

C-5237

Sub. Code

30711

M.B.A. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Environment and Industrial Safety

ORGANIZATIONAL BEHAVIOUR AND MANAGEMENT

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List few needs of Organizational Behaviour.
2. Write the scope of Frame work.
3. Define Attitudes.
4. Write short notes on theories of personality.
5. Draw the organization structure.
6. Define Group organization.
7. Write the sources of power.
8. Define leadership styles.
9. What is organization culture?
10. Brief the term job satisfaction.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain the Disciplines contributing towards Organizational Behaviour.

Or

- (b) Describe the Challenges and opportunities for Organizational Behaviour.

12. (a) Bring out the different models of individual behaviour.

Or

- (b) Explain the concept of emotional intelligence.

13. (a) Elaborate the structure of organization.

Or

- (b) Describe the influence of groups in organizations.

14. (a) Explain the theories of leadership.

Or

- (b) Examine the difference between leaders and managers.

15. (a) Describe the potential sources of stress.

Or

- (b) List the factors affecting organizational climate.

Part C

(3 × 10 = 30)

Answer **all** questions, choosing either (a) or (b).

16. (a) Describe organizational models with examples.

Or

- (b) Define Motivation. Discuss salient features of Herzberg's theory of motivation with suitable illustrations.

17. (a) Write short notes on Team building and communication.

Or

(b) What is Conflict? What are its causes and how it can be managed effectively? Explain.

18. (a) Explain about work life balance in detail.

Or

(b) It is possible to change organizational culture. What suggestions you would give the management for the purpose of changing the culture?

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30712

M.B.A. DEGREE EXAMINATION
ENVIRONMENT AND INDUSTRIAL SAFETY
NOVEMBER 2021 EXAMINATION

First Semester

PRINCIPLES OF SAFETY MANAGEMENT

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. Define 'Safety'.
2. What do you mean by 'Quality'?
3. What are the components of 'Safety Audit'?
4. Expand NCR.
5. What is 'Accidents'?
6. List out types of Accidents.
7. Brief 'ANSI'.
8. Write the formula for 'Accident Indices'.
9. Point out the uses of Training.
10. How Incentive Scheme improves safety?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write few words about the history of safety movement.

Or

(b) Give the general concepts of safety management.

12. (a) State Audit Methodology in details.

Or

(b) Brief the uses of Review of Inspection.

13. (a) Explain the causes for accidents.

Or

(b) What do you mean by 'Domino Sequences'?

14. (a) Explain shortly the Permanent total disabilities and Permanent partial disabilities.

Or

(b) Discuss on Frequency severity incidence and Incident rate.

15. (a) State the importance of Training.

Or

(b) Point out the role of Government agencies on safety.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain the supervisor's importance of safety.

Or

(b) Write short note on Safety Analysis and Safety Survey.

17. (a) Brief Safety Audit.

Or

(b) Explain the Implementation of Audit Indication.

18. (a) Give your ideas to improve safety on road side.

Or

(b) How you motivate workers towards safety?

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30713

M.B.A. DEGREE EXAMINATION
ENVIRONMENT AND INDUSTRIAL SAFETY
NOVEMBER 2021 EXAMINATION
First Semester
FIRE SAFETY – DESIGN, INSTALLATION AND
MAINTENANCE
(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. What is 'Fire'?
2. Give the causes of fire.
3. Classify hazards.
4. Name the types of fire extinguishers.
5. Give few point to control fire on buildings.
6. Brief IR and UV.
7. What do you mean by 'Hydrant'?
8. List out the components of hydrant.
9. Write about the exit requirements.

10. What is Occupant Load?

Part B

(5 × 5 = 25)

Answer **all** the questions choosing either (a) or (b).

11. (a) Write about the physical and chemical properties of fire.

Or

(b) Explain fire triangle with a neat sketch.

12. (a) Why fire extinguishers are needed?

Or

(b) List out the Dos and Don'ts on fire extinguishers.

13. (a) Point out the general requirements for fire systems.

Or

(b) Write short note on Smoke Detectors and Air sampling types fire detectors.

14. (a) Explain the purpose of Hydrants.

Or

(b) Brief the external hydrant arrangements with a neat line diagram.

15. (a) State the various types of fire exits.

Or

(b) Discuss on Occupant and Fire loads.

Part C

(3 × 10 = 30)

Answer **all** the questions choosing either (a) or (b).

16. (a) Brief 'BLEVE' with a neat sketch.

Or

(b) How building design help to control fire?

17. (a) Diagrammatically explain a fire extinguisher.

Or

(b) Brief any two of fire detectors.

18. (a) Point out various precautions to control fire incidents in a building.

Or

(b) Describe the lessons learnt from amazon fire disaster.

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M.B.A. DEGREE EXAMINATION
ENVIRONMENT AND INDUSTRIAL SAFETY
NOVEMBER 2021 EXAMINATION

First Semester

ELECTRICAL AND CHEMICAL SAFETY

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** the questions.

1. State Ohm's Law.
2. Write types of electrical faults.
3. List types of electrical hazards with examples.
4. Give types of lighting hazards.
5. How you minimize electrical hazards?
6. Explain No load protection.
7. Differentiate Lock out and Tag out system.
8. Mention the function on Discharge rod.
9. Classify hazardous zones.
10. Who are the equipment certifying agencies?

Part B

(5 × 5 = 25)

Answer **all** the questions choosing either (a) or (b).

11. (a) Write few words about Resistance and Capacitors with their uses.

Or

(b) Brief types of electrical faults.

12. (a) Explain the Primary and Secondary hazards.

Or

(b) Classify Insulations.

13. (a) Point out the function of Fuse and over load relays.

Or

(b) Brief ELCB with a circuit diagram.

14. (a) Discuss the role of environment on electrical equipment selection.

Or

(b) What is Lock out and Tag out?

15. (a) Write about Intrinsically safe and explosion proof electrical apparatus.

Or

(b) State on Temperature Classification.

Part C

(3 × 10 = 30)

Answer **all** the questions choosing either (a) or (b).

16. (a) Brief electrical hazards.

Or

(b) Write about electrical shock and its effects.

17. (a) Give mini statements on Shocks, Burns, Scalds and Falls.

Or

(b) Explain the Lighting hazards.

18. (a) What are the precautions to be followed on portable electrical tools usage?

Or

(b) Preventive Maintenance – Explain in detail.

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**30715A/
30615A**

M.B.A. DEGREE EXAMINATION

ENVIRONMENT AND INDUSTRIAL SAFETY

NOVEMBER 2021 EXAMINATION

First Semester

**OCCUPATIONAL HEALTH AND SAFETY
MANAGEMENT**

(Common for M.B.A. (E & IS)/M.Sc. (ISH))

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define the term "Wind hill Index".
2. Mention few effects of Noise at Work.
3. Classify the Hazardous Chemicals.
4. Define TLV.
5. Write the causes of Back Injury.
6. Name few diseases caused by Parasitic Agents.
7. What do you understand by from Toxicology?
8. Write the purpose of Audiometry test.
9. List the importance of Hygiene Practises.

10. Write few uses of Rest Pauses.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Discuss the Hearing Conservation Programme Components.

Or

(b) Explain Ionizing radiation types, sources, application and effects.

12. (a) Explain the Chemical Hazard Control Methods briefly.

Or

(b) Differentiate exposure and dose.

13. (a) Explain the Bio Hazard Control Programme.

Or

(b) Discuss the role of Ergonomics in Preventing Work Related. Musculoskeletal disorders.

14. (a) Explain the Pre-Employment testing and Post Employment testing of Occupational Health Services.

Or

(b) Discuss the causes of Occupational diseases and its effects with suitable examples.

15. (a) Discuss Aerobic work and Anaerobic Work with suitable illustration.

Or

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- (b) Discuss the types, causes of Fatigue and its effects with suitable examples.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Write an essay on importance of occupational health and safety management.

Or

- (b) Discuss the cold and hot working ambience and how these could be controlled.

17. (a) Write in detail on Field survey and sampling Methodology for chemical hazards.

Or

- (b) Distinguish biological and ergonomics hazards with explanation and example.

18. (a) Write an essay on industrial toxicology.

Or

- (b) Why occupational physiology is an integral part of OSH in industries?

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M.B.A. DEGREE EXAMINATION
ENVIRONMENT AND INDUSTRIAL SAFETY
NOVEMBER 2021 EXAMINATION

Third Semester

CONSTRUCTION SAFETY

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are the common hazard during construction?
2. What is 'Hygiene'?
3. How you prevent land collapse?
4. What do you mean by Confined Space?
5. Expand MEWP.
6. List out the causes of accident on Material Handling.
7. State the types of Scaffold.
8. Point out the precautions in acid handling.
9. What are Static loads?

10. Differentiate Gas cutting and Gas welding.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Brief the fall protection method on construction activities.

Or

(b) How you protect Eye and Ear?

12. (a) List the causes of accidents on Piling.

Or

(b) Discuss the safety precautions on Explosive usage.

13. (a) Explain the hot mix procedure.

Or

(b) Mention the safety steps during Manual material handling.

14. (a) Explain shortly the uses of Guard rails and Toe Boards.

Or

(b) Write about safe disposal of Batteries and Coal.

15. (a) Why you focus on ergonomics?

Or

(b) What are your suggestions for safe storage of LPG?

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) State briefly PPE.

Or

(b) Describe the importance accident investigation and reporting.

17. (a) Explain the sand blasting process with a line diagram and safety precautions.

Or

(b) Write short note on insurance and compensation.

18. (a) As a Safety Officer what are your suggestions for safe material handling?

Or

(b) Explain the scaffolding safety precaution in detail.

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M.B.A. DEGREE EXAMINATION

ENVIRONMENT AND INDUSTRIAL SAFETY

NOVEMBER 2021 EXAMINATION

Third Semester

**INDUSTRIAL SAFETY AND PROCESS SAFETY
MANAGEMENT**

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define industrial safety.
2. Write few occupational diseases.
3. What is called industrial hygiene?
4. Explain hazardous energy control.
5. Write short note on reactor safety.
6. Define the term thermal relief.
7. What is called acoustic emission?
8. Write short note on corrosion prevention.
9. Explain operating discipline.

10. What is called permit system?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write short note on principle of safe machine design.

Or

(b) Write few general precaution to be taken by operator for safe working.

12. (a) Describe about emergency preparedness.

Or

(b) Write short note on emergency preparedness.

13. (a) Explain about pressure vessel design.

Or

(b) Discuss the standards and codes for process design.

14. (a) Discuss pipeline inspection method.

Or

(b) Discuss about the documents needed for plant commissioning.

15. (a) Write about refinery units safety.

Or

(b) Elaborate the corrosion prevention for underground pipes.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Discuss the necessary precautions in the maintenance works.

Or

(b) Explain the overview of accident and its reporting methods.

17. (a) Discuss the various safety devices used in pressure vessels.

Or

(b) Describe the plant commissioning procedures in detail.

18. (a) Explain the roles and responsibilities of safety manager in plant operation.

Or

(b) Write the lessons learnt from Bhopal gas tragedy.

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M.B.A. DEGREE EXAMINATION

ENVIRONMENT AND INDUSTRIAL SAFETY

NOVEMBER 2021 EXAMINATION

Third Semester

SAFETY CULTURE AND BEHAVIOUR BASED SAFETY

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What are the components of safety culture?
2. Justify the importance of safety documents.
3. Write short note on Investigation and reporting.
4. List the major responsibilities of upper management about safety implementation.
5. Explain Accident prevention model.
6. What are objectives of Employee empowerment?
7. Mention few methods to eliminate occupational hazards.
8. Write short note on incentives and rewards.
9. Name few agencies in safety training.
10. Write any two safety slogans to create safety awareness.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write short note on Employee involvement.
Or
(b) Discuss various safety motivation techniques.
12. (a) Discuss about components of ideal safety culture.
Or
(b) Explain the major responsibilities of upper management in safety activities.
13. (a) What are the objectives of BBS in the work place?
Or
(b) Explain safety management system.
14. (a) Describe the process of cultivating people to motivate safety culture.
Or
(b) Explain the procedures to design and implement the behaviour safety process.
15. (a) Write short note on safety education and induction training.
Or
(b) Discuss the role of government and private agencies in safety training.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Explain the importance of sustainable safety in the workplace.
Or
(b) Discuss the principles of BBS.
17. (a) Discuss the challenges in implementation of BBS.

Or

(b) Discuss in detail the role of Leadership.

18. (a) Discuss the methods to eliminate recognised occupational hazards.

Or

(b) Write the steps in developing safety training methods.

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M.B.A. DEGREE EXAMINATION
ENVIRONMENT AND INDUSTRIAL SAFETY
NOVEMBER 2021 EXAMINATION

Third Semester

COMPUTER AIDED HAZARD ANALYSIS

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Mention the procedure for risk estimation.
2. Differentiate voluntary and involuntary risk.
3. Explain the application of thermo calorimetry.
4. Define Impact Sensitiveness Test.
5. What is called FETI?
6. Explain pool fire.
7. List few PPE to prevent chemical hazard.
8. What is meant by FTA?
9. List the merits of past accident analysis.
10. Write the lesson learnt from feyzin disaster.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Write the Hazard assessment procedures.
Or
(b) Describe social benefits vs Technological risk.
12. (a) Distinguish impact and friction testing methods.
Or
(b) Write short note on Safety Testing of explosives.
13. (a) Write short note on Fallure Mode and Effect Analysis.
Or
(b) Differentiate Fault Tree Analysis and Event Tree Analysis.
14. (a) Write short note on chemical inventory analysis.
Or
(b) Mention the need of good plant layout.
15. (a) Describe port Hudson disaster in detail.
Or
(b) Write short note on Feyzin disaster.

Part C (3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Discuss safety warning system in detail.
Or
(b) Elaborate the construction of reactive calorimeter.
17. (a) Discuss about various softwares used in risk analysis.

Or

(b) Explain the procedure for chemical inventory analysis.

18. (a) Recall Bhopal disaster and its effects.

Or

(b) Discuss in detail reactor safety study on nuclear power plant.

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M.B.A. DEGREE EXAMINATION

ENVIRONMENT AND INDUSTRIAL SAFETY

NOVEMBER 2021 EXAMINATION

Third Semester

EVOLUTION OF MODERN SAFETY CONCEPTS

(2019 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Justify the importance of safety planning.
2. Define safety survey.
3. What do you mean by physiological needs?
4. Classify management styles.
5. Write the benefits of Risk assessment.
6. List few demerits of FMEA.
7. Explain system theory.
8. What is gross hazard analysis?
9. Differentiate design and standby redundancy.

10. Write short notes on O.C Curves.

Part B

(5 × 5 = 25)

Answer **all** questions by choosing either (a) or (b).

11. (a) Write short notes about line and staff function.

Or

(b) Describe the performance evaluation method for safety supervisor.

12. (a) Describe Deming cycle.

Or

(b) Explain Maslow's hierarchy of needs.

13. (a) List the merits and demerits of Fault Tree Analysis.

Or

(b) Write short notes on quantitative risk analysis.

14. (a) Explain Epidemiological theory.

Or

(b) Explain multilinker sequence method.

15. (a) Discuss the objectives of life testing.

Or

(b) Write few reliability improvement techniques.

Part C

(3 × 10 = 30)

Answer **all** questions choosing either (a) or (b).

16. (a) Discuss briefly about evolution of modern safety.

Or

(b) Explain in detail about X and Y theory.

17. (a) Write in detail about the various hazard assessment techniques.

Or

(b) Explain in detail about accident investigation techniques.

18. (a) Discuss briefly about modern causation model.

Or

(b) Explain in detail about failure data analysis.

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30741/30641

**M.Sc./M.B.A. DEGREE EXAMINATION,
NOVEMBER 2021.**

Fourth Semester

ENVIRONMENTAL SAFETY MANAGEMENT

(Common for M.Sc., (HSE) / M.B.A. (E & IS))

(2016 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is the need for desalination?
2. Comment on different types of waste generated.
3. What is remote sensing?
4. Comment on GMOs.
5. Comment of Bhopal gas tragedy.
6. Comment on Chipko movement.
7. What are hazardous wastes?
8. What is Red data book?
9. What is silent valley? Comment on its importance.
10. How Mathura and TajMahal are important in relation to environmental protection.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Give an account of mineral resources and its management.

Or

- (b) Give an account of the impact of ecotourism.

12. (a) Explain the measures to be taken to monitor the environmental quality.

Or

- (b) Explain the need for Environmental monitoring.

13. (a) Discuss about Hazards due to Bio process Dilution.

Or

- (b) Elaborate the need and the relevance of Environmental impact assessment.

14. (a) Explain the role of Green Peace Movement in the protection of environment.

Or

- (b) Give a General Account of Environment with emphasis on Lithosphere.

15. (a) Biovillages are example for sustainable development. Justify.

Or

- (b) Discuss the impact of nuclear radiations.

Part C

(3 × 10 = 30)

Answer **all** questions, choosing either (a) or (b).

16. (a) Discuss in detail forest and wildlife resources.

Or

- (b) Write an essay on biomedical waste management.

17. (a) Discuss the problems associated with river cleaning projects.

Or

- (b) Explain the importance of biosensors in environmental monitoring

18. (a) Write notes on the following:

- (i) Composition of Atmosphere
- (ii) Bio-accumulation
- (iii) Acid Rain

Or

- (b) Describe Ozone Layer Depletion and its impact on plants and animals.
