WRITTEN TEST FOR THE POST OF

Jr.TECHNICAL ASSISTANT (MACHINE OPERATION) -A

Roll No.

Date: 29.08.2017   Duration: 60 Minutes

Time: 9.30 A.M   Total Marks: 60

INSTRUCTIONS TO THE CANDIDATE

1. Write your Roll Number on the top of the Question Booklet and in the OMR sheet.
2. Each question carries 1 mark.
3. There will not be any Negative marking.
4. Darken only the bubble corresponding to the most appropriate answer.
5. Marking more than one answer will invalidate the answer.
6. Candidate should sign in the Question paper and OMR sheet.
7. Candidate should hand over the question paper and OMR sheet to the invigilator before leaving the examination hall.

Signature of the Candidate

Sl.No	Questions
1.	**Jigs are used for** a. holding the work piece b. holding the tool c. holding the job and guiding the tool d. none of the above
2.	**Core drill is used** a. as the pilot drill for larger holes b. for finishing the existing hole c. enlarging the existing hole d. for deburring purpose
3.	**Feeler gauge is used for** a. checking the radius b. Check the gap between the mating parts c. To check an angle d. None of the above
4.	**Select the taper calculation formula for tailstock set over method.** a. $(D-d)/l$ b. $(D-d)/2l$ c. $((D-d)/2l)*L$ d. $(D-d)/l*L$
5.	**Which of the following is not a milling operation?** a. Face milling b. Straddle milling c. Thread milling d. Milling arbor
6.	**Which of the following term is not related to gear** a. Addendum b. Dedendum c. Pitch circle diameter d. Multi start
7.	**Shaping is the process of generating** a. round surface b. irregular surface c. flat surface d. conical surface
8.	**Which of the following is not used as shaper mechanism** a. Crank & slotted lever b. Hydraulic mechanism c. Whitworth mechanism d. Ball screw
9.	**Morse taper is used for** a. self holding applications b. self releasing applications c. permanent fixing d. none of the above.
10.	**Drilling is the process of** a. making a hole with a punch b. making a hole using a drill bit c. finishing a hole d. Enlarging a hole.

11.	**Taping is the process of** a. cutting an internal thread in a lathe b. making an internal thread using a tap c. making a thread by milling d. making a thread using a die.
12.	**Lead of a thread is the** a. distance between two consecutive threads b. distance advanced per revolution of the nut c. total length of the thread d. pitch diameter of the thread.
13.	**Lead of the double start thread is 4mm. Then the pitch of the thread is** a. 8mm b. 4mm c. 2mm d. 1mm
14.	**Angle of a metric thread is** a. 45° b. 90° c. 60° d. 55°
15.	**Least count of the micrometer is** a. pitch of the screw / number of thimble divisions b. number of thimble divisions / pitch of the screw c. 2* pitch of the screw / number of thimble divisions d. none of the above
16.	**Least count of the Vernier calliper with 49 MSD is equal to 50 VSD is** a. 0.05 b. 0.01 c. 0.04 d. 0.02
17.	**Least count of a Vernier micrometer is** a. 0.005 b. 0.001 c. 0.004 d. 0.02
18.	**Standard lip angle of a drill bit is** a. 100 b. 118 c. 90 d. 60.
19.	**Cutting speed permitted for a particular work is 62.8 m/minute using a cutter diameter of 100mm, the RPM of the cutter will be** a. 160 b. 200 c. 500 d. 100
20.	**Cutting feed given for a 4 lipped milling cutter is 50 mm/minute and the rpm of the cutter is 500. The feed per tooth is** 0.05 mm b. 0.025 mm c. 0.1 mm d. 0.01mm

21	**Standard cutting speed for HSS-MS combination is** a. 18-25m/s b. 30-50m/s c. 60m/s d. Above 100m/s
22	**Select the appropriate machining process to get three triangle surface finish.** a. Turning b. Milling c. Grinding d. Drilling
23	**Reaming is the process of finishing a hole by using** a. Single point tool b. Reamer c. Drill d. End mill
24	**When setting a round job the total dial indicator reading is 0.2 mm then the eccentricity will be** a. 0.2 mm b. 0.1 mm c.0.05mm d. 0.01mm
25	**Which of the following is a non-conventional machining process** a. Milling b. Turning c. EDM d. Grinding
26.	**Mass of a material is 50 grams and its volume is 25cc then the density is** a. 0.5 gram/cc b. 2.0 gram/cc c. 2.5 gram/cc d. 3.0 gram/cc
27.	**In a right angle triangle, lengths of orthogonal sides are 3 and 4 units. Length of third side will be** a. 8 b. 5 c. 6 d. 4
28.	**Maximum size of square which can be taken from a circle of diameter 28.2 mm is** a. 20 mm b. 18 mm c. 25 mm d. 15 mm
29	**Which of the following is not a cutting tool material?** a. HSS b. Tungsten Carbide c. Ceramic d. Copper
30	**Function of a fixture is** a. Holding the job in any position b. Holding the job with a reference c. Holding the job and guiding the tool d. Guiding the tool.

31.	Lapping is the process for a. Correcting the size b. Generating flatness c. Removing tool mark d. None of the above
32.	**18-4-1 denote the percentage composition of Tungsten, Chromium and Vanadium respectively of** a. Stainless Steel b. HSS c. Carbide d. Mild Steel.
33.	**Cutting speed is the** a. speed at which the tool travels over the job. b. feed movement of the table. c. rotation of the spindle. d. none of the above.
34.	**Cutting speed in cylindrical grinding operation is** a. peripheral speed of the grinding wheel b. peripheral speed of the job c. sum of the peripheral speed of wheel and job d. feed movement of the axis.
35.	**Area of rectangle with sides 'a' and '2a' is** a. $2a^2$ b. $2a$ c. a^2 d. $4a^2$
36.	**A47K4V denotes the specification of** a. Single point cutting tool b. Milling cutter c. Grinding Wheel d. Diamond tool
37.	**Perimeter of a triangle whose sides are 10, 5, 4 units is** a. 19 b. 14 c. 200 d. 20
38.	**A clock shows 3Hours 15minutes. The angle between hour and minute hand is** a. 0 degree b. 15 degree c. 7.5 degree d. 30 degree
39.	**Work hardening is the property of increasing hardness by** a. Heat treatment b. mechanical work c. Chemical treatment d. None of the above
40.	**Which of the following tool material is suitable for carbon steel machining at high speed** a. HSS b. High Carbon steel c. Diamond d. CBN

41.	**H7- g6 combination specifies** a. Clearance fit b. Transition fit c. Interference fit d. None of the above
42.	**4H denotes** a. Precision tolerance b. Thread tolerance c. Gear tolerance d. none of the above
43	**Spot facing is the process of making** a. right angle surface to the hole b. finishing a hole c. chamfering a hole d. an angle surface the hole.
44	**In an upmilling process, feed direction of the tool is** a. opposite to its rotation b. same direction to the rotation c. no feed movement d. none of the above.
45.	**Angle of a Whitworth thread is** a. 60 degree b. 55 degree c. 27 degree d. 29 degree
46.	**For tapping an M8 coarse thread the hole diameter will be** a. 6.6 mm b. 7.6 mm c. 5.8 mm d. 8.0 mm
47.	**Boring is a process of** a. enlarging a hole by a single point tool b. finishing a hole using a reamer c. enlarging a hole by drill bit. d. enlarging a hole by an end mill.
48.	**Which of the following is a conventional machining process** a. EDM b. Chemical Milling c. Grinding d. EBM
49.	**Purpose of cobalt content in HSS is to increase** a. hot hardness & wear resistance. b. toughness. c. malleability. d. ductility.
50.	**Counter sinking is a process to make** a. conical shaped enlargement for seating counter sink screw. b. to make counter bore. c. enlarging a hole. d. hole finishing.

51.	**One micrometer is** a. 0.001 mm b. 0.01 mm c. 0.1 mm d. 1.0 mm
52.	**1 Litre is** a. 10,000 cc b. 100 cc c. 1000 cc d. 150 cc
53.	**Ultrasonic machining is used for machining of** a. Aluminium b. Glass c. Copper d. Teflon
54.	**Electrical Discharge Machining is suitable for** a. Hardened steel b. Ceramic material c. Glass d. Teflon
55.	**Hardening is the process** a. to decrease hardness b. to increase ductility c. to relieve stress d. to increase hardness
56.	**Pickling is the process for** a. stress relieving b. hardening non-ferrous materials c. removal of surface oxides and scales d. none of the above
57.	**Broaching is a process for making a fixed contour using** a. special tool. b. milling cutter c. grinding wheel d. boring tool
58.	**Total internal angle of a pentagon is** a. 360 deg b. 540 deg c. 720 deg d. 600 deg
59.	**Main function of a cutting fluid is** a. to protect the operator b. to protect the machine c. to carry away the tool tip temperature d. none of the above
60.	**Tool life is defined as** a. Number of pieces completed per hour. b. Duration of effective cutting time before regrinding c. Total duration in use d. Time taken for completion of work