

UNIT-I

SURVEYING AND CIVIL ENGINEERING MATERIALS

PART-A (2 Marks)

1. What is surveying?
2. what is the objective of surveying?
3. what is the difference between a plan and a map?
4. what are the two major types of surveying
5. Differentiate between plane surveying and geodetic surveying?
6. How the surveying is classified based on purpose
7. State the principles of surveying.
8. What are the accessories used in chain surveying?
9. Define bearing of a line.
10. What are the systems of bearing
11. What is meant by local attraction & state its effects?
12. Define leveling and state its objectives
13. Define benchmark and state its effects
14. How rocks are classified?
15. What is quarrying & dressing of stones
16. What are the uses of stones?
17. State the uses of cement?
18. State the properties of cement concrete.
19. What is proportioning of concrete?
20. Define workability of concrete.

UNIT-II

BUILDING COMPONENTS AND STRUCTURES

PART-A (2 Marks)

1. State the objectives and requirements of good foundation?
2. Differentiate between shallow foundation and deep foundation.
3. Define bearing capacity of soil.
4. How the stone masonry is classified?
5. Define the following terms.
 - i) Corbel
 - ii) Cornice
 - iii) Coping
 - iv) String course
 - v) Through stone
6. Compare stone masonry and Brick masonry
7. Why bonding in brick wall is essential?
8. State the special features of English and Flemish bond.
9. Define beam, column and Lintel.
10. Classify the types of column based on its conditions.
11. State the purpose of plastering.
12. Define Dam, Bridge and classify them
13. What are the basic components of a bridge?
14. What is the purpose of reinforced concrete?
15. Define factor of safety.

UNIT- III
POWER PLANT ENGINEERING
PART-A (2 Marks)

1. What are the types of power plant?
2. What are the parts of thermal power plant?
3. What is the purpose of Surge tank in hydro power plant?
4. Classify the hydro power plant.
5. What is the function of Draft tube?
6. Define Nuclear Fission. Write chain reaction.
7. What is the function of Moderator?
8. Write down the Merits and Demerits of Diesel engine power plant.
9. List out the parts of the Gas turbine power plant.
10. Define Pump and Turbine.
11. Define Cavitations.
12. Define Primiming in Centrifugal Pump.
13. What is impulse turbine? Give example
14. What is Reaction turbine? Give example.

UNIT IV
INTERNAL COMBUSTION ENGINES

PART-A (2 Marks)

1. What is heat engine?
2. Define I.C Engine and E.C. Engine
3. Classify the I.C engine.
4. List out the Part of the I.C. Engine
5. Define the terms: Top Dead Center, Bottom Dead Center.
6. Define the term: Compression Ratio.
7. What do you understand by Scavenging?
8. Define Boiler.
9. Classify Boilers.
10. Define fire tube boiler and water tube boiler.
11. List out the Boiler Mountings and Accessories.
12. What is the Purpose of a fusible Plug?

UNIT V
REFRIGERATION & AIR CONDITIONING

PART-A (2 Marks)

1. Define Refrigeration.
2. Define refrigerant
3. Define C.O.P.
4. Define refrigerant. Give some examples of refrigerant.
5. Give some properties of good refrigerant.
6. Mention some of the applications of refrigeration.
7. Define relative humidity
8. Define psychrometry.
9. Define DBT and WBT.
10. What is a dew point temperature?
11. Define humidity
12. Mention the classification of air conditioning system.
13. Define year-round air conditioning system