

Mid-West University
Examinations Management Office

Chance Examinations 2081

Bachelor level/ B.E. Hydropower/ 7th Semester

Time: 3 hours

Subject: Construction Project Management (MS471/HE404)

Full Marks: 50

Pass Marks: 25

- *Attempt all the questions*
 - *Figures in the margin indicate full marks.*
 - *Assume suitable values, with a stipulation, if necessary.*
 - *Candidates are required to answer the questions in their own words as far as possible.*
1. Define construction project management and explain its significance in hydropower projects. [1+2]
 2. What are construction specifications? Write detailed specifications for the foundation of a hydropower dam, considering RCC M30 concrete. [1+4]
 3. Publish a tender notice for construction of powerhouse having estimated amount of 3 crores without VAT. [5]
 4. List various types of construction contracts, and critically analyze the advantages and disadvantages of BOOT contracts in hydropower projects. [2+3]
 5. A company is planning to build a 150 km tunnel in a mountainous region. Identify and describe the construction equipment required for such a project, including sketches where applicable. [5]
 6. A hydropower dam project is delayed due to continuous rainfall and landslides. Evaluate the decision to accelerate construction by working during night time shifts. Discuss the potential risks and benefits. [4]
 7. What is maintenance? Explain the importance of predictive maintenance in hydropower projects. [4]
 8. What are hardware and software causes of construction site accidents? Critically discuss how technology can mitigate these causes. [4]
 9. Define and discuss how Maslow's Hierarchy of Needs theory can be applied to improve the productivity of workers on a construction site. [4]
 10. An activity takes 4 days to complete at a normal cost of Rs. 500. If it is possible to complete the activity in 2 days with an additional cost of Rs 700, what is the incremental cost of the activity? [2]
 11. Write a short note on (Any three) [3x3=9]
 - a. Record Keeping at construction site
 - b. Site Order Book
 - c. IEE and EIA
 - d. BoQ
 - e. Job Layout of Dam construction site

The End