

Mid-West University  
**Examinations Management Office**

End Semester Examinations 2081

Master level/ M. Sc. (Construction Management)/ 3<sup>rd</sup> Semester

Time: 3 hours

**Subject: Construction Safety Engineering (CMT532)**

Full Marks: 60

Pass Marks: 30

- *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. Explain the meaning and scope of construction safety. List the PPEs required for your full body protection at construction site. [2.5+2.5]
  2. Who is safety inspector? Enumerate the construction safety regulation in Nepal with example. [1+4]
  3. Define incident, hazard and risk. Examine the hazard analysis for RCC work done at fifth floor slab for the safety construction. [1.5+2.5]
  4. What is emergency preparedness plan? As a safety officer how would you determine the first aid center of your work place? Explain. [1+4]
  5. Develop an EHS plan required for a capital intensive Road Construction Project (format only). [5]
  6. What is site security plan? As a consultant of Hydropower project list the entire site security checklist to prepare the site security plan. [1+4]
  7. Design a Safety Statistics Board that you plan to install at the entry gate of a construction project site. [5]
  8. What is JSA? Prepare a JSA sample of any specific work related to excavation work. [1+4]
  9. Develop a daily safety reporting format related to any construction project of your choice. [5]
  10. List at least three provisions you think missing or to be included in tender document related to construction safety. [3]
  11. Why is motivation important for contractors? Explain how you would motivate the contractors for safety at the construction site. [5]
  12. A resident construction worker broke his ankle and forearm after falling 3 m off an unguarded scaffold onto the main floor of a construction site. Costs are based on one employer and a five-worker crew.  
Estimated wages rate  
Workers= Rs 250 per hour  
Employer= Rs 350 per hour  
Estimate the investigation costs for this accident. [3]
  13. Write a short note on (any two): [2.5+2.5]
    - a) Trade union
    - b) Safety committee
    - c) Visible and invisible cost.

**The End**