

C-1490

Sub. Code

91013

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

First Semester

Fire and Industrial Safety

FIRE PREVENTION AND PROTECTION

(2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Write the reasons for fire.
2. Differentiate heat and temperature.
3. Write about location of fire detection.
4. Give the properties of CO_2 .
5. Write the hazards of LPG.
6. How will maintain the fire extinguisher?
7. Define electricity.
8. Write about national electric code.
9. Give examples of flammable and combustible liquids.
10. Write the types of ventilation.

Part B

(5 × 5 = 25)

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

11. (a) Explain fire protection.

Or

- (b) Write about heat transfer.

12. (a) Write about power supply for fire alarm system.

Or

- (b) Write about public fire alarm system.

13. (a) Write short notes on portable fire extinguisher.

Or

- (b) Explain fire extinguisher testing.

14. (a) Write the safety measure on loading and unloading of acetylene.

Or

- (b) Write about safe design of electrical equipment.

15. (a) Explain hazard of hot work.

Or

- (b) Explain local exhaust ventilation.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the any one case study of fire accident in India with it root cause, date and location.

Or

- (b) Explain basic condition for fire alarm system installation.

17. (a) Explain about extinguishing agents.

Or

(b) Differentiate form extinguishing agent and combustible metal extinguishing agents.

18. (a) Write about hazardous location and features of national electric code.

Or

(b) Explain flammability range with LEL and UEL.

C-1491

Sub. Code

91014

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

First Semester

Fire and Industrial Safety

PERSONAL PROTECTIVE EQUIPMENTS

(2019 Onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Different between sound & noise.
2. Write about IR and IJY radiation.
3. Write the types of hand injuries.
4. Write direct and indirect hazards for work Kg.
5. What is meant by mc guarding?
6. Define housekeeping.
7. Write colour code for canister.
8. What is O₂ deficiency?
9. Write the employer responsible as per HASAWA 1974.
10. Differentiate the active and passive fall protection.

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) Different between ear plug and ear muffs.

Or

- (b) Recommended average levels illumination for work area.

12. (a) How to avoid the hand injury.

Or

- (b) Write the functions of safety shoe.

13. (a) Write about storage and transporting chemicals.

Or

- (b) Give short note on physical hazards.

14. (a) Explain the harmful contaminate.

Or

- (b) Write about responding hazards.

15. (a) Write IS code for PPE.

Or

- (b) Explain MSIHSL rules.

Part C

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain SCBA.

Or

(b) Explain factories Act 1948, its chapters.

17. (a) Explain skin protection PPE.

Or

(b) Give detail note on type of heat protector.

18. (a) Explain hearing mechanism and hearing loss.

Or

(b) Frame the emergency eye protection checklist.

C-1492

Sub. Code

91015

B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

First Semester

Fire and Industrial Safety

ELECTRICAL SAFETY

(2019 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define ohm's law.
2. Differentiate Arc flash and arc blast.
3. What is corona effect?
4. Write the types of electrical hazard with example.
5. Explain : ELCB, GFCI, MCB.
6. What is meant by circuit breakers?
7. What is LOTOTO?
8. Write about PTW.
9. Explain IS Equipments.
10. How the electrical equipment are classified in the hazardous zones?

Part B**(5 × 5 = 25)**Answer **all** questions.

11. (a) Write about the effects of shock in human body.
Or
(b) Explain the step by procedure of CPR.
12. (a) Give the short notes on primary and secondary hazards with types of burns.
Or
(b) Write about the earth pit maintenance.
13. (a) Explain briefly about the types of circuit breaker.
Or
(b) Give short notes on electrical joints and connection.
14. (a) Briefly notes on safety use of portable tools.
Or
(b) Explain step by step procedure in LOTO.
15. (a) Explain classification of hazardous zone.
Or
(b) Write the use of barrier and isolator.

Part C**(3 × 10 = 30)**Answer **all** questions.

16. (a) Detailed notes on statutory requirements from electrical inspectorate.
Or
(b) Write about ELCB in detail With diagram.

17. (a) Explain about the intrinsically safe equipment and equipment certifying agencies.

Or

- (b) Write about the special PPE using in electrical works.

18. (a) Draft an permit sheet for underground electrical cable maintenance.

Or

- (b) Write the hazards of static electricity.
