NATIONAL REMOTE SENSING CENTRE

ADVERTISEMENT NO.NRSC/RMT/3/2017 DATED 20.05.2017

Name of the Post: Technician – B (Machinist)

Post Code: TB 6

SYLLABUS – WRITTEN TEST

Type of Examination	:	Objective Type (Multiple Choice Questions)
No. of Questions	:	80 Questions
Apportionment of marks	:	Each Question carries one mark
Duration of Examination	:	02 Hours

Qualification Requirement: ITI/NTC/NAC in Machinist Trade

(Examination will broadly comprise of below mentioned topics as covered in ITI/NTC/NAC in Machinist trade)

1. Hand tools and its Importance
2. Classification and uses of chisels, files and vices, micrometer, depth gauge
3. Types of cutting tools
4. Shaping
5. Slotting machine, its tools and sprocket cutting calculations
6. Forging tools, types and its importance.
7. Lathe operation, its tools, angles and uses. CNC and conventional
8. Milling machine operation, types of milling
9. Indexing and calculation of various types of Indexing
10. Gear Introduction, spur gear calculations, curves and their uses, gear tooth of different forms
11. Grinding machine types, specifications and their parts, types of abrasives and their uses.
12. Thread and screw cutting on lathe
13. Pillar drill machine and its applications
14. Interchangeability – Limits, fits, tolerances and allowances
15. Cutting speed and feed for various maching operations, calculation of machining time
16. Lubricants and coolants
17. Quality Control types and measurements of testing, gear and error
18. Engineering Drawing
19. Workshop Science and Calculation
20. Heat treatment processes such as annealing, normalizing, tampering, hardening.
21. CNC operations

Syllabus for Skill Test

1. Identification and usage of different tools (Hand tools , Fitting tools & Measuring tools)
2. Fitting male and female square piece to close limit, application of vernier calipers in making job
3. Filing Tee shape joint
4. Lathe Operations such as turning, under cutting, knurling, drilling and threading with + 0.1mm accuracy, cutting square and acme threads
5. Making radial drills
6. Standard method of sectioning as per BIS. SP: 46-2003 in engineering drawing. Exercises for different sectional views on the given orthographic drawing of machine parts, casting etc
7. Cutting V thread external and internal in a lathe
8. spur gear calculations
9. Interconversion of Isometric and oblique drawings into orthographic drawings and vice versa
10. CNC part programming with simple exercises and various programming codes