1. A good brick should not absorb water by weight more than
   (a) 10%
   (b) 20%
   (c) 25 %
   (d) 30 %

2. Match List-I (Name of stone) with List II (Use of stone) and select the correct answer using the codes given below the lists:

List – I	List – II
1. Granite	1. Omamental work
2. Marble	2. Ballast
3. Chalk	3. Rough stone work
4. Laterite	4. Manufacture of cement

   Codes :
   a. A – 3, B – 1, C – 2, D – 4
   b. A – 2, B – 3, C – 1, D – 4
   c. A – 2, B – 1, C – 4, D – 3
   d. A – 1, B – 4, C – 2, D – 3

3. King closers are related to
   (a) doors and windows
   (b) king posts truss
   (c) queen post truss
   (d) brick masonry

4. The coefficient of linear expansion of granite is in the range of that of
   (a) glass
   (b) mild steel
   (c) high carbon steel
   (d) bamboo

5. A good brick when immersed in water bath for 24 hours should not absorb more than
   (a) 20% of its dry weight
   (b) 30% of its saturated weight
   (c) 10% of its dry weight
   (d) 20% of its saturated weight

6. The crushing strength of a good building stone should be at least
   (a) 50 MPa
   (b) 100 MPa
   (c) 150 MPa
   (d) 200 MPa

7. The most important purpose of frog in a brick is to
   (a) Emboss manufacture's name
   (b) Reduce the weight of brick
   (c) Form keyed joint between brick and mortar
   (d) Improve insulation by providing 'hollows'

8. Bricks are burnt at a temperature range of
   (a) 500° to 700°C
   (b) 700° to 900°C
   (c) 900° to 1200°C
   (d) 1200° to 1500°C

9. A king closer is a
   (a) Full brick
   (b) 3/4 brick
   (c) longitudinally 1/2 brick
   (d) crosswise 1/2 brick

10. The maximum permissible slenderness ratio for masonry walls is
    (a) 40
    (b) 30
    (c) 20
    (d) 10

11. The number of bricks required per cubic metre of brick masonry is
    (a) 400
    (b) 450
    (c) 500
    (d) 550

12. The minimum compressive strength of first class bricks should be
    (a) 5 N/mm^2
    (b) 7.5 N/mm^2
    (c) 9 N/mm^2
    (d) 10 N/mm^2

13. Match List I (Constituents of bricks) with II (Corresponding influence) and select the correct answer:

List – I	List – II
A. Alumina	1. Colour of brick
B. Silica	2. Plasticity recovery for moulding
C. Magnesia	3. Reacts with silica during burning and causes particles to unite together and development of strength.
D. Limestone	4. Preserves the form of brick at high temperature and prevents shrinkage

   Codes :
   a. A – 2, B – 1, C – 4, D – 3
   b. A – 3, B – 4, C – 1, D – 2
   c. A – 2, B – 4, C – 1, D – 3
   d. A – 3, B – 1, C – 4, D – 2

14. Consider the following stages in the manufacturing of bricks:
    1. Weathering 2. Moulding 3. Tempering

    The correct sequence of these stages in the manufacturing of the bricks is
    (a) 1, 2, 3
    (b) 2, 3, 1
    (c) 1, 3, 2
    (d) 3, 2, 1

15. Which one of the following is the correct statement? Refractory bricks resist :
    (a) high temperature
    (b) chemical action
    (c) dampness
    (d) all of the above

16. Consider the following statements : Perforated bricks are preferred in construction since
    1. they are lighter
    2. they are stronger than class I bricks
    3. they have heat-insulating properties
    4. they are cheaper and need less mortar

    Which of these statements are correct?
    (a) 1, 2, 3 and 4
    (b) 2 and 3 only
    (c) 1 and 3 only
    (d) 3 and 4 only

17. The standard size of a brick is
    (a) 20 cm x 10 cm x 10 cm
    (b) 19 cm x 9 cm x 9 cm
    (c) 18 cm x 9 cm x 9 cm
    (d) 18 cm x 10 cm x 10 cm

18. When provided with altemating courses of (a) all headers and (b) all stretchers, the front elevation of such brick masonry is designed as
    (a) English bond
    (b) Single Flemish bond
    (c) Double Flemish bond
    (d) Rat-trap bond

19. Consider the following statements: A good soil for making bricks should contain
    1. 30% alumina
    2. 10% lime nodules
    3. Only small quantity of iron oxides
    4. 15% magnesia

    Which of the above statements are correct?
    (a) 1 and 2 only
    (b) 1 and 3
    (c) 1, 2 and 4
    (d) 2, 3 and 4

20. Which one of the following is the nominal size of standard modular brick?
    (a) 25 cm x 13 cm x 8 cm
    (b) 25 cm x 10 cm x 8 cm
    (c) 20 cm x 10 cm x 10 cm
    (d) 20 cm x 15 cm x 10 cm