Construction Materials

Lime

- Q.1 Surkhi is added to time mortar to
 - (a) prevent shrinkage
 - (b) decrease setting time
 - (c) increase bulk
 - (d) impart hydraulicity
- Q.2 Consider the following statements

A high lime content in a composite cement-lime monar results in

- 1. slow hardening
- 2. quick setting
- 3. weakermortar

Which of these statement/s is/are correct?

- (a) 2 and 3
- (b) 1 and 2
- (c) 1 and 3 (d) 1, 2 and 3 Q.3 For construction of structures under water, the
- type of time used is
- (a) hydraulic time.
- (b) fat time.
- (c) quick lime.
- (d) pure lime.
- Q.4 Pick up the correct statement(s).
 - 1. CaCO_a is the raw material for manufacturing
 - 2. Kankar is an impure limestone.
 - 3. Coral for manufacturing time is a sea animal.
 - (a) 1, 2
- (b) 2,3
- (c) 1, 2, 3
- (d) 1 only

- Q.5 Which of the following is caustic lime?
 - (a) Quick lime
- (b) Fat lime
- (c) Milk lime
- (d) Hydraulic lime
- Q.6 Quick lime coming out of the kiln is also known
 - (a) hydrated lime
- (b) lump lime
- (c) fallime
- (d) hydraulic lime
- Q.7 Hydrated lime for making .mortars is slaked for
 - (a) 1 day
- (b) 3 days
- (c) 7 days
 - (d) 14 days
- Q.8 Match List-I with List-II and select the correct answer using the codes given below the lists:
 - List-I
- List-II
- A. Silica
- 1. Hydraulic properties
- B. Clay
- 2. Poor cementina
- C. Sulphates
- 3. Increased rate of setting
- 4. Reduce setting time

Codes:

- ABC
- (a) 2 1 3
- (b) 4 2 1
- (c) 4 1 3
- (d) 2 3 1
- Q.9 Which of the following is not used for producing fat lime?
 - (a) Calcareous tufa
- (b) Qolitic limestone
- (c) Marble
- (d) Raw time stone

Answers

Lime

1. (d)

3. (a)

4. (c)

5. (a)

6. (b) 7. (a)

Explanations Lime

3. (a)

Hydraulic lime is made by calcining a limestone containing silica and alumina to a temperature slightly lower than that of incipient fusion so as to form sufficient free lime to permit hydration and at the same time leave sufficient unhydrated calcium silicates to give the dry powder its hydraulic properties.

Because of the low silicate and high time contents, hydrautic times are relatively weak. They find their principal use in masonry mortars.

9.

Fat lime is manufactured by burning marble, white chalk, calcareous tufa, pure time stone, sea shell and coral.

