

ESTIMATION AND COSTING

UNIT I

1. Estimation is the process of finding the _____ of a proposed work.

- A) Colour
- B) Approximate cost
- C) Height
- D) Weight

Answer: B) Approximate cost

2. An estimate prepared when only limited information is available is called:

- A) Detailed estimate
- B) Revised estimate
- C) Approximate estimate
- D) Supplementary estimate

Answer: C) Approximate estimate

3. A detailed estimate contains:

- A) Only total cost
- B) Quantities and rates of individual items
- C) Only material names
- D) Only labour cost

Answer: B) Quantities and rates of individual items

4. A revised estimate is prepared when:

- A) There is no change in the work
- B) The estimated cost is expected to exceed the original estimate
- C) The building is completed
- D) Materials are not available

Answer: B) The estimated cost is expected to exceed the original estimate

5. A supplementary estimate is prepared for:

- A) Additional works
- B) Demolition only
- C) Annual maintenance only
- D) Painting only

Answer: A) Additional works

6. An estimate prepared for regular maintenance of a building is called:

- A) Sub estimate
- B) Annual maintenance estimate
- C) Revised estimate
- D) Complete estimate

Answer: B) Annual maintenance estimate

7. Cost of conveyance and cost of materials added in the _____

- A) Schedule of Rate
- B) Lead Statement
- C) Analysis of Rate
- D) Lump sum provision

Answer: B) Lead Statement

8. The first stage of a detailed estimate is generally:

- A) Taking of quantities
- B) Painting
- C) Payment
- D) Demolition

Answer: A) Taking of quantities

9. The system in which quantities are grouped according to trades is called:

- A) Centre line system
- B) Trade system
- C) Long wall system
- D) Area system

Answer: B) Trade system

10. The group system is useful because:

- A) It reduces the number of calculations
- B) It increases the cost
- C) It avoids measurement
- D) It eliminates materials

Answer: A) It reduces the number of calculations

11. In the long wall and short wall method, the long wall is generally measured:

- A) Inwards
- B) Out-to-out
- C) Centre-to-centre only
- D) Upwards

Answer: B) Out-to-out

12. Painting Coefficient for Louvered doors and windows Joinery

- A) 1.6
- B) 2.6
- C) 3.6
- D) 4.6

Answer: B) In-to-in

13. In the centre line method, quantities are calculated using:

- A) Centre-to-centre length
- B) Height only
- C) Width only
- D) Area only

Answer: A) Centre-to-centre length

14. An abstract estimate mainly gives:

- A) Detailed drawings
- B) Total cost under different items
- C) Soil test results
- D) Building elevation

Answer: B) Total cost under different items

15. A lump sum provision is made for:

- A) An item whose exact cost cannot be determined at the estimating stage
- B) Only bricks
- C) Only cement
- D) Only sand

Answer: A) An item whose exact cost cannot be determined at the estimating stage

16. Contingencies are provided to meet:

- A) Unexpected minor expenses
- B) Land cost
- C) Architect's salary only
- D) Material wastage only

Answer: A) Unexpected minor expenses

17. A person who prepares estimates and takes quantities is called a:

- A) Quantity surveyor
- B) Mason
- C) Plumber
- D) Carpenter

Answer: A) Quantity surveyor

18. One important duty of a quantity surveyor is:

- A) Taking off quantities
- B) Manufacturing cement
- C) Designing electrical equipment
- D) Operating machinery

Answer: A) Taking off quantities

19. Deduction of opening in plastering area between 0.5 m² but Less than 3 m² is required for

- A) One side deduction
- B) Two side deduction
- C) No deduction
- D) None of the above

Answer: B) Accurate

20. The degree of accuracy required in measurement depends on:

- A) The type of work and unit of measurement
- B) Weather only
- C) Colour of building
- D) Location only

Answer: A) The type of work and unit of measurement

21. Deductions are made in masonry measurement for:

- A) Openings
- B) Walls
- C) Foundations
- D) Floors

Answer: A) Openings

22. Deductions may also be required while measuring:

- A) Plastering
- B) Land area
- C) Furniture
- D) Machinery

Answer: A) Plastering

23. Painting coefficient is used in calculating:

- A) Painting work
- B) Brick quantity
- C) Cement quantity
- D) Sand quantity

Answer: A) Painting work

24. “Out-turn” refers to:

- A) Quantity of work completed in a given time
- B) Cost of land
- C) Quantity of cement purchased
- D) Building height

Answer: A) Quantity of work completed in a given time

25. Material requirements can be worked out using:

- A) Thumb rules
- B) Colour charts
- C) Building photographs
- D) Weather reports

Answer: A) Thumb rules

26. Which of the following is a common construction material?

- A) Cement
- B) Petrol
- C) Ink
- D) Paper

Answer: A) Cement

27. Sand is mainly used in:

- A) Mortar and concrete
- B) Painting only
- C) Roofing sheets only
- D) Electrical wiring

Answer: A) Mortar and concrete

28. Bricks are commonly used for:

- A) Masonry work
- B) Painting work
- C) Electrical work
- D) Plumbing fixtures

Answer: A) Masonry work

29. Aggregates are commonly used in:

- A) Concrete
- B) Painting
- C) White washing
- D) Glass cleaning

Answer: A) Concrete

30. Which of the following is an essential quality of a quantity surveyor?

- A) Accuracy
- B) Carelessness
- C) Negligence
- D) Guessing

Answer: A) Accuracy

UNIT- II

1. A detailed estimate provides:

- A) Only approximate cost
- B) Detailed quantities and cost of items
- C) Only building height
- D) Only material names

Answer: B) Detailed quantities and cost of items

2. The trade system divides construction work according to:

- A) Colours
- B) Trades or types of work
- C) Building height
- D) Location

Answer: B) Trades or types of work

3. Which of the following is a type of building included in Unit II?

- A) Bridge
- B) Single-room building with flat roof
- C) Canal
- D) Highway

Answer: B) Single-room building with flat roof

4. A residential building in Unit II may contain:

- A) 1 room only
- B) 2 or 3 rooms
- C) 10 rooms only
- D) No rooms

Answer: B) 2 or 3 rooms

5. RCC roof means:

- A) Reinforced Cement Concrete roof
- B) Rolled Cement Cover roof
- C) Reinforced Clay Concrete roof
- D) Random Cement Construction roof

Answer: A) Reinforced Cement Concrete roof

6. The main purpose of taking off quantities is to:

- A) Calculate quantities of work
- B) Select paint colour
- C) Prepare photographs
- D) Choose furniture

Answer: A) Calculate quantities of work

7. Building quantities are generally obtained from:

- A) Drawings
- B) Weather reports
- C) Newspaper
- D) Photographs only

Answer: A) Drawings

8. In a detailed estimate, the quantity of each item is multiplied by its:

- A) Height
- B) Rate
- C) Colour
- D) Age

Answer: B) Rate

9. The product of quantity and rate gives:

- A) Area
- B) Cost of the item
- C) Length
- D) Volume only

Answer: B) Cost of the item

10. A detailed estimate is more accurate than:

- A) An approximate estimate
- B) A drawing
- C) A specification
- D) A report

Answer: A) An approximate estimate

11. Which of the following is an example of a building item?

- A) Masonry
- B) Weather report
- C) Soil colour
- D) Furniture design

Answer: A) Masonry

12. The quantity of an item is normally expressed in its:

- A) Suitable unit
- B) Colour
- C) Brand name
- D) Serial number

Answer: A) Suitable unit

13. Area is generally calculated using:

- A) Length $\times$ Breadth
- B) Length + Breadth
- C) Length $\div$ Breadth
- D) Length – Breadth

Answer: A) Length $\times$ Breadth

14. Volume is generally calculated using:

- A) Length $\times$ Breadth $\times$ Height
- B) Length + Breadth
- C) Length $\times$ Height only
- D) Breadth + Height

Answer: A) Length $\times$ Breadth $\times$ Height

15. The detailed estimate of a building is prepared item by:

- A) Item
- B) Colour
- C) Floor only
- D) Room name only

Answer: A) Item

16. Which roof is specifically mentioned for a single-room building in Unit II?

- A) Thatched roof
- B) Flat roof
- C) Steel roof
- D) Tile roof

Answer: B) Flat roof

17. Which roof is specifically mentioned for the residential building?

- A) RCC roof
- B) Thatched roof
- C) Timber roof
- D) Glass roof

Answer: A) RCC roof

18. The interior space of a _____ is included in Unit II.

- A) Hospital
- B) Shop
- C) Bridge
- D) Canal

Answer: B) Shop

19. The trade system helps in:

- A) Organizing different works
- B) Increasing errors
- C) Avoiding measurements
- D) Removing quantities

Answer: A) Organizing different works

20. A building estimate may include quantities for:

- A) Different construction works
- B) Weather conditions
- C) Population
- D) Traffic

Answer: A) Different construction works

21. Which information is essential for preparing a detailed estimate?

- A) Dimensions of the work
- B) Favourite colour
- C) Owner's hobbies
- D) Weather forecast

Answer: A) Dimensions of the work

22. The cost of an item depends mainly on:

- A) Quantity and rate
- B) Colour and shape
- C) Height and age
- D) Location and weather

Answer: A) Quantity and rate

23. A detailed estimate can be prepared for:

- A) Buildings
- B) Only roads
- C) Only bridges
- D) Only canals

Answer: A) Buildings

24. In a building estimate, measurements should be taken from:

- A) Approved drawings
- B) Guesswork
- C) Photographs only
- D) Verbal description only

Answer: A) Approved drawings

25. A residential building is primarily used for:

- A) Living
- B) Industrial production
- C) Water storage
- D) Road traffic

Answer: A) Living

26. An interior shop estimate deals mainly with:

- A) Interior space and associated works
- B) Road construction
- C) Canal excavation
- D) Bridge foundation

Answer: A) Interior space and associated works

27. The final cost of a detailed estimate is obtained by:

- A) Adding the costs of individual items
- B) Adding only room areas
- C) Multiplying room numbers
- D) Adding building heights

Answer: A) Adding the costs of individual items

28. Which method is specified for Unit II?

- A) Trade system
- B) Centre line method only
- C) Plinth area method
- D) Cubical content method

Answer: A) Trade system

29. A 2 or 3-room residential building mentioned in Unit II has:

- A) RCC roof
- B) Flat roof only
- C) Thatched roof
- D) No roof

Answer: A) RCC roof

30. The main objective of a detailed estimate is to determine:

- A) Detailed quantities and cost
- B) Building colour
- C) Furniture arrangement
- D) Weather conditions

Answer: A) Detailed quantities and cost

UNIT III – APPROXIMATE ESTIMATE

Part A – Multiple Choice Questions

30 × 1 = 30 Marks

1. An approximate estimate is also known as:

- A) Preliminary estimate
- B) Final estimate
- C) Revised estimate
- D) Supplementary estimate

Answer: A) Preliminary estimate

2. An approximate estimate is mainly prepared at the:

- A) Initial stage of a project
- B) Completion stage
- C) Payment stage
- D) Maintenance stage

Answer: A) Initial stage of a project

3. The plinth area method is based on:

- A) Plinth area
- B) Building height only
- C) Number of doors
- D) Wall thickness only

Answer: A) Plinth area

4. In the plinth area method, the estimated cost is related to:

- A) Plinth area and rate per unit area
- B) Number of rooms only
- C) Number of windows only
- D) Length of walls only

Answer: A) Plinth area and rate per unit area

5. The cubical content method is based on:

- A) Volume of the building
- B) Area of the building only
- C) Number of rooms
- D) Length of the walls

Answer: A) Volume of the building

6. The unit generally used for cubical content is:

- A) m
- B) m²
- C) m³
- D) kg

Answer: C) m³

7. The service unit method is based on:

- A) A suitable functional unit
- B) Wall thickness
- C) Floor thickness
- D) Roof colour

Answer: A) A suitable functional unit

8. Which method is specifically mentioned for approximate estimates?

- A) Plinth area method
- B) Centre line method
- C) Long wall method
- D) Short wall method

Answer: A) Plinth area method

9. Which method considers the volume of a building?

- A) Cubical content method
- B) Plinth area method
- C) Service method
- D) Typical bay method

Answer: A) Cubical content method

10. The typical method is used for:

- A) Preliminary estimation
- B) Painting only
- C) Plumbing only
- D) Demolition only

Answer: A) Preliminary estimation

11. The typical bay method is useful when a building contains:

- A) Repeated bays
- B) No rooms
- C) Only one wall
- D) No foundation

Answer: A) Repeated bays

12. The area of an irregular figure can be calculated using:

- A) End ordinate rule
- B) Cubical content method
- C) Service method
- D) Plinth area method

Answer: A) End ordinate rule

13. The mid-ordinate rule is used for calculating:

- A) Area of irregular figures
- B) Volume of concrete only
- C) Cost of materials
- D) Building height

Answer: A) Area of irregular figures

14. The average ordinate rule is used to find:

- A) Area
- B) Weight
- C) Cost of cement
- D) Building height

Answer: A) Area

15. The trapezoidal rule can be used to calculate:

- A) Area of irregular figures
- B) Brick strength
- C) Cement grade
- D) Wall thickness

Answer: A) Area of irregular figures

16. Simpson's rule is used for:

- A) Area calculation
- B) Painting calculation
- C) Brick testing
- D) Roof construction

Answer: A) Area calculation

17. Which rule is specifically included for irregular areas?

- A) Simpson's rule
- B) Centre line rule
- C) Long wall rule
- D) Short wall rule

Answer: A) Simpson's rule

18. The end area rule is used for calculating:

- A) Volumes of irregular solids
- B) Building cost only
- C) Wall thickness
- D) Floor area only

Answer: A) Volumes of irregular solids

19. The mid-area rule is used for:

- A) Volumes of irregular solids
- B) Painting
- C) Plastering
- D) Brickwork

Answer: A) Volumes of irregular solids

20. The mean area rule is used for:

- A) Volume calculation
- B) Plinth area calculation only
- C) Cost calculation only
- D) Material testing

Answer: A) Volume calculation

21. The pyramidal rule is related to:

- A) Volume of irregular solids
- B) Area of walls
- C) Painting work
- D) Roofing work

Answer: A) Volume of irregular solids

22. Embankments involve:

- A) Earthwork
- B) Painting work
- C) Plastering
- D) Brick pointing

Answer: A) Earthwork

23. Cuttings refer to:

- A) Removal of earth
- B) Laying bricks
- C) Painting walls
- D) Fixing doors

Answer: A) Removal of earth

24. Cross-sectional areas are important in calculating:

- A) Earthwork quantities
- B) Painting quantities
- C) Door quantities
- D) Window quantities

Answer: A) Earthwork quantities

25. Level sections are associated with:

- A) Earthwork calculations
- B) Painting
- C) Plastering
- D) Flooring

Answer: A) Earthwork calculations

26. Two-section problems involve:

- A) Two cross-sectional measurements
- B) Two rooms
- C) Two doors
- D) Two windows

Answer: A) Two cross-sectional measurements

27. A preliminary estimate helps in determining:

- A) Probable project cost
- B) Exact final payment
- C) Final material wastage
- D) Final labour attendance

Answer: A) Probable project cost

28. Which of the following is NOT an approximate estimating method listed in Unit III?

- A) Plinth area method
- B) Cubical content method
- C) Service method
- D) Centre line method

Answer: D) Centre line method

29. Which of the following is a method for irregular area calculation?

- A) Average ordinate rule
- B) Trade system
- C) Group system
- D) Centre line method

Answer: A) Average ordinate rule

30. Unit III includes simple problems on:

- A) Preliminary estimate of a building project
- B) Electrical wiring design
- C) Structural design
- D) Plumbing design

Answer: A) Preliminary estimate of a building project

UNIT IV – DATA

Part A – Multiple Choice Questions

30 × 1 = 30 Marks

1. Data in estimation is used mainly for:

- A) Preparing rates and quantities
- B) Drawing building plans
- C) Testing soil
- D) Painting buildings

Answer: A) Preparing rates and quantities

2. Data is generally prepared for:

- A) Different items of construction work
- B) Weather conditions
- C) Building colours
- D) Furniture

Answer: A) Different items of construction work

3. The two main types of data mentioned in the syllabus are:

- A) Main data and sub data
- B) Old data and new data
- C) Small data and large data
- D) Basic data and final data

Answer: A) Main data and sub data

4. Data obtained from actual observations is called:

- A) Observed data
- B) Main data
- C) Sub data
- D) Lump-sum data

Answer: A) Observed data

5. A lead statement is related to:

- A) Lead of materials
- B) Building height
- C) Floor area
- D) Wall thickness

Answer: A) Lead of materials

6. Schedule of Rates is commonly abbreviated as:

- A) SOR
- B) RCC
- C) CPWD
- D) BOQ

Answer: A) SOR

7. Schedule of Rates provides:

- A) Rates for various items of work
- B) Building drawings
- C) Soil properties
- D) Labour attendance

Answer: A) Rates for various items of work

8. A standard data book contains:

- A) Standard data for construction items
- B) Building photographs
- C) Architectural drawings only
- D) Soil maps

Answer: A) Standard data for construction items

9. Sundries refer to:

- A) Miscellaneous items or expenses
- B) Main structural members
- C) Foundation walls
- D) Roof slabs

Answer: A) Miscellaneous items or expenses

10. Lump-sum provision is made when:

- A) Exact details or cost cannot be conveniently determined
- B) No work is required
- C) Only bricks are used
- D) The building is demolished

Answer: A) Exact details or cost cannot be conveniently determined

11. Data can be prepared using:

- A) Standard data and Schedule of Rates
- B) Weather reports only
- C) Photographs only
- D) Building colour charts

Answer: A) Standard data and Schedule of Rates

12. Brick masonry is a type of:

- A) Masonry work
- B) Roofing work
- C) Painting work
- D) Flooring work

Answer: A) Masonry work

13. Stone masonry uses:

- A) Stones
- B) Steel sheets
- C) Glass only
- D) Timber only

Answer: A) Stones

14. Cement mortar contains:

- A) Cement and sand
- B) Cement and steel
- C) Bricks and water only
- D) Lime and timber

Answer: A) Cement and sand

15. Lime mortar is based on:

- A) Lime
- B) Steel
- C) Aggregate only
- D) Bitumen only

Answer: A) Lime

16. Surkhi is associated with:

- A) Mortar
- B) Steel reinforcement
- C) Roofing sheets
- D) Paint

Answer: A) Mortar

17. Cement concrete consists mainly of:

- A) Cement, fine aggregate, coarse aggregate and water
- B) Cement and steel only
- C) Sand and bricks only
- D) Lime and timber

Answer: A) Cement, fine aggregate, coarse aggregate and water

18. Flooring work is related to:

- A) Floor construction or finishing
- B) Wall excavation
- C) Roof drainage only
- D) Foundation soil testing

Answer: A) Floor construction or finishing

19. Weathering course is generally associated with:

- A) Roof construction
- B) Foundation excavation
- C) Door frames
- D) Wall painting only

Answer: A) Roof construction

20. RCC stands for:

- A) Reinforced Cement Concrete
- B) Rolled Cement Construction
- C) Reinforced Clay Concrete
- D) Random Cement Concrete

Answer: A) Reinforced Cement Concrete

21. RCC work mentioned in Unit IV includes:

- A) Slabs, sunshades, beams and columns
- B) Roads only
- C) Canals only
- D) Doors only

Answer: A) Slabs, sunshades, beams and columns

22. A sunshade is provided mainly over:

- A) Openings such as windows
- B) Foundations
- C) Floors
- D) Columns only

Answer: A) Openings such as windows

23. A partition wall is used to:

- A) Divide interior spaces
- B) Support a bridge
- C) Store water
- D) Cover a road

Answer: A) Divide interior spaces

24. Formwork is used to:

- A) Give shape to concrete during construction
- B) Paint walls
- C) Lay bricks only
- D) Measure land

Answer: A) Give shape to concrete during construction

25. Centering and shuttering are associated with:

- A) Formwork
- B) Painting
- C) Flooring
- D) Masonry only

Answer: A) Formwork

26. Plastering is generally carried out on:

- A) Walls and ceilings
- B) Foundations only
- C) Roads only
- D) Roofing sheets only

Answer: A) Walls and ceilings

27. Pointing is generally done to:

- A) Joints of masonry
- B) Reinforcement bars
- C) Floor tiles only
- D) Roof sheets only

Answer: A) Joints of masonry

28. Painting work is mainly a:

- A) Finishing work
- B) Foundation work
- C) Earthwork
- D) Excavation work

Answer: A) Finishing work

29. A.C. sheet roofing refers to roofing using:

- A) A.C. sheets
- B) RCC slabs only
- C) Bricks
- D) Stone blocks

Answer: A) A.C. sheets

30. Apron and revetment works mentioned in Unit IV are related to:

- A) Canals
- B) Residential rooms
- C) Shop interiors
- D) Hospital furniture

Answer: A) Canals

UNIT V – SPECIFICATION AND REPORT WRITING

Part A – Multiple Choice Questions

30 × 1 = 30 Marks

1. A specification describes:

- A) Requirements of construction work
- B) Weather conditions
- C) Building ownership
- D) Land price

Answer: A) Requirements of construction work

2. The main purpose of a specification is to:

- A) Clearly describe the quality and requirements of work
- B) Increase building height
- C) Select furniture
- D) Calculate population

Answer: A) Clearly describe the quality and requirements of work

3. Specifications are necessary for:

- A) Construction work
- B) Weather forecasting
- C) Traffic control
- D) Population census

Answer: A) Construction work

4. Which of the following is included in Unit V?

- A) Types of specifications
- B) Soil mechanics
- C) Surveying instruments
- D) Highway traffic

Answer: A) Types of specifications

5. A good specification should be:

- A) Clear and precise
- B) Confusing
- C) Incomplete
- D) Unclear

Answer: A) Clear and precise

6. Essential requirements of specifications are related to:

- A) Proper description of the work
- B) Building colour only
- C) Furniture selection
- D) Land registration

Answer: A) Proper description of the work

7. Specifications may be prepared for:

- A) Various items of building work
- B) Weather reports
- C) School examinations
- D) Population studies

Answer: A) Various items of building work

8. Standard specifications are prepared to:

- A) Provide a standard description of work
- B) Change the building plan
- C) Calculate traffic
- D) Determine land ownership

Answer: A) Provide a standard description of work

9. The first step in preparing standard specifications is to:

- A) Identify the work and its requirements
- B) Start painting
- C) Buy furniture
- D) Demolish the building

Answer: A) Identify the work and its requirements

10. A specification should mention the:

- A) Materials to be used
- B) Owner's hobbies
- C) Weather forecast
- D) Number of vehicles

Answer: A) Materials to be used

11. A specification may include requirements regarding:

- A) Quality of materials
- B) School timings
- C) Traffic signals
- D) Population

Answer: A) Quality of materials

12. A report is generally prepared to:

- A) Present information about a work or project
- B) Select paint colour
- C) Purchase furniture
- D) Calculate school marks

Answer: A) Present information about a work or project

13. While writing a report, the information should be:

- A) Clear and systematic
- B) Confusing
- C) Incomplete
- D) Unrelated

Answer: A) Clear and systematic

14. One point to be considered while writing a report is:

- A) Purpose of the report
- B) Favourite food
- C) Weather only
- D) Personal hobbies

Answer: A) Purpose of the report

15. A report may be prepared for:

- A) Building work
- B) Entertainment only
- C) Sports only
- D) Shopping only

Answer: A) Building work

16. Unit V includes reports for:

- A) Residential buildings
- B) Aircraft
- C) Railways only
- D) Ships

Answer: A) Residential buildings

17. Which type of building report is included in the syllabus?

- A) Hospital
- B) Airport
- C) Railway station
- D) Factory

Answer: A) Hospital

18. A report can also be prepared for a:

- A) School building
- B) Cinema film
- C) Shop advertisement
- D) Sports match

Answer: A) School building

19. Laying a village road is included as a:

- A) Report-writing topic
- B) Specification type only
- C) Measurement unit
- D) Material

Answer: A) Report-writing topic

20. Construction of a bridge is included under:

- A) Report writing
- B) Painting
- C) Flooring
- D) Masonry only

Answer: A) Report writing

21. Water supply system for a village is included under:

- A) Report writing
- B) Flooring work
- C) Roofing work
- D) Painting work

Answer: A) Report writing

22. A specification helps to ensure:

- A) Required quality of work
- B) Random construction
- C) Uncontrolled work
- D) No measurement

Answer: A) Required quality of work

23. Specifications help the contractor understand:

- A) What work is required
- B) The weather forecast
- C) The owner's hobbies
- D) Traffic conditions

Answer: A) What work is required

24. Specifications are prepared for:

- A) Different items of work
- B) Only completed buildings
- C) Only roads
- D) Only bridges

Answer: A) Different items of work

25. Standard specifications help to maintain:

- A) Uniformity in describing work
- B) Confusion
- C) Different standards for every item
- D) Unclear requirements

Answer: A) Uniformity in describing work

26. A report should contain:

- A) Relevant information about the work
- B) Unrelated information
- C) Personal opinions only
- D) Random statements

Answer: A) Relevant information about the work

27. Which of the following is a building-related report?

- A) Residential building report
- B) Weather report
- C) Sports report
- D) News report

Answer: A) Residential building report

28. The specification of an item should describe:

- A) Requirements for executing the item
- B) The owner's personal details
- C) Traffic rules
- D) Weather conditions

Answer: A) Requirements for executing the item

29. Report writing requires information to be:

- A) Organized
- B) Random
- C) Unclear
- D) Incomplete

Answer: A) Organized

30. Unit V mainly deals with:

- A) Specification and report writing
- B) Surveying
- C) Soil mechanics
- D) Structural analysis

Answer: A) Specification and report writing

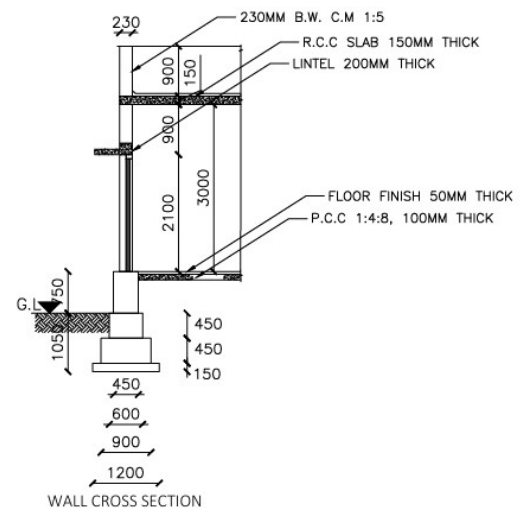
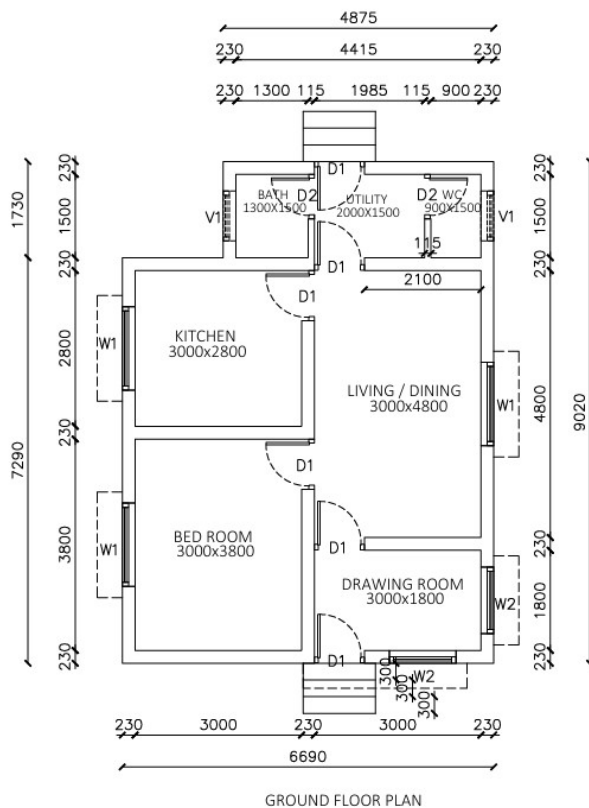
UNIT – I

- 1. Define estimation. Explain the different types of estimates.**
- 2. Explain the long wall and short wall method and centre line method of taking quantities.**
- 3. Explain units of measurement, accuracy of measurements and deductions for openings.**
- 4. Explain the duties and essential qualities of a quantity surveyor.**
- 5. Explain the stages of preparing a detailed estimate.**

UNIT-II - Descriptive Questions

1. Prepare the Detailed Estimate for the following work in the given figure

1. Prepare the Detailed estimate for the Earth work quantity
2. Prepare the Detailed estimate for the Brick Work Foundation

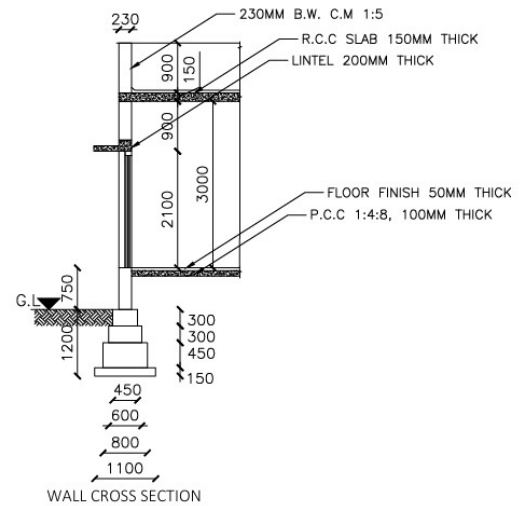
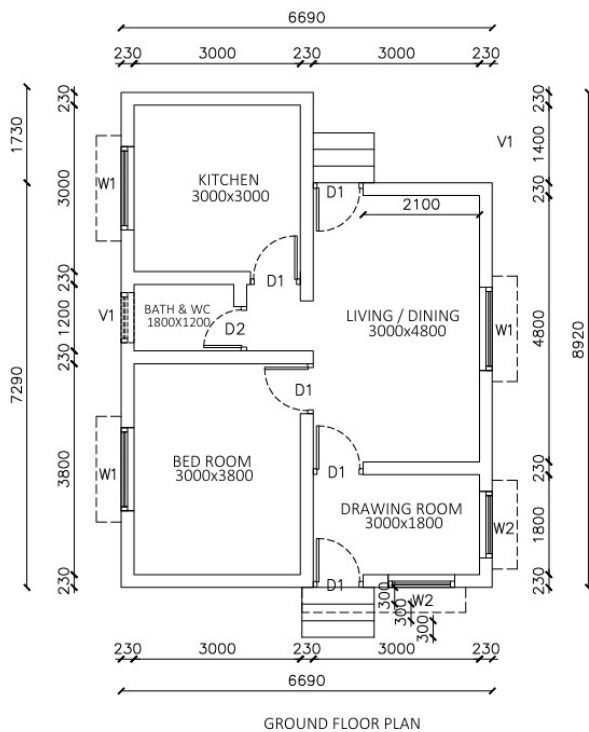


REFERENCE:

Foundation in C.C 1:4:8
 Brick Work in Foundation & Basement with C.M 1:5
 D.P.C in C.M 1:3, 20mm Thick
 Flooring 150mm thick with C.C 1:3:6 & Finishing with C.M 1:3
 Brick Work in Superstructure in C.M 1:5, 230 thick
 R.C.C Lintel 200mm thick and 200mm bearing both sides
 R.C.C Slab 150mm thick
 Parapet wall B.W 230x900mm
 Brick Bat Concrete 75mm thick
 Two Courses of flat tiles 50thick
 D1 – T.W Flush Door 900 x 2100
 D2 – T.W Panelled Door 800 x 2100
 W1 – T.W Glazed Window 1200 x 1350
 W2 – T.W Glazed Window 1200 x 1350
 V – T.W Glazed Ventilator 900 x 600

2. Prepare the Detailed Estimate for the following work in the given figure

1. Prepare the Detailed estimate for the Earth work quantity
2. Prepare the Detailed estimate for the Flooring concrete.

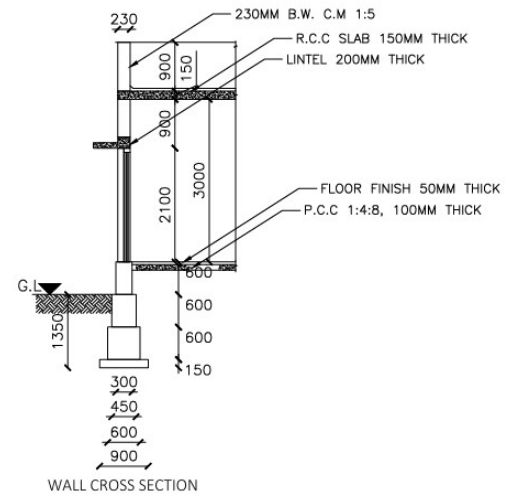
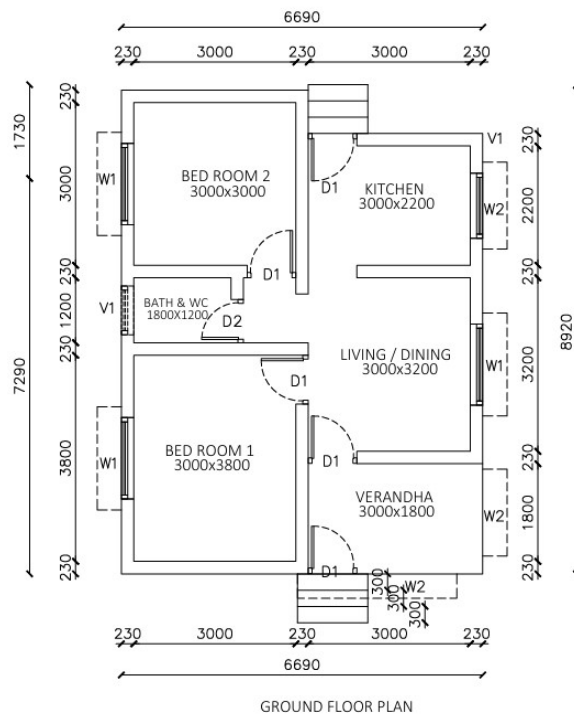


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 Brick Bat Concrete 75mm thick
 Two Courses of flat tiles 50thick
 D1 – T.W Flush Door 900 x 2100
 D2 – T.W Panelled Door 800 x 2100
 W1 – T.W Glazed Window 1200 x 1350
 W2 – T.W Glazed Window 1200 x 1350
 V – T.W Glazed Ventilator 900 x 600

3. Prepare the Detailed Estimate for the following work in the given figure

1. Prepare the Detailed estimate for the Earth work quantity
2. Prepare the Detailed estimate for the Lintel concrete quantity

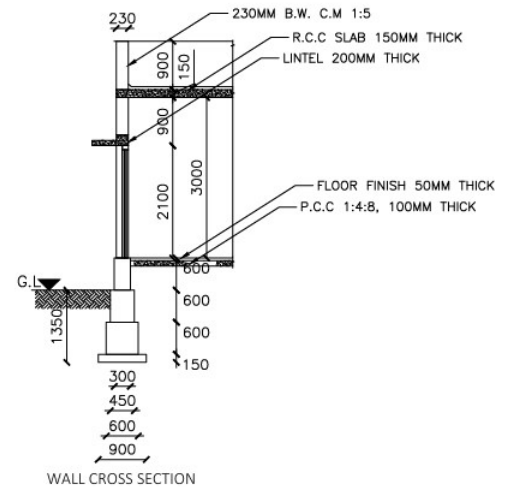
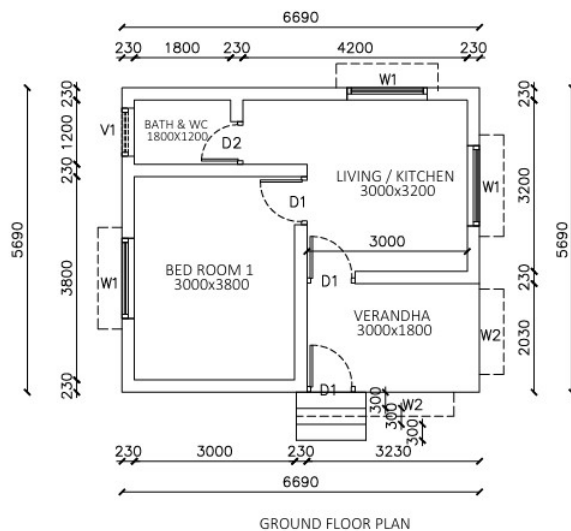


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 Brick Bat Concrete 75mm thick
 Two Courses of flat tiles 50thick
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 W1 – T.W Glazed Window 1200 x 1350
 W2 – T.W Glazed Window 1200 x 1350
 V – T.W Glazed Ventilator 900 x 600

4. Prepare the Detailed Estimate for the following work in the given figure

1. Prepare the Detailed estimate for the Earth work quantity
2. Prepare the Detailed estimate for the Foundation Brick work below ground level.

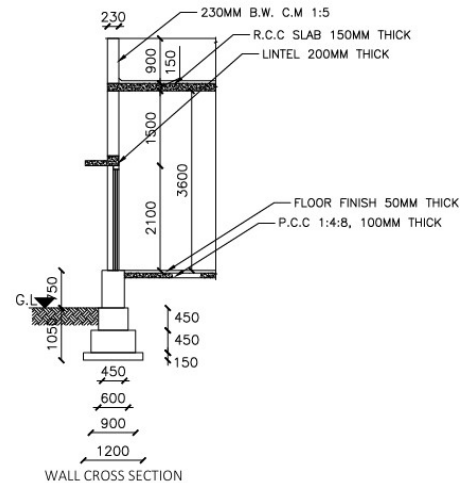
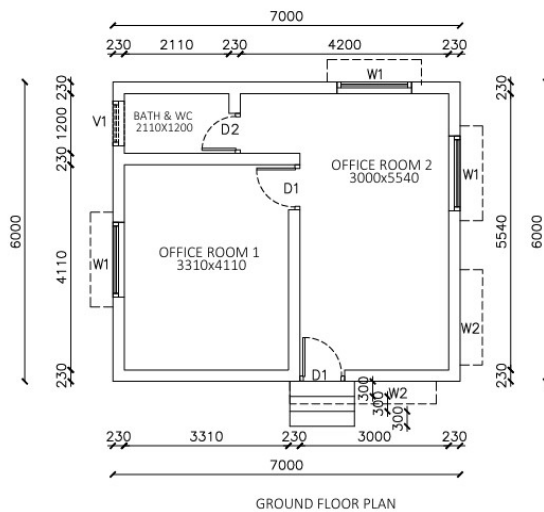


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 W2 – T.W Glazed Window 1200 x 1350
 V – T.W Glazed Ventilator 900 x 600

5. Prepare the Detailed Estimate for the following work in the given figure

1. Prepare the Detailed estimate for the Earth work quantity
2. Prepare the Detailed estimate for the Roof Concrete work



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 W2 - T.W Glazed Window 1200 x 1350
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UNIT-III - Descriptive

1. Explain the different methods of approximate estimation.
2. The actual expenditure incurred in the construction of a single storey residential building of plinth area 72m^2 is found to be Rs.6,76,800 in which 60% is towards the cost of materials and the remaining is towards the cost of labour. It is now proposed to construct a similar building of same height and specifications with a plinth area of 94m^2 at place where the cost materials is 10% more and the cost of labour is 20% less. Estimate approximately the cost of proposed building (Use plinth area method)
3. Explain the methods used for finding the area of irregular figures.
4. The perpendicular offsets were taken from a survey line to an irregular boundary line. Calculate the area between the survey line, the boundary and the end offset by the application of (i) Trapezoidal rule and (ii) Simpson's rule.

Distance (m)	0	30	60	90	120	150	180
Offsets (m)	4	8	13	18	16	21	6

UNIT - IV

1. Prepare the data for the following item of works from the particulars given below.
 - a. Plain Cement Concrete using 1:4:8 using 20mm metal - 10m^2

Materials and labour required

Broken stone 20mm	- 9m^3
Cement Mortar 1:4	- 4.5m^3
Mason 1 st class	- 1.80 nos
Mason 2 nd class	- 17.70 nos
Mazdoor 2 nd class	- 17.70 nos

Cost of materials and labour

Cement	-5200 / tone
Sand	- 600 / m^3
Broken stone 20mm	- 400 / m^3
Mason 1 st class	- 500 each
Mason 2 nd class	- 450 each
Mazdoor 1 st class	- 400 each
Mazdoor 2 nd class	- 300 each
Mixing Charges	- Rs.100 / m^3

2. Explain the lead statement, Schedule of Rates and Standard Data Book.

3. Centering for soffits of R.C.C slabs including strutting 3m height-1m²

Materials and labour required

Country wood boarding 40mm thick	- 0.4m ³ for 5 operation
Country wood joist	- 0.12m ³ for 5 operation
Casuarinas post	- 98.5m for 5 operation
Carpenter 1 st class	- 3.80 nos
Mazdoor 1 st class	- 5.40 nos
Mazdoor 2 nd class	- 21.5 nos
Wedges nail coirs etc	- L.S

Cost of materials and labour

Country wood boarding 40mm thick	-1000 / m ³
Country wood joist	- 600 / m ³
Casuarinas post	- 200 / 10m
Carpenter 1 st class	- 400 each
Mazdoor 1 st class	- 300 each
Mazdoor 2 nd class	- 200 each
Wedges nail coirs etc	- 100 / 10m ²

3. Prepare the data for Brick work in C.M 1:5 in super structure using 1st class bricks – 10m³

Materials and labour required

Brick (19x9x9cm)	- 5000Nos
Cement Mortar 1:5	- 2.20m ³
Mason 1 st class	- 3.5 Nos
Mason 2 nd Class	- 10.60 Nos
Mazdoor 1 st class	- 7.10 Nos
Mazdoor 2 nd class	- 21.20 Nos

Cost of Materials and Labour

Cement	- Rs.5200 / Tonne
Sand	- Rs.600 / m ³
Brick 1 st class	- Rs.4000 / 1000 Nos
Brick 2 nd class	- Rs.3000 / 1000 Nos
Mason 1 st class	- Rs.550 each
Mason 2 nd class	- Rs.400 each
Mazdoor 1 st class	- Rs.450 each
Mazdoor 2 nd class	- Rs.400 each

Mixing charge

- Rs.75 / m³

5. Prepare the data for Random rubble masonry in cement Mortar- 10 m³

Materials and labour required

Rough stone	- 10m ³
Bond stone	- 1m ³
Cement Mortar 1:3	- 3.4m ³
Mason 1 st class	- 7.1 Nos
Mason 2 nd Class	- 10.6 Nos
Mazdoor 1 st class	- 14.10 Nos
Mazdoor 2 nd class	- 14.10 Nos

Cost of Materials and Lead particulars

Sl.No	Materials	Units	Cost (Rs.)	Lead Km	Rate for Lead	Handling charges
1	Cement	Tonne	4400	Supplied at site		
2	Rough Stone	m ³	220	15	5	40
3	Bond Stone	m ³	350	16	6	50
4	Sand	m ³	150	40	2.50	30

Cost of Labours

Mason 1 st class	- Rs.450 each
Mason 2 nd class	- Rs.400 each
Mazdoor 1 st class	- Rs.300 each
Mazdoor 2 nd class	- Rs.200 each
Mixing Charges	- Rs.100 / m ³

UNIT- V

- 1. What is a specification? Explain its necessity and types.**
- 2. Explain the essential requirements of a good specification.**
- 3. Explain the steps involved in preparing standard specifications for building works.**
- 4. Explain the important points to be considered while writing a report.**
- 5. Write a typical report for laying a village road nearby to your native place.**