



ADAMAS UNIVERSITY
END-SEMESTER EXAMINATION: JULY 2020

Name of the Program: M. Tech

Stream: CE

PAPER TITLE: Construction Personnel Management

Maximum Marks: 40

Total No of questions: 08

Semester: II

PAPER CODE: ECE61134

Time duration: 3 Hours

Total No of Pages: 01

Instruction to the Candidate:

1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam.
 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page.
 3. Assumptions made if any, should be stated clearly at the beginning of your answer.
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Answer all the Groups

Group A

Answer all the questions of the following

5 × 1 = 5

1.
 - a) What do you mean by directing?
 - b) What is the full form of GPF?
 - c) List down all the functions of management.
 - d) Who laid the foundation of HRM practice?
 - e) What is MPDQ?

GROUP –B

(Short Answer Type Questions)

Answer *any three* of the following

3 × 5 = 15

2. What is the importance of communication in organization?
3. What is the use of performance appraisal?
4. Write down all the advantages and disadvantages of job rotation.
5. Write down the features of personnel management.

GROUP –C

(Long Answer Type Questions)

Answer *any two* of the following

2 × 10 = 20

6. Write a short note on different types of planning process.
7. Briefly explain different techniques available to train and develop management skills
8. Briefly explain the decision making process.



ADAMAS UNIVERSITY
END-SEMESTER EXAMINATION: JULY 2020

Name of the Program: M. Tech

Semester: II

Stream: CEM

PAPER TITLE: Quality Control and Assurance in Construction

PAPER CODE: ECE61136

Maximum Marks: 40

Time duration: 3 Hours

Total No of questions: 12

Total No of Pages: 01

Instruction to the Candidate:

1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam.
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Answer all the Groups

Group A

Answer all the questions of the following

$5 \times 1 = 5$

1. a) What is meant by Quality Management System?
b) Define Statistical Tolerance.
c) What are the needs of Quality Assurance?
d) Difference between Validity and Reliability.
e) What are the uses of Total Quality Control?

GROUP –B

(Short Answer Type Questions)

Answer *any three* of the following

$3 \times 5 = 15$

2. What are the methods in Quality Management System? Explain in detail.
3. Why is Ergonomics important? How does Ergonomics work?
4. Enumerate different aspects of Quality.
5. Write short notes on Specification and its types.

GROUP –C

(Long Answer Type Questions)

Answer *any two* of the following

$2 \times 10 = 20$

6. Elucidate Construction Organization and its types.
 7. Describe Quality Control and different statistical methods used for Quality Control.
 8. Explain in detail about the preparation of Bid.
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ADAMAS UNIVERSITY
END-SEMESTER EXAMINATION: JULY 2020

Name of the Program: M. Tech

Stream: CE

PAPER TITLE: Project Safety Management

Maximum Marks: 40

Total No of questions: 08

Semester: II

PAPER CODE: ECE 61138

Time duration: 3 Hours

Total No of Pages: 02

Instruction to the Candidate:

1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam.
 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page.
 3. Assumptions made if any, should be stated clearly at the beginning of your answer.
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Answer all the Groups

Group A

Answer all the questions of the following

5 × 1 = 5

1.
 - a) What is occupational hazard?
 - b) What is fishbone diagram?
 - c) What are the available methods for risk analysis?
 - d) What do you mean by MORT?
 - e) Which analysis method is the most effective in determining potential problem in a given system?

GROUP –B

(Short Answer Type Questions)

Answer *any three* of the following

3 × 5 = 15

2. Write a short note on safety design.
3. What are the needs of training for management?
4. As a safety manager of underground work what factors will you take into account for safety program?
5. What are the roles of owner for construction safety?

GROUP –C

(Long Answer Type Questions)

Answer *any two* of the following

2 × 10 = 20

6. Briefly explain all the causes of construction accidents and their preventive measures.
7. Write a short note on risk analysis.
8. Briefly discuss about the elements of an effective safety program.



ADAMAS UNIVERSITY
END-SEMESTER EXAMINATION: JULY 2020

Name of the Program: M. Tech

Semester: II

Stream: CEM

PAPER TITLE: Advanced Construction Techniques

PAPER CODE: ECE61142

Maximum Marks: 40

Time duration: 3 Hours

Total No of questions: 12

Total No of Pages: 01

Instruction to the Candidate:

1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam.
 2. All parts of a Question should be answered consecutively. Each Answer should start from a fresh page.
 3. Assumptions made if any, should be stated clearly at the beginning of your answer.
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Answer all the Groups

Group A

Answer all the questions of the following

$5 \times 1 = 5$

1.
 - a) Under which situation Under Reamed piles are required.
 - b) Define Suspended Formwork.
 - c) What is meant as Micro Piling?
 - d) What are the methods of construction of Domes?
 - e) Differentiate Demolition and Dismantling.

GROUP –B

(Short Answer Type Questions)

Answer *any three* of the following

$3 \times 5 = 15$

2. What is tilt and shift in construction of caissons? How can you rectify the tilting of caissons?
3. Write a short note on Mason's Scaffolding.
4. Enumerate sub grade waterproofing techniques.
5. Explain controlled demolition of structure with a flowchart.

GROUP –C

(Long Answer Type Questions)

Answer *any two* of the following

$2 \times 10 = 20$

6. Discuss the launching techniques for heavy decks with the help of sketches.
 7. Describe the various steps involved in the erection of lattice towers.
 8. Explain in detail about the construction sequence of Domes.
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ADAMAS UNIVERSITY
END-SEMESTER EXAMINATION: JULY 2020

Name of the Program: M. Tech

Semester: II

Stream: CE

PAPER TITLE: Maintenance and Rehabilitation of Structures

PAPER CODE: ECE61148

Maximum Marks: 40

Time duration: 3 Hours

Total No of questions: 17

Total No of Pages: 01

Instruction to the Candidate:

1. At top sheet, clearly mention Name, Univ. Roll No., Enrolment No., Paper Name & Code, Date of Exam.
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 3. Assumptions made if any, should be stated clearly at the beginning of your answer.
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Answer all the Groups

Group A

Answer all the questions of the following

5 × 1 = 5

1. a) Define shrinkage in concrete.
b) What is concept of erosion in concrete?
c) What is effective cover in a RC section?
d) Why inspection of structures required?
e) Compare the concept of shoring and underpinning.

GROUP –B

(Short Answer Type Questions)

Answer *any three* of the following

3 × 5 = 15

2. Discuss about what are the causes of distress in concrete structures. (5)
3. Explain about the results of rate of freezing and thawing deterioration in concrete. (5)
4. Classify chemical attack on concrete and mention the resistance of concrete against it. (5)
5. Write short note on Epoxy injection. (5)

GROUP –C

(Long Answer Type Questions)

Answer *any two* of the following

2 × 10 = 20

6. Briefly explain about: (**any two**) (2 x 5 = 10)
 - a) Sulphur infiltrated concrete
 - b) Foamed concrete.
 - c) Carbonation Process
 - d) Sulphate attack in concrete structures
 7. a) Discuss about the concept of surface hardness test on concrete as per IS code with neat sketches. (5)
b) Also mention how quality of concrete can be assessed through this test. (5)
 8. a) Explain about Pull out and pull of test on concrete with neat sketches. (5)
b) Explain about different type of demolition techniques used in construction practice. (5)
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