## VSSC Exam 16th and 17th Sept 2026

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| Participant ID | |
| Participant Name | |
| Test Center Name | |
| Test Date | 16/09/2026 |
| Test Time | 8:30 AM - 10:00 AM |
| Subject | 1534 Technician B Machinist |

Section : **Technical Domain**

**Q.1** **In industry-standard CNC turning centres, which method is most reliable for identifying the positive direction of the Z-axis according to axes convention?**

**Ans**
✗ A. The positive Z-axis direction is always upwards, regardless of spindle orientation.
✓ B. The positive Z-axis direction is away from the spindle face, along the spindle axis.
✗ C. The positive Z-axis direction changes based on the tool's orientation.
✗ D. The positive Z-axis direction is towards the spindle face, along the spindle axis.

Question ID : **4410092254565**
Option 1 ID : **4410098869254**
Option 2 ID : **4410098869255**
Option 3 ID : **4410098869256**
Option 4 ID : **4410098869257**
Status : **Answered**
Chosen Option : **A**

**Q.2** **Which engineering standard defines the ISO system of tolerance zones?**

**Ans**
✗ A. ISO 9001 specifies internationally standardized limits, fits, deviations, and tolerance zones accurately.
✓ B. ISO 286 specifies internationally standardized limits, fits, deviations, and tolerance zones accurately.
✗ C. ISO 45001 specifies internationally standardized limits, fits, deviations, and tolerance zones accurately.
✗ D. ISO 14001 specifies internationally standardized limits, fits, deviations, and tolerance zones accurately.

Question ID : **4410092254160**
Option 1 ID : **4410098867715**
Option 2 ID : **4410098867714**
Option 3 ID : **4410098867717**
Option 4 ID : **4410098867716**
Status : **Answered**
Chosen Option : **D**

Q.3 **A machinist needs to produce a short, gradual taper on a lathe without using special attachments or offsetting the tailstock. Which taper-turning method is most suitable?**

Ans
- ✗ A. Using the form tool method for steep taper production
- ✗ B. Employing the tailstock offset method for taper cutting
- ✗ C. Applying the taper attachment for parallel taper machining
- ✓ D. Using the compound slide method for taper turning

Question ID : **4410092254717**
Option 1 ID : **4410098869884**
Option 2 ID : **4410098869883**
Option 3 ID : **4410098869885**
Option 4 ID : **4410098869882**
Status : **Answered**
Chosen Option : **A**

Q.4 **Which principle allows the slotter machine to produce accurate slots?**

Ans
- ✗ A. Oscillating movement of the work table during cutting
- ✗ B. Continuous rotary motion of the cutting tool
- ✓ C. Precise linear motion of the ram and tool
- ✗ D. Intermittent vibration of the tool head

Question ID : **4410092254600**
Option 1 ID : **4410098869396**
Option 2 ID : **4410098869395**
Option 3 ID : **4410098869394**
Option 4 ID : **4410098869397**
Status : **Answered**
Chosen Option : **C**

**Q.5** **A machinist is grinding a high-speed steel end mill and must select suitable cutting parameters to prevent thermal damage. Given the following options, which combination of wheel speed and feed is most appropriate to achieve a fine surface finish without causing excessive heat?**

**Ans**

✗ A. High wheel speed with high feed

✗ B. Moderate wheel speed with high feed

✗ C. Low wheel speed with high feed

✓ D. Moderate wheel speed with low feed

Question ID : **4410092254336**
Option 1 ID : **4410098868428**
Option 2 ID : **4410098868426**
Option 3 ID : **4410098868429**
Option 4 ID : **4410098868427**
Status : **Answered**
Chosen Option : **D**

**Q.6** **If you change 5% to a decimal, the value obtained is:**

**Ans**

✗ A. 0.50

✗ B. 0.15

✓ C. 0.05

✗ D. 0.55

Question ID : **4410092254135**
Option 1 ID : **4410098867616**
Option 2 ID : **4410098867617**
Option 3 ID : **4410098867614**
Option 4 ID : **4410098867615**
Status : **Answered**
Chosen Option : **C**

Q.7 **A machinist is measuring a standard metric external thread to ensure the assembly fits properly. If the major diameter is 16 mm and the minor diameter is 14 mm, which measurement technique provides the most reliable value for the pitch diameter?**

Ans
- ✗ A. Using an optical comparator for thread profile
- ✗ B. Measuring the crest with a vernier caliper
- ✗ C. Measuring the root with a depth gauge
- ✓ D. Using a set of standard thread wires and a micrometer

Question ID : **4410092254349**
Option 1 ID : **4410098868479**
Option 2 ID : **4410098868481**
Option 3 ID : **4410098868480**
Option 4 ID : **4410098868478**
Status : **Answered**
Chosen Option : **A**

Q.8 **एक मशीनिस्ट एक ऐसा शैफ्ट बना रहा है जिसे एक विशिष्ट स्थितिक सहिष्णुता (positional tolerance) वाले एक छिद्र में फिट होना है। यह सुनिश्चित करने के लिए कि शैफ्ट का केंद्र, डेटम अक्ष के सापेक्ष एक निश्चित व्यास वाले बेलन के भीतर रहे, निम्न में से कौन-सी ज्यामितीय सहिष्णुता अनुप्रयुक्त की जानी चाहिए?**

Ans
- ✓ A. स्थितिक सहिष्णुता (Positional tolerance)
- ✗ B. लंबता सहिष्णुता (Perpendicularity tolerance)
- ✗ C. वृत्तीयता सहिष्णुता (Circularity tolerance)
- ✗ D. संकेन्द्रता सहिष्णुता (Concentricity tolerance)

Question ID : **4410092254326**
Option 1 ID : **4410098868387**
Option 2 ID : **4410098868386**
Option 3 ID : **4410098868388**
Option 4 ID : **4410098868389**
Status : **Answered**
Chosen Option : **A**

**Q.9** **When performing milling operations that require changing the height of the workpiece relative to the rotating cutter, which milling machine component is adjusted to provide this vertical movement?**

**Ans**

✗ A. Base

✗ B. Column

✗ C. Spindle

✓ D. Knee

Question ID : **4410092254703**
Option 1 ID : **4410098869827**
Option 2 ID : **4410098869826**
Option 3 ID : **4410098869828**
Option 4 ID : **4410098869829**
Status : **Answered**
Chosen Option : **D**

**Q.10** **Which cutter material provides superior wear resistance during high-speed angular milling?**

**Ans**

✗ A. Mild steel cutters maintain hardness effectively under elevated cutting temperature conditions during machining.

✗ B. Brass cutters maintain hardness effectively under elevated cutting temperature conditions during machining.

✗ C. Cast iron cutters maintain hardness effectively under elevated cutting temperature conditions during machining.

✓ D. Carbide cutters maintain hardness effectively under elevated cutting temperature conditions during machining.

Question ID : **4410092254173**
Option 1 ID : **4410098867767**
Option 2 ID : **4410098867769**
Option 3 ID : **4410098867768**
Option 4 ID : **4410098867766**
Status : **Answered**
Chosen Option : **D**

Q.11 **During the grinding of a cylindrical milling cutter, a machinist finds the specification reads: 60 mm diameter, 120 mm length, 10 teeth. What specification detail should be prioritized to ensure the cutter fits the intended machine spindle?**

Ans
- ✗ A. Length of the cutter
- ✓ B. Bore diameter of the cutter
- ✗ C. Number of teeth on the cutter
- ✗ D. Diameter of the cutter

Question ID : **4410092254332**
Option 1 ID : **4410098868413**
Option 2 ID : **4410098868410**
Option 3 ID : **4410098868412**
Option 4 ID : **4410098868411**
Status : **Answered**
Chosen Option : **B**

Q.12 **A fabrication frame has sides measuring 15 m and 20 m. Determine the diagonal support length.**

Ans
- ✗ A. 30 m
- ✗ B. 28 m
- ✗ C. 24 m
- ✓ D. 25 m

Question ID : **4410092254140**
Option 1 ID : **4410098867635**
Option 2 ID : **4410098867636**
Option 3 ID : **4410098867637**
Option 4 ID : **4410098867634**
Status : **Answered**
Chosen Option : **D**

**Q.13** **A ladder is placed against a wall. The foot of the ladder is 9 m from the wall, and the ladder touches the wall at a height of 12 m. What is the length of the ladder?**

**Ans**

✗ A. 16 m

✓ B. 15 m

✗ C. 13 m

✗ D. 14 m

Question ID : **4410092254138**
Option 1 ID : **4410098867627**
Option 2 ID : **4410098867629**
Option 3 ID : **4410098867626**
Option 4 ID : **4410098867628**
Status : **Answered**
Chosen Option : **B**

**Q.14** **Which statement best distinguishes deviation from tolerance?**

**Ans**

✗ A. Deviation measures inspection accuracy whereas tolerance measures algebraic difference from basic size accurately.

✗ B. Deviation measures machining error whereas tolerance measures algebraic difference from basic size accurately.

✓ C. Deviation measures algebraic difference from basic size whereas tolerance measures permissible size variation.

✗ D. Deviation measures permissible size variation whereas tolerance measures algebraic difference from basic size.

Question ID : **4410092254158**
Option 1 ID : **4410098867709**
Option 2 ID : **4410098867708**
Option 3 ID : **4410098867706**
Option 4 ID : **4410098867707**
Status : **Answered**
Chosen Option : **A**

**Q.15** **In machining operations, why is the application of coolant considered essential for both the tool and the workpiece during prolonged cutting tasks?**

**Ans**

✗ A. Coolant enhances the shine of the workpiece after machining

✗ B. Coolant increases machine speed for faster production

✓ C. Coolant helps maintain temperature stability and reduces wear

✗ D. Coolant is mainly used to improve surface roughness

Question ID : **4410092254675**
Option 1 ID : **4410098869715**
Option 2 ID : **4410098869716**
Option 3 ID : **4410098869717**
Option 4 ID : **4410098869714**
Status : **Answered**
Chosen Option : **C**

**Q.16** **A machinist is setting up a Computer Numerical Control (CNC) turn centre and needs to program a facing operation. Along which axis will the cutting tool primarily move during the cut?**

**Ans**

✓ A. The X axis will be used to move the tool during a facing operation

✗ B. The Y axis will be used to move the tool during a facing operation

✗ C. The Z axis will be used to move the tool during a facing operation

✗ D. The C axis will be used to move the tool during a facing operation

Question ID : **4410092254570**
Option 1 ID : **4410098869276**
Option 2 ID : **4410098869277**
Option 3 ID : **4410098869274**
Option 4 ID : **4410098869275**
Status : **Answered**
Chosen Option : **A**

Q.17 निरंतर प्रचालन के दौरान सुचारू रूप से चिप हटाने को सुनिश्चित करने के लिए कौन-सा CNC मशीन विनिर्देश सर्वाधिक प्रासंगिक है?

Ans
✗ A. कूलेंट टैंक कैपेसिटी (Coolant tank capacity)
✗ B. टूल मैगजीन कैपेसिटी (Tool magazine capacity)
✗ C. स्पिंडल मोटर पावर (Spindle motor power)
✓ D. चिप कन्वेयर टाइप (Chip conveyor type)

Question ID : **4410092254556**
Option 1 ID : **4410098869219**
Option 2 ID : **4410098869218**
Option 3 ID : **4410098869221**
Option 4 ID : **4410098869220**
Status : **Answered**
Chosen Option : **D**

Q.18 हेवी-ड्यूटी मशीनिंग के लिए दो मिलिंग मशीनों की तुलना करते समय, कौन-सा विनिर्देश अपेक्षाकृत कठोर सामग्री को काटने की मशीन की क्षमता को सर्वोत्तम रूप से दर्शाता है?

Ans
✗ A. एकाधिक स्पिंडल स्पीड और तीव्र चंक्रमण दर
✗ B. परिशुद्धता नियंत्रण और परिवर्ती शीतलक प्रवाह
✓ C. उच्च मोटर शक्ति और सुदृढ़ स्पिंडल डिजाइन
✗ D. दीर्घ टेबल आमाप और विस्तृत प्रभरण सीमा

Question ID : **4410092254714**
Option 1 ID : **4410098869873**
Option 2 ID : **4410098869872**
Option 3 ID : **4410098869871**
Option 4 ID : **4410098869870**
Status : **Answered**
Chosen Option : **C**

**Q.19** **While setting up a tool and cutter grinder for sharpening a side and face cutter, a machinist needs to ensure accurate axial alignment. Which part is most critical for maintaining this alignment throughout the grinding operation?**

**Ans**

✔ A. The workhead spindle and its bearings

✘ B. The work table stop mechanism

✘ C. The wheel guard assembly

✘ D. The cross-slide handwheel control

Question ID : **4410092254329**
Option 1 ID : **4410098868401**
Option 2 ID : **4410098868400**
Option 3 ID : **4410098868399**
Option 4 ID : **4410098868398**
Status : **Answered**
Chosen Option : **D**

**Q.20** **What happens when friction is undesirable?**

**Ans**

✘ A. It increases machine efficiency

✘ B. It reduces weight of components

✔ C. It causes loss of energy in the form of heat

✘ D. It prevents motion completely

Question ID : **4410091454012**
Option 1 ID : **4410095744349**
Option 2 ID : **4410095744352**
Option 3 ID : **4410095744350**
Option 4 ID : **4410095744351**
Status : **Answered**
Chosen Option : **C**

**Q.21** **An engineering drawing specifies a screw thread with a major diameter of 16 mm and a minor diameter of 14 mm. During inspection, a machinist is asked to confirm the major diameter on the manufactured screw. Which part of the thread profile should the machinist measure to verify the major diameter?**

**Ans**

✗ A. The width of the thread groove at the root

✓ B. The distance across the crests of the thread

✗ C. The distance across the roots of the thread

✗ D. The distance between adjacent threads

Question ID : **4410092254346**
Option 1 ID : **4410098868466**
Option 2 ID : **4410098868468**
Option 3 ID : **4410098868469**
Option 4 ID : **4410098868467**
Status : **Answered**
Chosen Option : **D**

**Q.22** **When integrating a new CNC turn centre in a production line, why must feedback devices be calibrated according to industry standards before starting regular machining operations?**

**Ans**

✗ A. Calibration reduces the machine cycle time but does not affect part quality.

✗ B. Calibration is required only for initial machine testing, not for regular operations.

✗ C. Calibrating feedback devices increases the spindle power for heavy cutting tasks.

✓ D. Proper calibration ensures accurate position feedback and prevents dimensional errors.

Question ID : **4410092254581**
Option 1 ID : **4410098869321**
Option 2 ID : **4410098869320**
Option 3 ID : **4410098869319**
Option 4 ID : **4410098869318**
Status : **Answered**
Chosen Option : **D**

**Q.23** **Which of the following is a curve traced out by a point moving in such a way that the product of its distances from two fixed lines at right angles to each other is a constant?**

**Ans**

✗ A. Simple Parabola

✓ B. Rectangular Hyperbola

✗ C. Ellipse

✗ D. Cubic Parabola

Question ID : **4410091453775**
Option 1 ID : **4410095743406**
Option 2 ID : **4410095743408**
Option 3 ID : **4410095743405**
Option 4 ID : **4410095743407**
Status : **Answered**
Chosen Option : **C**

**Q.24** **A machinist is tasked with producing a component with two parallel faces spaced exactly 40 mm apart using a horizontal milling machine. Which setup best achieves this dimension in a single pass using straddle milling?**

**Ans**

✗ A. Use a single face mill and reposition the workpiece after each cut

✓ B. Mount two side and face cutters spaced 40 mm apart using suitable spacing collars

✗ C. Mount two plain milling cutters on the arbor and adjust by eye for 40 mm spacing

✗ D. Use a form cutter designed for 40 mm width and make one pass

Question ID : **4410092254309**
Option 1 ID : **4410098868318**
Option 2 ID : **4410098868319**
Option 3 ID : **4410098868320**
Option 4 ID : **4410098868321**
Status : **Answered**
Chosen Option : **B**

Q.25 **A machinist is tasked with producing a small series of parts using a dedicated jig. The job requires a quick turnaround and minimal setup time. After completion, it is found that the use of the jig actually delayed the process instead of speeding it up. What is the most likely disadvantage encountered?**

Ans
- ✗ A. Reduced operator fatigue during machining
- ✗ B. Improved repeatability in mass production
- ✗ C. Increased risk of accidental damage
- ✓ D. Long setup time for small batch production

Question ID : **4410092254321**
Option 1 ID : **4410098868368**
Option 2 ID : **4410098868367**
Option 3 ID : **4410098868369**
Option 4 ID : **4410098868366**
Status : **Answered**
Chosen Option : **B**

Q.26 **दो कुशल वेल्डरों को 10 वेल्डेड पार्ट्स बनाने में चार दिन लगते हैं। ऐसे आठ वेल्डरों को 40 पार्ट्स बनाने में कितना समय लगेगा?**

Ans
- ✗ A. 6 दिन
- ✗ B. 2 दिन
- ✗ C. 8 दिन
- ✓ D. 4 दिन

Question ID : **4410091443731**
Option 1 ID : **4410095703735**
Option 2 ID : **4410095703733**
Option 3 ID : **4410095703736**
Option 4 ID : **4410095703734**
Status : **Answered**
Chosen Option : **D**

**Q.27** **Which component determines the width of the tolerance zone?**

**Ans**

✗ A. Fundamental deviation specifies tolerance zone width according to ISO engineering standards accurately.

✗ B. Upper deviation specifies tolerance zone width according to ISO engineering standards accurately.

✓ C. International tolerance grade specifies tolerance zone width according to ISO engineering standards accurately.

✗ D. Lower deviation specifies tolerance zone width according to ISO engineering standards accurately.

Question ID : **4410092254151**
Option 1 ID : **4410098867679**
Option 2 ID : **4410098867680**
Option 3 ID : **4410098867678**
Option 4 ID : **4410098867681**
Status : **Answered**
Chosen Option : **C**

**Q.28** **If a feedback device in a CNC system is faulty, what is a likely result during operation?**

**Ans**

✗ A. The machine will select the best cutting speed automatically

✓ B. The machine may produce parts with dimensional errors

✗ C. The cutting tool will automatically sharpen itself

✗ D. The operator will get real-time maintenance reminders

Question ID : **4410092254579**
Option 1 ID : **4410098869310**
Option 2 ID : **4410098869311**
Option 3 ID : **4410098869312**
Option 4 ID : **4410098869313**
Status : **Answered**
Chosen Option : **B**

**Q.29** **A piece of ribbon 5/6 m long is cut into two halves, then each piece is equal to:**

**Ans**
- ✗ A. 6/5 m
- ✓ B. 5/12 m
- ✗ C. 1/6 m
- ✗ D. 5/3 m

Question ID : **4410091281322**
Option 1 ID : **4410095057139**
Option 2 ID : **4410095057138**
Option 3 ID : **4410095057141**
Option 4 ID : **4410095057140**
Status : **Answered**
Chosen Option : **B**

**Q.30** **Which formula correctly represents the lower limit of a shaft?**

**Ans**
- ✓ A. Basic size plus lower deviation of shaft equals lower limit according to ISO standards.
- ✗ B. Basic size minus lower deviation of shaft equals lower limit according to ISO standards.
- ✗ C. Basic size plus upper deviation of shaft equals lower limit according to ISO standards.
- ✗ D. Basic size minus upper deviation of shaft equals lower limit according to ISO standards.

Question ID : **4410092254152**
Option 1 ID : **4410098867682**
Option 2 ID : **4410098867683**
Option 3 ID : **4410098867684**
Option 4 ID : **4410098867685**
Status : **Answered**
Chosen Option : **A**

**Q.31** **Limits of size consist of:**

**Ans**
- ✓ A. upper limit and lower limit specifying maximum and minimum permissible component dimensions accurately
- ✗ B. upper deviation and lower deviation specifying maximum and minimum permissible component dimensions accurately
- ✗ C. tolerance and allowance specifying maximum and minimum permissible component dimensions accurately
- ✗ D. basic size and actual size specifying maximum and minimum permissible component dimensions accurately

Question ID : **4410092254149**
Option 1 ID : **4410098867670**
Option 2 ID : **4410098867671**
Option 3 ID : **4410098867672**
Option 4 ID : **4410098867673**
Status : **Answered**
Chosen Option : **A**

**Q.32** **Which cutter material offers excellent performance for machining non-ferrous alloys?**

**Ans**

✗ A. Mild steel inserts provide superior wear resistance and surface finish during machining operations.

✗ B. Grey cast iron inserts provide superior wear resistance and surface finish during machining operations.

✗ C. Brass inserts provide superior wear resistance and surface finish during machining operations.

✓ D. Polycrystalline diamond inserts provide superior wear resistance and surface finish during machining.

Question ID : **4410092254170**
Option 1 ID : **4410098867755**
Option 2 ID : **4410098867756**
Option 3 ID : **4410098867757**
Option 4 ID : **4410098867754**
Status : **Answered**
Chosen Option : **D**

**Q.33** **Which feature of a milling machine allows the workpiece to be moved precisely in multiple directions during machining operations?**

**Ans**

✗ A. The rotating spindle holding the cutter

✗ B. The fixed base supporting the structure

✗ C. The stationary column providing vertical support

✓ D. The adjustable table guided along axes

Question ID : **4410092254692**
Option 1 ID : **4410098869784**
Option 2 ID : **4410098869783**
Option 3 ID : **4410098869782**
Option 4 ID : **4410098869785**
Status : **Answered**
Chosen Option : **D**

**Q.34** **If a CNC turning program requires the tool to move 30 mm away from the workpiece centre along the X axis, how is this commonly programmed?**

**Ans**

✔ A. By specifying an X value of plus 30 millimetres

✘ B. By specifying an X value of minus 30 millimetres

✘ C. By specifying a Y value of plus 30 millimetres

✘ D. By specifying a Z value of plus 30 millimetres

Question ID : **4410092254587**
Option 1 ID : **4410098869345**
Option 2 ID : **4410098869344**
Option 3 ID : **4410098869343**
Option 4 ID : **4410098869342**
Status : **Answered**
Chosen Option : **B**

**Q.35** **Which application correctly uses a continuous thin line in engineering drawing?**

**Ans**

✘ A. Visible outlines, extension, leader, projection and section lining require continuous thin line representation consistently.

✘ B. Cutting planes, extension, leader, projection and section lining require continuous thin line representation consistently.

✘ C. Hidden outlines, extension, leader, projection and section lining require continuous thin line representation consistently.

✔ D. Dimension, extension, leader, projection and section lining require continuous thin line representation consistently.

Question ID : **4410092254126**
Option 1 ID : **4410098867579**
Option 2 ID : **4410098867581**
Option 3 ID : **4410098867580**
Option 4 ID : **4410098867578**
Status : **Answered**
Chosen Option : **B**

**Q.36** What is a characteristic of opposite sides in a rectangle?

**Ans**
- ✗ A. They are unequal and intersecting
- ✓ B. They are equal and parallel
- ✗ C. They are curved
- ✗ D. They are perpendicular

Question ID : **4410091180379**
Option 1 ID : **4410094655656**
Option 2 ID : **4410094655655**
Option 3 ID : **4410094655657**
Option 4 ID : **4410094655654**
Status : **Answered**
Chosen Option : **B**

**Q.37** Which of the following best describes feedback in a CNC (Computer Numerical Control) turn centre?

**Ans**
- ✗ A. It is an alarm that stops the machine when a fault occurs
- ✗ B. It is a feature that increases spindle speed
- ✓ C. It is information sent from machine sensors to the controller
- ✗ D. It is a signal that powers the cutting tool

Question ID : **4410092254576**
Option 1 ID : **4410098869301**
Option 2 ID : **4410098869298**
Option 3 ID : **4410098869299**
Option 4 ID : **4410098869300**
Status : **Answered**
Chosen Option : **C**

**Q.38** During a drilling operation, which lubrication practice is most effective for reducing drill wear and producing a good surface finish?

**Ans**
- ✗ A. Applying lubricant only before drilling starts
- ✗ B. Applying lubricant only after the hole is completed
- ✗ C. Applying lubricant only to the drill shank
- ✓ D. Applying lubricant continuously to the drill–workpiece interface

Question ID : **4410092254686**
Option 1 ID : **4410098869759**
Option 2 ID : **4410098869760**
Option 3 ID : **4410098869761**
Option 4 ID : **4410098869758**
Status : **Answered**
Chosen Option : **D**

**Q.39** **If two workers can complete a task in 10 days, how many days will it take for four workers to complete the same task, assuming they all work at the same rate?**

**Ans**

✗ A. 10 days

✗ B. 7 days

✓ C. 5 days

✗ D. 8 days

Question ID : **4410092254136**
Option 1 ID : **4410098867619**
Option 2 ID : **4410098867618**
Option 3 ID : **4410098867621**
Option 4 ID : **4410098867620**
Status : **Answered**
Chosen Option : **C**

**Q.40** **A leader line should:**

**Ans**

✓ A. terminate in an arrow or dot touching the referenced feature

✗ B. never touch the feature it refers to in the given technical drawing

✗ C. be thick and bold for visibility

✗ D. be parallel to the drawing's border

Question ID : **4410091447911**
Option 1 ID : **4410095720141**
Option 2 ID : **4410095720142**
Option 3 ID : **4410095720140**
Option 4 ID : **4410095720143**
Status : **Answered**
Chosen Option : **D**

**Q.41** **How do feedback devices support safety in CNC (Computer Numerical Control) turn centres?**

**Ans**

✗ A. They increase the maximum tool life automatically

✗ B. They reduce the need for operator training and supervision

✗ C. They eliminate the requirement for regular maintenance checks

✓ D. They help prevent collisions by monitoring actual axis positions

Question ID : **4410092254578**
Option 1 ID : **4410098869306**
Option 2 ID : **4410098869307**
Option 3 ID : **4410098869308**
Option 4 ID : **4410098869309**
Status : **Answered**
Chosen Option : **C**

**Q.42** **Which formula correctly represents the lower limit of a hole?**

**Ans**

✗ A. Basic size minus lower deviation of hole equals lower limit according to ISO standards accurately.

✗ B. Basic size minus upper deviation of hole equals lower limit according to ISO standards accurately.

✗ C. Basic size plus upper deviation of hole equals lower limit according to ISO standards accurately.

✓ D. Basic size plus lower deviation of hole equals lower limit according to ISO standards accurately.

Question ID : **4410092254150**
Option 1 ID : **4410098867675**
Option 2 ID : **4410098867677**
Option 3 ID : **4410098867676**
Option 4 ID : **4410098867674**
Status : **Answered**
Chosen Option : **A**

**Q.43** **Which of the following statements about the frictional force of static friction is true?**

**Ans**

✓ A. It acts opposite to the direction of impending motion.

✗ B. It acts parallel and along the applied external force.

✗ C. It acts perpendicular to the plane of contact.

✗ D. It acts in the direction of motion of the body.

Question ID : **4410091454028**
Option 1 ID : **4410095744415**
Option 2 ID : **4410095744416**
Option 3 ID : **4410095744414**
Option 4 ID : **4410095744413**
Status : **Answered**
Chosen Option : **A**

**Q.44** **Which component determines the position of the tolerance zone relative to zero line?**

**Ans**
✔ A. Fundamental deviation determines tolerance zone position independent of tolerance grade width accurately.

✘ B. Upper deviation determines tolerance zone position independent of tolerance grade width accurately.

✘ C. Actual deviation determines tolerance zone position independent of tolerance grade width accurately.

✘ D. Lower deviation determines tolerance zone position independent of tolerance grade width accurately.

Question ID : **4410092254157**
Option 1 ID : **4410098867702**
Option 2 ID : **4410098867703**
Option 3 ID : **4410098867705**
Option 4 ID : **4410098867704**
Status : **Answered**
Chosen Option : **C**

**Q.45** **If a machinist needs to adjust the lateral (crosswise) position of the milling table to accurately align the workpiece with the cutting tool, which milling machine component should be adjusted?**

**Ans**
✘ A. Base

✔ B. Saddle

✘ C. Ram

✘ D. Knee

Question ID : **4410092254704**
Option 1 ID : **4410098869831**
Option 2 ID : **4410098869830**
Option 3 ID : **4410098869832**
Option 4 ID : **4410098869833**
Status : **Answered**
Chosen Option : **B**

**Q.46** **In orthographic projection, which planes are utilized?**

**Ans**

✗ A. XY plane only

✗ B. Isometric plane

✓ C. HP and VP

✗ D. Auxiliary plane only

Question ID : **4410091292073**
Option 1 ID : **4410095100377**
Option 2 ID : **4410095100378**
Option 3 ID : **4410095100376**
Option 4 ID : **4410095100379**
Status : **Answered**
Chosen Option : **C**

**Q.47** **Which of the following types of lubricant is generally preferred for high-speed machine parts because it can flow easily, reduce friction, and carry away heat?**

**Ans**

✗ A. Grease-based lubricant

✗ B. Water-based lubricant

✗ C. Solid lubricant

✓ D. Oil-based lubricant

Question ID : **4410092254690**
Option 1 ID : **4410098869777**
Option 2 ID : **4410098869776**
Option 3 ID : **4410098869775**
Option 4 ID : **4410098869774**
Status : **Answered**
Chosen Option : **D**

**Q.48** **An engineer inspects a lead screw with a length of 100 mm and finds 20 complete threads along its length. Based on standard thread terminology, which value correctly represents the pitch of this screw?**

**Ans**

✗ A. 4 mm

✗ B. 6 mm

✗ C. 2 mm

✓ D. 5 mm

Question ID : **4410092254342**
Option 1 ID : **4410098868450**
Option 2 ID : **4410098868451**
Option 3 ID : **4410098868452**
Option 4 ID : **4410098868453**
Status : **Answered**
Chosen Option : **D**

**Q.49 What is a non-functional dimension in a technical drawing?**

**Ans**

✗ A. A dimension always required for assembly operation

✓ B. A dimension not essential for the function of the part

✗ C. A dimension critical for performance of the machine

✗ D. A dimension used only for inspection of tolerances

Question ID : **4410091292921**
Option 1 ID : **4410095103781**
Option 2 ID : **4410095103780**
Option 3 ID : **4410095103783**
Option 4 ID : **4410095103782**
Status : **Answered**
Chosen Option : **B**

**Q.50 Which axis is commonly referred to as the 'X axis' in CNC (Computer Numerical Control) turn centres according to industry standards?**

**Ans**

✗ A. The X axis is the rotational axis around the spindle.

✗ B. The X axis is the axis moving along the length of the spindle.

✓ C. The X axis is the horizontal axis moving perpendicular to the spindle.

✗ D. The X axis is the vertical axis moving parallel to the spindle.

Question ID : **4410092254560**
Option 1 ID : **4410098869234**
Option 2 ID : **4410098869235**
Option 3 ID : **4410098869236**
Option 4 ID : **4410098869237**
Status : **Answered**
Chosen Option : **C**

**Q.51 A square steel platform has a diagonal of 56.57 cm. Determine the side length.**

**Ans**

✓ A. 40 cm

✗ B. 42 cm

✗ C. 45 cm

✗ D. 38 cm

Question ID : **4410092254139**
Option 1 ID : **4410098867630**
Option 2 ID : **4410098867631**
Option 3 ID : **4410098867633**
Option 4 ID : **4410098867632**
Status : **Answered**
Chosen Option : **D**

**Q.52** When identifying axes on a CNC turn centre, what does the X axis usually describe in terms of tool or workpiece movement?

**Ans**
- ✗ A. X axis describes movement at an angle to spindle
- ✓ B. X axis describes movement perpendicular to spindle
- ✗ C. X axis describes movement in a circular direction
- ✗ D. X axis describes movement parallel to spindle

Question ID : **4410092254564**
Option 1 ID : **4410098869250**
Option 2 ID : **4410098869253**
Option 3 ID : **4410098869251**
Option 4 ID : **4410098869252**
Status : **Answered**
Chosen Option : **B**

**Q.53** During high-speed machining of aluminium components, which type of cutting fluid is commonly selected because it provides excellent cooling and keeps the machining area clean with minimal oily residue?

**Ans**
- ✗ A. Dry compressed air
- ✗ B. Water-soluble coolant
- ✓ C. Synthetic fluid
- ✗ D. Straight oil coolant

Question ID : **4410092254678**
Option 1 ID : **4410098869727**
Option 2 ID : **4410098869726**
Option 3 ID : **4410098869728**
Option 4 ID : **4410098869729**
Status : **Answered**
Chosen Option : **C**

**Q.54** Which of the following types of line is used for outlines of adjacent parts?

**Ans**
- ✗ A. Chain thick line
- ✗ B. Continuous thin line
- ✓ C. Chain thin double-dashed line
- ✗ D. Dashed thick line

Question ID : **4410091453752**
Option 1 ID : **4410095743311**
Option 2 ID : **4410095743314**
Option 3 ID : **4410095743312**
Option 4 ID : **4410095743313**
Status : **Answered**
Chosen Option : **D**

**Q.55** What is another name for a parallelogram?

**Ans**
- ✔ A. Rhomboid
- ✘ B. Square
- ✘ C. Trapezium
- ✘ D. Rectangle

Question ID : **4410091293183**
Option 1 ID : **4410095104837**
Option 2 ID : **4410095104839**
Option 3 ID : **4410095104838**
Option 4 ID : **4410095104836**
Status : **Answered**
Chosen Option : **A**

**Q.56** Which axis would you check to ensure correct tool approach distance from the workpiece centre in a CNC turn centre?

**Ans**
- ✘ A. Check the Y-axis for correct tool approach distance
- ✔ B. Check the X-axis for correct tool approach distance
- ✘ C. Check the C-axis for correct tool approach distance
- ✘ D. Check the Z-axis for correct tool approach distance

Question ID : **4410092254591**
Option 1 ID : **4410098869358**
Option 2 ID : **4410098869359**
Option 3 ID : **4410098869361**
Option 4 ID : **4410098869360**
Status : **Answered**
Chosen Option : **D**

**Q.57** A small manufacturer wants to improve productivity and reduce overall production costs. Which factor best explains how jigs and fixtures contribute to these business goals?

**Ans**
- ✘ A. They maximize tool wear by increasing cutting forces
- ✘ B. They ensure higher operator salaries by requiring specialized skills
- ✘ C. They standardize the use of expensive raw materials
- ✔ D. They minimize setup time and allow for quicker changeover between tasks

Question ID : **4410092254318**
Option 1 ID : **4410098868355**
Option 2 ID : **4410098868357**
Option 3 ID : **4410098868354**
Option 4 ID : **4410098868356**
Status : **Answered**
Chosen Option : **D**

**Q.58 What does CNC stand for in the context of machine tools?**

**Ans**

✗ A. Central Numeric Command

✗ B. Computer Navigation Control

✗ C. Computer Number Centre

✓ D. Computer Numerical Control

Question ID : **4410092254553**
Option 1 ID : **4410098869206**
Option 2 ID : **4410098869207**
Option 3 ID : **4410098869208**
Option 4 ID : **4410098869209**
Status : **Answered**
Chosen Option : **D**

**Q.59 Why is a horizontal milling machine preferred for plain milling?**

**Ans**

✗ A. Arbor support increases spindle speed and minimizes deflection during heavy machining operations significantly.

✗ B. Arbor support decreases spindle speed and minimizes deflection during heavy machining operations significantly.

✓ C. Arbor support increases cutter rigidity and minimizes deflection during heavy machining operations significantly.

✗ D. Arbor support decreases cutter rigidity and minimizes deflection during heavy machining operations significantly.

Question ID : **4410092254169**
Option 1 ID : **4410098867752**
Option 2 ID : **4410098867753**
Option 3 ID : **4410098867750**
Option 4 ID : **4410098867751**
Status : **Answered**
Chosen Option : **C**

**Q.60** **In modern machining operations, which type of cutting fluid is widely preferred because it is free from mineral oil, leaves less residue, and is generally easier to maintain?**

**Ans**

✗ A. Straight oil coolant

✗ B. Kerosene

✗ C. Oil-based coolants

✓ D. Synthetic coolants

Question ID : **4410092254679**
Option 1 ID : **4410098869730**
Option 2 ID : **4410098869732**
Option 3 ID : **4410098869731**
Option 4 ID : **4410098869733**
Status : **Answered**
Chosen Option : **D**

**Q.61** **On a CNC turn centre, what happens if the Z axis is incorrectly referenced during program setup?**

**Ans**

✓ A. The tool may cut at wrong length positions on the workpiece

✗ B. The tool will increase its cutting speed automatically

✗ C. The coolant system will fail to start

✗ D. The spindle will stop rotating during operation

Question ID : **4410092254592**
Option 1 ID : **4410098869363**
Option 2 ID : **4410098869365**
Option 3 ID : **4410098869362**
Option 4 ID : **4410098869364**
Status : **Answered**
Chosen Option : **A**

**Q.62** **During the working of a slotter machine, what is the safest practice regarding the handling of workpieces and tools while the machine is in operation?**

**Ans**

✔ A. Keeping hands and tools away from moving parts during machine operation

✘ B. Cleaning chips while the machine is running

✘ C. Adjusting the workpiece while the machine is in running condition

✘ D. Lubricating parts during operation for smooth running of the machine

Question ID : **4410092254673**
Option 1 ID : **4410098869707**
Option 2 ID : **4410098869709**
Option 3 ID : **4410098869706**
Option 4 ID : **4410098869708**
Status : **Answered**
Chosen Option : **A**

**Q.63** **In CNC (Computer Numerical Control) machines, which axis is usually considered as the primary movement axis for turning operations?**

**Ans**

✘ A. Y axis is considered as the primary movement axis

✘ B. X axis is considered as the primary movement axis

✘ C. A axis is considered as the primary movement axis

✔ D. Z axis is considered as the primary movement axis

Question ID : **4410092254561**
Option 1 ID : **4410098869241**
Option 2 ID : **4410098869238**
Option 3 ID : **4410098869239**
Option 4 ID : **4410098869240**
Status : **Answered**
Chosen Option : **A**

**Q.64** **Which specification indicates the maximum workpiece diameter that can be machined on a CNC (Computer Numerical Control) turn centre?**

**Ans**

✘ A. Tool turret capacity

✘ B. Spindle speed range

✘ C. Feed rate range

✔ D. Swing over bed

Question ID : **4410092254552**
Option 1 ID : **4410098869204**
Option 2 ID : **4410098869202**
Option 3 ID : **4410098869203**
Option 4 ID : **4410098869205**
Status : **Answered**
Chosen Option : **D**

**Q.65** **Why is proper identification of CNC turn centre axes important when setting up a new job?**

**Ans**

✗ A. Axis identification only affects manual machine operations

✗ B. Proper axis labeling is only for software programming convenience

✓ C. Correct axis identification ensures accurate tool path and safety

✗ D. Incorrect axis identification increases tool life and speed

Question ID : **4410092254593**
Option 1 ID : **4410098869369**
Option 2 ID : **4410098869368**
Option 3 ID : **4410098869366**
Option 4 ID : **4410098869367**
Status : **Answered**
Chosen Option : **C**

**Q.66** **A company observes excessive tool wear and inconsistent surface finish when using a fixture in turning operations. Which principle should be reviewed first to solve this problem?**

**Ans**

✗ A. Using excessive rigidity in clamping force

✓ B. Ensuring proper support to minimize workpiece vibration

✗ C. Increasing cutting speed without changing fixture design

✗ D. Changing tool geometry for improved chip removal

Question ID : **4410092254313**
Option 1 ID : **4410098868336**
Option 2 ID : **4410098868334**
Option 3 ID : **4410098868337**
Option 4 ID : **4410098868335**
Status : **Answered**
Chosen Option : **D**

**Q.67** **A CNC (Computer Numerical Control) turn centre operator is tasked to machine a stepped shaft. The finished shaft requires three different diameters at precise locations along its length. To ensure accurate machining, which coordinate geometry approach should the operator primarily use to program the tool paths for each step?**

**Ans**

✗ A. Polar coordinate system for all diameters

✗ B. Randomly resetting the work coordinate zero

✗ C. Manual calculation without coordinate system

✓ D. Absolute (fixed origin) coordinate system for all steps

Question ID : **4410092254589**
Option 1 ID : **4410098869353**
Option 2 ID : **4410098869352**
Option 3 ID : **4410098869351**
Option 4 ID : **4410098869350**
Status : **Answered**
Chosen Option : **A**

**Q.68** **A machinist is asked to decide whether to use a jig and fixture setup for a one-time custom component. Which disadvantage should most influence the machinist's decision in this scenario?**

**Ans**

✗ A. Reduced dimensional accuracy in mass production

✓ B. The high initial cost for design and manufacture

✗ C. Increased tool wear during operation

✗ D. Less operator safety compared to manual methods

Question ID : **4410092254319**
Option 1 ID : **4410098868360**
Option 2 ID : **4410098868359**
Option 3 ID : **4410098868361**
Option 4 ID : **4410098868358**
Status : **Answered**
Chosen Option : **B**

**Q.69** On a typical Computer Numerical Control (CNC) turn centre, which axis controls the tool movement along the length of the workpiece?

**Ans**
- ✗ A. Y axis controls the length of the workpiece
- ✗ B. X axis controls the length of the workpiece
- ✗ C. C axis controls the length of the workpiece
- ✓ D. Z axis controls the length of the workpiece

Question ID : **4410092254568**
Option 1 ID : **4410098869267**
Option 2 ID : **4410098869268**
Option 3 ID : **4410098869269**
Option 4 ID : **4410098869266**
Status : **Answered**
Chosen Option : **D**

**Q.70** In CNC (Computer Numerical Control) machines, where is the zero point usually set for turning operations?

**Ans**
- ✗ A. Zero point is set at the middle of the tool post
- ✓ B. Zero point is set at the face of the workpiece
- ✗ C. Zero point is set at the foot of the machine
- ✗ D. Zero point is set at the tailstock end

Question ID : **4410092254583**
Option 1 ID : **4410098869328**
Option 2 ID : **4410098869326**
Option 3 ID : **4410098869329**
Option 4 ID : **4410098869327**
Status : **Answered**
Chosen Option : **B**

**Q.71** During maintenance of a slotter machine, what is the safest approach to handling the machine's moving parts?

**Ans**
- ✗ A. Informing coworkers about maintenance activities
- ✓ B. Locking out and tagging the machine before maintenance begins
- ✗ C. Relying on memory to avoid moving parts during maintenance
- ✗ D. Using protective covers on exposed parts during maintenance

Question ID : **4410092254674**
Option 1 ID : **4410098869712**
Option 2 ID : **4410098869711**
Option 3 ID : **4410098869710**
Option 4 ID : **4410098869713**
Status : **Answered**
Chosen Option : **D**

**Q.72** **The angle of friction is the angle between the _____.**

**Ans**

✗ A. normal reaction and limiting friction force

✗ B. angle bisectors of normal reaction and limiting friction force

✗ C. resultant of limiting friction force and normal reaction with the limiting friction force

✓ D. resultant of limiting friction force and normal reaction with the normal reaction

Question ID : **4410091227302**
Option 1 ID : **4410094842691**
Option 2 ID : **4410094842694**
Option 3 ID : **4410094842693**
Option 4 ID : **4410094842692**
Status : **Answered**
Chosen Option : **C**

**Q.73** **In the conventional wooden drawing board, ebony strips placed on the left edge are commonly used for which of the following instruments?**

**Ans**

✗ A. Scale

✗ B. Drafter

✓ C. T-square

✗ D. Divider

Question ID : **4410091429630**
Option 1 ID : **4410095646846**
Option 2 ID : **4410095646845**
Option 3 ID : **4410095646844**
Option 4 ID : **4410095646847**
Status : **Answered**
Chosen Option : **A**

**Q.74** **In turning operations with a lathe, why is it important to direct coolant flow specifically at the tool-workpiece interface rather than the general machine area?**

**Ans**

✗ A. Applying coolant to the chip tray removes waste material

✗ B. Lubricating only the tool shank prevents overheating

✓ C. Directing coolant at the interface reduces tool wear and improves finish

✗ D. Cooling the general machine area maintains overall temperature

Question ID : **4410092254684**
Option 1 ID : **4410098869750**
Option 2 ID : **4410098869753**
Option 3 ID : **4410098869752**
Option 4 ID : **4410098869751**
Status : **Answered**
Chosen Option : **C**

**Q.75** **When selecting a Computer Numerical Control (CNC) Turn Centre for precision aerospace components, which machine specification is most critical to ensure dimensional accuracy during high-speed operations?**

**Ans**

✔ A. Thermal stability of spindle and axes

✘ B. Availability of manual handwheel for jog mode

✘ C. Maximum tool magazine capacity

✘ D. Presence of automatic chip conveyor

Question ID : **4410092254558**
Option 1 ID : **4410098869226**
Option 2 ID : **4410098869227**
Option 3 ID : **4410098869228**
Option 4 ID : **4410098869229**
Status : **Answered**
Chosen Option : **C**

**Q.76** **In Engineering Drawing, A dashed thin line is used to represent**

**Ans**

✘ A. Reference line

✘ B. Grid dimension

✘ C. Visible outline

✔ D. Hidden Outline

Question ID : **4410091188582**
Option 1 ID : **4410094688608**
Option 2 ID : **4410094688607**
Option 3 ID : **4410094688606**
Option 4 ID : **4410094688609**
Status : **Answered**
Chosen Option : **D**

**Q.77** **In a maintenance scenario, a technician compares two screws: Screw A has a pitch of 1.5 mm and is double-start, while Screw B has a pitch of 1.5 mm and is single-start. Which statement correctly describes their leads?**

**Ans**

✗ A. Both have equal leads

✗ B. Screw A has half the lead of Screw B

✗ C. Screw B has double the lead of Screw A

✓ D. Screw A has double the lead of Screw B

Question ID : **4410092254353**
Option 1 ID : **4410098868497**
Option 2 ID : **4410098868496**
Option 3 ID : **4410098868494**
Option 4 ID : **4410098868495**
Status : **Answered**
Chosen Option : **D**

**Q.78** **When selecting a milling machine for industrial use, which specification primarily determines the maximum size of the workpiece that can be mounted and clamped on the machine?**

**Ans**

✗ A. Motor power

✓ B. Table length and width

✗ C. Spindle speed range

✗ D. Number of axes controls movement flexibility

Question ID : **4410092254712**
Option 1 ID : **4410098869864**
Option 2 ID : **4410098869862**
Option 3 ID : **4410098869865**
Option 4 ID : **4410098869863**
Status : **Answered**
Chosen Option : **D**

**Q.79** **A new machinist is tasked with grinding the primary clearance on a plain milling cutter. Accurate adjustment of the grinding wheel's position is essential. Which part of the cutter grinding machine must be primarily manipulated to achieve the correct clearance angle consistently?**

**Ans**

✗ A. The index plate mechanism

✗ B. The saddle slide arrangement

✓ C. The tilting wheel head bracket

✗ D. The coolant pump assembly

Question ID : **4410092254330**
Option 1 ID : **4410098868405**
Option 2 ID : **4410098868403**
Option 3 ID : **4410098868404**
Option 4 ID : **4410098868402**
Status : **Answered**
Chosen Option : **C**

**Q.80** **Actual size is measured after:**

**Ans**

✗ A. machine installation using calibrated measuring instruments under inspection procedures accurately

✗ B. preparation of engineering drawing using calibrated measuring instruments under inspection procedures accurately

✓ C. completion of manufacturing operations using calibrated measuring instruments under inspection procedures accurately

✗ D. tool design using calibrated measuring instruments under inspection procedures accurately

Question ID : **4410092254155**
Option 1 ID : **4410098867696**
Option 2 ID : **4410098867695**
Option 3 ID : **4410098867694**
Option 4 ID : **4410098867697**
Status : **Answered**
Chosen Option : **C**

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