



- Notes :
1. All question carry equal marks.
 2. Answer **Four** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Illustrate your answer necessary with the help of neat sketches.
 6. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) What are the object of "foundation"? What is meant by the term "Bearing capacity" of soil, explain why the study of bearing capacity of different types of soil is necessary before laying the foundations? 9
- b) Define the terms. 6
- i) Parapet.
 - ii) Live & Dead load.
 - iii) Foundation.
- c) Draw plan and sectional Elevation of Load bearing foundation for a brick masonry wall showing distribution of load on Larger area? 5

OR

2. a) Draw neat sketches of the following. 9
- 1) Standard brick with dimension.
 - 2) King-closer and Queen closer.
 - 3) Half Bat & Bevelled Bat.
- b) Distinguish between clamp burning & kiln burning of bricks? 6
- c) State the different Qualities of Good Bricks? 5
3. a) Design and draw to a suitable scale the plan, elevation of alternate courses of one and half th. $(1\frac{1}{2})$ Brick wall in English bond? 8
- b) Describe with neat sketches any three types of joint's used in stone masonry? 6
- c) Define with neat sketches the following terms. 6
- 1) Coping with throating & weathering.
 - 2) Corbel & cornice.
 - 3) Plinth.

OR

4. a) Describe with neat sketches the different types of Bonds used in Brick masonry? 9

- b) Describe with neat sketches the “Rubble masonry” and it’s various type’s? 7
- c) What is meant by the term “D.P.C.” why it is to be provided? 4
- 5. a) Why preservation of stone is carried out explain the methods adopted for preservation of stone? 8
- b) Describe with neat sketches the various plinth filling materials and state the precaution to be taken while carrying out the plinth filling operation? 6
- c) Explain with neat sketches :- 6
 - 1) Rat-trap bond.
 - 2) Through - stone.
 - 3) Harmful - ingredients in brick - earth.

OR

- 6. a) Design and draw to a suitable scale plan, elevation of alternate courses of one brick thick brick wall in Flemish bond. State it’s merits & demerits? 8
- b) Distinguish betⁿ first class and second class Bricks? 6
- c) Explain the process of Quarrying of stone from stone quarry? 6
- 7. Describe with neat sketches **any four** of the following. 20
 - 1) Decorative brick and Jali work.
 - 2) Qualities of good building stone.
 - 3) Manufacturing process of bricks.
 - 4) Different types of Lintels.
 - 5) Clay products.
 - 6) Load - bearing foundation for stone masonry pier.
 - 7) Dressing of stone.

OR

- 8. a) Draw neat sketch of segmental stone Arch and define it’s important component parts? 6
- b) Explain with neat sketches “mud as a building materials”. 6
- c) Describe How Arche’s are classified according to various types of materials used for it’s constructions? 8
