

17558

21718

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. (A) Attempt any THREE of the following :

12

- (a) Define hazard. Write types of hazard.
- (b) List the equipments used for breathing and respiratory protection. (any four)
- (c) List the harmful effects of chlorine on human being.
- (d) Write the importance of plant maintenance.

(B) Answer any ONE of the following :

6

- (a) Describe with neat diagram construction and working of soda acid type fire extinguisher.
- (b) Write importance of high efficiency dust respirator and blasting helmets.

2. Attempt any FOUR of the following :

16

- (a) State the objectives of safety audit.
- (b) Define fire triangle and explain the principle of extinguishing of fire.
- (c) Explain bin storage with neat sketch.
- (d) Draw proportionate sketch of any four personal protective equipments.
- (e) List types of plant maintenance and describe scheduled maintenance.
- (f) Describe the various protections used against noise.

- 3. Attempt any FOUR of the following : 16**
- (a) Describe physiological effect of electricity.
 - (b) State disadvantages of breakdown maintenance.
 - (c) Give safety precautions in the transportation of inflammable liquid.
 - (d) How on-line maintenance of rotameter is carried out ?
 - (e) Explain predictive maintenance in detail.
- 4. (A) Attempt any THREE of the following : 12**
- (a) Describe use of fire hydrant system.
 - (b) How mass flow bins for storage works ? What are its advantages ?
 - (c) List the causes of breakdown maintenance.
 - (d) Explain preventive maintenance in detail.
- (B) Answer any ONE of the following : 6**
- (a) Describe procedure of safety audit.
 - (b) Describe construction and working of pneumatic conveyors. (Any one type)
- 5. Attempt any TWO of the following : 16**
- (a) Explain construction and working of dry chemical powder fire extinguisher in detail.
 - (b) Explain construction and working of bucket elevator.
 - (c) Describe the procedure of startup of the plant.
- 6. Attempt any TWO of the following : 16**
- (a) Explain supplied air type and self contained breathing apparatus in detail.
 - (b) (i) Explain sources of radiation hazard
(ii) Give classification of explosive
 - (c) Give functions and responsibilities of plant maintenance department.
-