

**Industrial Chemistry, Examination** | Nov-2014  
**B. Sc. Semester-III**  
**Paper- IC-301: Material Science-I**  
**Subject Code: 3795**

Time:  $2\frac{1}{2}$  Hours

Total Marks: 70

- Que.1 (A) Describe the carbon steel production. 10  
(B) Write a note on fossil fuels. 04  
OR
- Que.1 (A) Describe the production of phosphorus pentoxide. 10  
(B) List out minerals of aluminium. 04
- Que.2 (A) How industrially phosphoric acid is manufactured by electric furnace method? 10  
(B) Write the classification of fuels in detail. 04  
OR
- Que.2 (A) Give industrial production of soda ash with flow sheet diagram. 10  
(B) Discuss properties of steel alloys. 04
- Que.3 (A) Write a note on production of sulphur. 10  
(B) Give an industrial application of caustic soda. 04  
OR
- Que.3 (A) Discuss industrial production of calcium carbide. 10  
(B) Discuss about the micro constituents in aluminium alloys. 04
- Que.4 (A) Explain industrial production of nitric acid by ammonia oxidation process. 10  
(B) Write a note on gaseous fuels. 04  
OR
- Que.4 (A) Discuss about the oleum production by contact process. 10  
(B) Which factors are considered for selecting particular fuel? 04
- Que.5 (A) How synthetic graphite is produced from natural graphite? Give application of graphite. 10  
(B) Write about calorific value and heat units of fuels. 04  
OR
- Que.5 (A) Write a note on solid fuels. 10  
(B) State economic importance of a fuel. 04