)  (B) 



(C)  (D) 


(i)  







(A)  (B)  (C) 

(D) 

(j)  



(A)  (B) 

(C)  (D) 



(n) 1

(A) 2 i X X G P B D C) 1 L H U L

(D) G P B D D S D Ä G U E Q W " P i

Ä P X U V U H P G D P » Q Z S F L P D D P V i L P i G

¥ S E P F L F H P D P V i L E P Q W " " P i

" D E P i N L F H P i Ä P i C A i

(A) Ä " ô (B) 2 i X X

G Y L P B V i X X

(C) A i V G P B D (D)

1 L H U L G P B D

Q-2 (a) 7

L P i B Z Q P F G M P i -

D P i ë X U N A i V G i I Y » D P i ë X U N U

(b) 7

Q H Q H F U S P K D P H P i -

Q K D V P Q H Q H " ° L P F P i Q H I i

Q-3 (a) 7

K D P H P i -






A P i X U ® " F U " P i V ® ç X Q K D ç V Y »




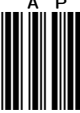
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O V L Y D L H K D P H P i -







(b)      7


       




Q-4 (a)           5


         



(b)  




       




  


(c)          


Q-5 (a)      


      

(b)        






Q-6 (a)        






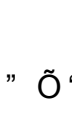


 














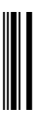
(b)       















    

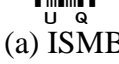








(c)   " °    4

Q-7 (a)   » '    "  '   7

(b)               7

Q-8 (a)               7

(b)        7

(a) ISMB, (b) ISHC, (c) ISMC, (d) ISA, (e) ISLT, (f) ISLB, (g) ISLC

