

SHRI ANGALAMMAN COLLEGE OF ENGINEERING & TECHNOLOGY (An ISO 9001:2008 Certified Institution) SIRUGANOOR,TRICHY-621105.



DEPARTMENT OF CIVIL ENGINEERING

<u>CE-1301 BUILDING TECHNOLOGY</u> <u>Unit - I</u> <u>PART – A</u>

- **1.** Define Principles of planning.
- 2. What is planning regulations?
- **3.** Define building Bye-laws-site.
- 4. Define a) Site work and b) Setting out of building.
- 5. Define excavation and timbering.
- **6.** Define subsoil drainage.
- 7. Discuss about building site lighting and electricity layouts.
- 8. How to prepare the building layout.
- 9. Define building sites.
- 10. What are the different points considered in layout?
- **11.** Define site plan.
- 12. What is meant by the orientation of building?

PART – B

- 1. Explain briefly the Planning regulations.
- 2. Explain building bye-laws site works.
- 3. Define setting out of building and explain it with neat sketch.
- 4. Explain the excavations and timbering with neat sketch.
- 5. Enumerate the various points considered in electricity lighting on building sites.
- **6.** Explain briefly in preparation of layout and various points considered in the approval of building.
- 7. Write short notes on a) site plan b) winter building c) sub soil drainage.
- 8. Briefly explain the orientation of building.

<u>Unit - II</u> <u>PART – A</u>

- **1.** List the types of building as per NBC.
- 2. List out the types of shallow foundation.
- **3.** List the types of deep foundation.
- 4. State the function of foundations.
- 5. Define bearing capacity of soil.
- **6.** Define a) Anvil b) Tup.
- 7. List the types of piles.
- 8. Define foundation support.
- 9. Define swage piles.
- 10. Define vibro piles.
- **11.** List two advantages of precast concrete piles.
- **12.** List two disadvantages of precast concrete piles.
- **13.** Define coffer dam.
- 14. List the advantage and disadvantage of pneumatic caisson.

PART – B

- 1. Enumerated various groups in which building are divided as per NBC.
- 2. a) Differentiate between strip footing and pad footing.

b) Differentiate between combined trap footing and strap footing.

- **3.** What do you understand by grillage foundation? Draw a neat sketch of steel grillage foundation for a steel stanchion. Explain the method of construction.
- **4.** What do you understand by raft foundation? When do you prefer them? Explain with the help of a neat sketch of common types (or form) of raft foundation.
- 5. Differentiate between the following.
 - a) Cased cast in situ pile.
 - b) Uncased cast in situ pile.
 - c) Bored pile.

Give one example of each.

- **6.** What do you understand by under reamed pile foundation? When do we use it? Draw a typical sketch of a under reamed pile foundation along with a grade beam for use in expansive soil.
- **7.** What is coffer dam? Where do we use it? With the help of neat sketches explain in briefly various types of coffer dam.
- **8.** With the help of a neat sketch, explain the method of sinking of a pneumatic caisson. What is optimum depth under water up to which you can sink pneumatic caisson?
- Explain in brief the general rules for the design of foundation for reciprocating engines.
 Explain in brief the design criteria for foundation for impact type machines