

**238512 (38)**

Dip. In Engg. (5<sup>th</sup> Semester)  
Examination, Dec. - Jan., 2011-12

Branch : Mett.

**INDUSTRIAL METALLURGY &**

**SAFETY ENGINEERING**

*Time Allowed : Three Hours*

*Maximum Marks : 100*

*Minimum Pass Marks : 35*

Note : (i) Solve any five questions.

(ii) All questions carry equal marks.

Q. 1 (a) Explain welding and name the different welding processes. 5

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(2)

(b) Explain in details metals inert gas

welding: 15

Q. 2 Explain principle, application and equipment

used: 20

Electric Arc Welding OR Gas Welding. (20)

Q. 3 What is powder metallurgy? Write in detail

the different steps involved in powder

metallurgy. 20

Q. 4. Write in detail the production of cemented

carbide tools and self lubricating bearing. 20

Q. 5. (a) Discuss the importance & aims of

safety. 10

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(b) What are the various costs of an accident?

Describe Injury severity rate. 10

Q. 6. (a) How fire can be classified? Suggest fire

extinguishers for each kind of fire. 10

(b) Give idea about fire detection & alarm system. 10

Q. 7. Write safety rules for : 20

(i) Coke Oven

(ii) Blast Furnace

Q. 8. Write short notes on (any two) : 20

(a) Safety rules with electrical hazards

(b) Duties of a safety officer

(c) Safety rules in steel melting shop