

Roll No: -----



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, April/ May 2018

Program: B. Plan

Subject (Course): Specifications, Estimation and Valuation

Course Code : BPLC 133

No. of page/s: 2

Semester – II

Max. Marks : 100

Duration : 3 Hrs

SECTION-A (05×04 =20 Marks)

- Q1. Define 'Valuation'. - 04 marks
- Q2. List out different types of service reservoirs in Water supply System. - 04 marks
- OR**
- What are main classifications of sources of water?
- Q3. List out different types of sewer system. - 04 marks
- Q4. What are the types of 'Wiring Points' in electric wiring for house. - 04 marks
- Q5. What is the purpose of 'Centering' and 'Shuttering' in building construction? - 04 marks

SECTION-B (04x10 =40 Marks)

- Q6. What is the difference between 'General Specifications' and 'Detailed Specifications'? And where are they used? -10 marks
- OR**
- Explain:
- (a) Ball Park Estimate.
- (b) Lead and Lift.
- (c) Cost Index and its features.
- Q7. What are the items to be used for preparing estimates of a typical water supply house connection? -10 marks
- OR**
- What are typical types of 'Valves' used in water supply system and where are they used?
- Q8. What are the factors on which the valuation of a building depends? -10 marks
- OR**
- What are the factors on which rate of an item depends?
- Q9. What are different components of typical Sewer System? -10 marks

OR

What is the purpose of manhole in a sewer system and where are they used?

SECTION-C (20×2 =40 Marks)

Q10. Prepare an approximate estimate of a water supply distribution network of 500 m length of pipeline with 1 no of sluice valve, reflux valve and Air valve each. The rates of items are as follows:-

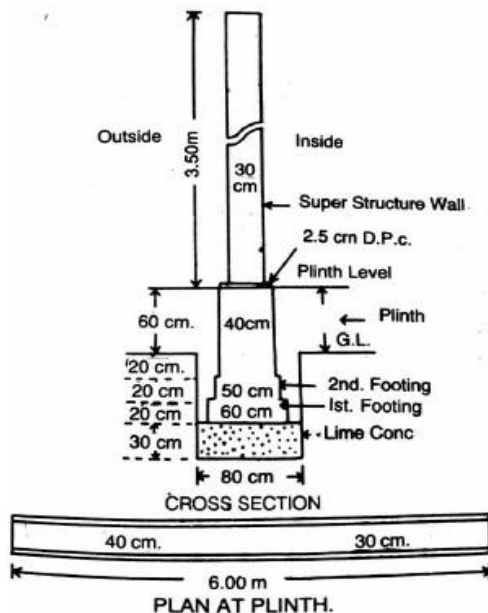
- i) Earth work including all lift and lead– Rs 100 per meter of trench
 - ii) Providing, laying, Jointing & field testing of High Density Polyethylene pipes, (HDPE) – Rs 1500 per meter
 - iii) Cost of fittings required for pipe – 10% of the cost of Pipe (10% of (ii))
 - iv) Providing & fixing (i) Sluice Valve – Rs 20,000 (ii) Reflux Valve – Rs 25,000 and (iii) Air Valve – Rs 10,000
- 20 marks**

Q11. Define in detail (i) different components of site development and (ii) corresponding aspects which must be considered while preparing estimates for site development.

-20 marks

OR

Prepare a detailed estimate of part of a wall of a building from the given plan and section and general specifications. Rates for different items may be taken as below:



- 1). Earth work = Rs. 100 per cu.m.
- 2). Lime Concrete = Rs. 3000 per cu.m.
- 3). Brickwork in foundation/ Substructure = Rs. 4000 per cu.m.
- 4). DPC = Rs. 2000 per meter length
- 5). Brickwork in Super Structure = Rs. 5000 per cu.m.

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SECTION-A (05x04 =20 Marks)

- Q1. What are the factors affecting valuation of land and buildings? - 04 marks
- Q2. What are main classification of sources of water? - 04 marks
- Q3. List out different types of pipes used in Sewer system or Water Supply system.- 04 marks
- Q4. What is 'Contraction Joint' in pavements? - 04 marks
- Q5. What is 'Tabletop Pedestrian Crossing'? -04 marks

SECTION-B (04x10 =40 Marks)

Q6. What is landscaping? What are the steps involving landscaping?

OR

Write a short note on:

- (a) Betterment
- (b) Scrap Value.
- (c) Salvage Value.

-10 marks

Q7. Prepare an approximate estimate of building project (total plinth area is 1500sqm) from following data. -10 marks

- i) Plinth area rate Rs. 4000 per sqm
- ii) Cost of water supply @5 %of cost of building.
- iii) Cost of Sanitary and Electrical installations @ 10% of cost of building.
- iv) Cost of architectural features @1% of building cost.

v) Cost of roads and lawns @4% of building cost.

Determine the total cost of building project.

Q8.What is 'difference between 'Cost' and 'Value' of the Building? **-10 marks**

OR

What are the factors on which rate of an item depends?

Q9.What is the use of Sluice Valve and Air Valve in the water supply system **-10 marks**

OR

What is the purpose of manhole in a sewer system and where are they used?

SECTION-C (20×2 =40 Marks)

Q10. You have been assigned for preparing an estimate for a college campus. What aspects you will consider while preparing estimates for Site Development for the campus. **-20 marks**

Q11. Prepare an approximate estimate of a water supply distribution network of 1000 m length of pipeline with 1 no of sluice valve and Air valve each with 20 house connections. The rates of items are as follows:-

- i) Earth work including all lift and lead– Rs 150 per meter of trench
- ii) Providing, laying, Jointing & field testing of High Density Polyethylene pipes, (HDPE) – Rs 2000 per meter
- iii) Cost of fittings required for pipe – 10% of the cost of Pipe (10% of (ii))
- iv) Providing & fixing (i) Sluice Valve – Rs 30,000 (ii) Air Valve – Rs 20,000
- v) Cost of each house connection is Rs3000

-20 marks