

MANIPAL UNIVERSITY**SECOND BDS DEGREE EXAMINATION – NOVEMBER 2013****SUBJECT: DENTAL MATERIALS (ESSAY)
(NEW REGULATION)**

Monday, November 25, 2013

Time: 14:15 – 17:00 Hrs.

Maximum Marks: 60

1. What are gypsum products? Explain the chemistry of setting, methods of measuring the setting times and manipulative variables affecting the setting times of gypsum products.
(1+2+4+3 = 10 marks)
2. Describe the manufacturing of lathe - cut amalgam alloy powder. Give the composition, amalgamation reaction, and properties of high copper amalgam alloys.
(4+2+2+2 = 10 marks)
3. **Write short notes on:**
 - 3A. Binary solid solutions.
 - 3B. Coefficient of thermal expansion.
 - 3C. Factors affecting cutting efficiency of dental burs.
 - 3D. Manipulation of reversible hydrocolloids.
 - 3E. Wetting and contact angle.
 - 3F. Cavity varnish.
 - 3G. Curing lamps.
 - 3H. Heat treatment of gold casting alloys.
 - 3I. Metallic implant materials.
 - 3J. Sprue former.

(4×10 = 40 marks)

