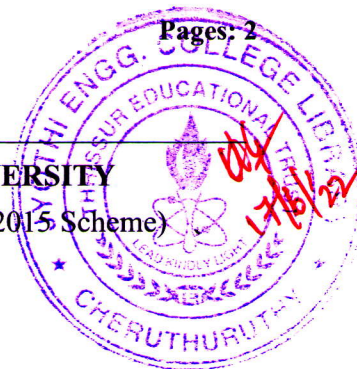


Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
Eighth Semester B.Tech Degree Examination June 2022 (2015 Scheme)



Course Code: ME476

Course Name: Material Handling & Facilities Planning

Max. Marks: 100

Duration: 3 Hours

PART A*Answer any three full questions, each carries 10 marks.*

Marks

- | | | |
|---|---|------|
| 1 | a) Explain the principles of a good plant layout. | (4) |
| | b) With neat sketches explain any four plant layouts. | (6) |
| 2 | a) What are the facilities that should be provided for the employees in the plant? | (5) |
| | b) What are the factors that should be considered while planning the stores layout? | (5) |
| 3 | Explain any five environmental aspects to be considered while designing a layout. | (10) |
| 4 | a) Explain the procedure for ALDEP. | (4) |
| | b) Explain the procedure for placement sequencing of department, using CORELAP | (6) |

PART B*Answer any three full questions, each carries 10 marks.*

- | | | |
|---|--|------|
| 5 | Describe the various steps in the establishment of an industrial pollution. | (10) |
| 6 | Define an industrial accident. Enumerate the common causes of industrial accidents. Describe various types and measures to prevent them. | (10) |
| 7 | a) Explain the principles of material handling? | (6) |
| | b) With a neat sketch explain any two conveying equipment used in a plant. | (4) |
| 8 | a) Discuss the application of fork lift with a neat sketch. | (6) |
| | b) Explain the relationship of material handling to plant layout. | (4) |

PART C*Answer any four full questions, each carries 10 marks.*

- | | | |
|----|--|------|
| 9 | a) Describe any four factors affecting the selection of material handling equipment.. | (4) |
| | b) With a neat sketch explain any three material handling system used in a job shop. | (6) |
| 10 | Explain any four criteria for the selection of a material handling system? | (10) |
| 11 | a) With an example explain the classification of material handling equipment based on its characteristics. | (5) |

- b) What are the safety considerations to be followed while carrying out maintenance of a material handling equipment? (5)
- 12 Explain the elements of material handling ergonomics. (10)
- 13 a) Explain how preventive maintenance is better than breakdown maintenance? (5)
- b) How will you plan for a good material handling maintenance system? (5)
- 14 a) Describe any four material handling activities involving cost. (4)
- b) Name the material handling methods followed in an industry. Explain any two safety measures to be taken under each method? (6)
