

Seat No.

Enrolment No.

CVM UNIVERSITY
M.Sc. (Industrial Hygiene and Safety) Semester-I Examination-2021
Winter Examination Monday , 1/3/2021
02:00 PM to 04:00 PM
PAPER CODE: 101360104 : Safety Engineering- I

Pages - 2

Total Marks: 60

- Note: (1) Attempt all questions.
(2) Figures to the right indicate marks.

Q1 Multiple Choice.

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- (A) i. What should be the factor of safety for Lifting Equipment?
a. Four b. Three c. Two d. Five
- ii. To determine plant layout, how many templating are in use?
a. Two b. Three c. Four d. Six
- iii. Cleanliness means the place is free from...
a. Dust b. Dirt c. Trash d. All of the above
- iv. The contact point of two opposite moving wheels is known as...
a. Dip b. Nip c. Pip d. Kip
- v. In the abbreviation TPM, the letter "P" means...
a. Preventive b. Predictive c. Productive d. Preservative
- vi. Luminance means the quantity of light energy...
a. Reflected b. Refracted c. Radiated d. Absorbed
- vii. Which of the following is the most hazardous zone?
a. Zone II b. Zone I c. Zone 0 d. Zone III
- viii. Which of the following is the best stage of Fire to be extinguished?
a. Extinction b. Spread c. Propagation d. Inception

Q.1 Write TRUE or FALSE for the following.

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- (B) i. Usual unit in practice for population density is thousands/sq.km.
ii. ~~Static Generation phase is an inherent phase.~~
iii. Bailly Button Rule of Ergonomics is used for maintenance of machine guard.
iv. Machine Tool is a cutting tool used by a machine.
v. Kinematics of manual material handling recommends third order leverage.
vi. "Seiso" means cleaning.
vii. PIPA is a software.
viii. Two hand control is the most preferred machine guard for power press.

Q.2 Answer in brief (Any Six).

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- (C) i. Explain Separation Distance.
ii. Sketch crawling board.
iii. What do you mean by edge sheathing of hand tools?
iv. Classify ropes.
v. Differentiate Hoist and Lift.
vi. Enlist various types of Circuit Breaker.
vii. Sketch Scaffold
viii. Define BLEVE

Descriptive Questions

Q. 3	What are the citing criteria for a Industrial Plant.	(08)
	OR	
Q.3	Concept of "Five S"	(08)
Q. 4	Explain safety measures to be taken for atleast four machines seen at the ADIT workshop.	(08)
	OR	
Q. 4	Explain various types of Guards what is Zero mechanical state (ZMS)	(08)
Q. 5	Purpose and benefits of good lighting and importance of maintenance for lighting and colour.	(08)
	OR	
Q. 5	What is Lock Out and Tag Out ,explain static electricity with example	(08)
Q. 6	Explain Fire Phenomenon ,Chemistry of fire, Stages of fire and Factors contributing to fire.	(08)
	OR	
Q. 6	Explain Work Permit system and its types also prepare a Confined space work Permit.	(08)