

IV B.Tech I Semester Supplementary Examinations, April/May 2005

LIGHT METALS & ALLOYS
(Metallurgy & Material Technology)

Time: 3 hours

Max Marks: 70

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Describe production of Aluminum by Bayer process.
(b) Discuss economics of Aluminum production.
2. (a) Explain direct sintering of Aluminum silicon alloys.
(b) What are the applications of Titanium?
3. (a) Give classification of brasses and explain season cracking.
(b) Explain structure, properties and uses of Naval brass.
4. Briefly write on any two of the following
 - (a) Molybdenum
 - (b) Tungsten
 - (c) Columbium
5. (a) What are bronzes and briefly write on phosphor bronze.
(b) What are Monels and explain their properties and uses.
6. (a) Explain structure, properties and uses of Aluminium-copper-alloys.
(b) Briefly write on magnesium casting alloys.
7. Write short notes on any three of the following:
 - (a) Cobalt
 - (b) Lead
 - (c) Zinc and
 - (d) Platinum.
8. (a) Explain evaluation of light alloys as structural material
(b) Describe structure, properties and uses of Copper-Beryllium alloys.
