



**SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY**

**THIRUVANANTHAPURAM—695 011, INDIA.**

(An Institute of National Importance under Govt. of India)

Grams—Chitramet Phone—(91)0471—2443152 Fax—(91)0471—2446433, 2550728

Email-sct@sctimst.ac.in Web site—www.sctimst.ac.in

P&A.I/X/68/Syllabus/VOP/SCTIMST/2009

Dated: 03.09.2009

## **NOTICE**

The syllabus for written test for selection to the post of **Machine Operator** at BMT Wing—as approved by the Director is notified for the information of all concerned.

**1. Metal cutting and cutting tools.**

✓Types of cutting tools, cutting tool materials, cutting tool nomenclature, cutting speeds and feeds, calculation of cutting speed and feed, tool life and wear. ✓

**2. Cutting fluids.**

Purpose of cutting fluids, properties of cutting fluids, types of cutting fluids. ✓

**3. Machine Tools.**

Types of lathe, lathe operations, tools used for turning operations, types of milling machine, Milling machine operations, work holding devices, milling cutters and tools, cutting speed feed and dept of cut. Types of grinding machines, grinding operations. ✓

**4. Non-traditional machining**

Types of non-traditional machines, EDM-Principle and operation, Wire EDM Principle and operation. ✓

**5. Limits, Fits and surface quality** ✓

Tolerance, fits and allowance, types of fit, hole basis and shaft basis system, Evaluation of surface quality, surface finish symbols on drawings. Limits and fits-Indian standard. ✓

**6. CNC machines.**

CNC machines – axis of motion, classification of CNC system, position and motion control in CNC machines.

**Reference books:**

1. Elements of workshop technology volume 2 – Machine tools by S.K.Hajra Choudhry.
2. Production Technology – by HMT.

  
**ADMINISTRATIVE OFFICER GR – I**