

These are sample MCQs to indicate pattern, may or may not appear in examination

**University of Mumbai
Online Examination 2020**

Program: BE Mechanical Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: MEDLO5012 and Course Name: Machining Sciences and Tool Design

Time: 1hour

Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Which is most commonly used for measuring the metal cutting force dynamometer ?
Option A:	Mechanical strain gauge type
Option B:	Calorimeter
Option C:	Wattmeter
Option D:	Thermometer
Q2.	The forces required for metal cutting operation -----
Option A:	increase with increase in the feed of the tool and decreases with increase in the depth of cut
Option B:	decrease with increase in the feed of the tool and increases with increase in the depth of cut
Option C:	increase with increase in both the feed of the tool and the depth of cut
Option D:	decrease with increase in both the feed of the tool and the depth of cut
Q3.	The velocity of----- called as Shear velocity.
Option A:	Tool relative to the workpiece
Option B:	Chip relative to the tool
Option C:	Tool along the tool face
Option D:	Along shear plane
Q4.	In work-tool thermocouple the hot junction is produced between---
Option A:	Tool and chip
Option B:	Tool and workpiece
Option C:	Chip and workpiece
Option D:	Machine and tool

Q5.	Cutting temperature measurement method developed by Boothroyd uses –
Option A:	Pyrometer
Option B:	Photographing the side face of tool chip
Option C:	Pbs Cell
Option D:	Optical fibers
Q6.	Tungsten carbide partial bonded by
Option A:	Silica
Option B:	Charcoal
Option C:	Cobalt
Option D:	Iron
Q7.	Titanium carbide partial bonded by
Option A:	Silica
Option B:	Nickel-Molybdenum
Option C:	Cobalt
Option D:	Iron
Q8.	Built up edge is formed due to
Option A:	High coolant
Option B:	High friction
Option C:	Higher job hardness
Option D:	Very High cutting speed
Q9.	Built up edge resulted into
Option A:	high surface finish
Option B:	Sharp cutting edge
Option C:	Poor surface finish
Option D:	reduces cutting temperature
Q10.	Residual stresses are generated due to
Option A:	Smooth cutting
Option B:	easy flow of chip
Option C:	cleaning
Option D:	stresses in machining
Q11.	period of time in which the tool cuts effectively and efficiently called as

Option A:	Tool parameter
Option B:	Tool life
Option C:	Tool length
Option D:	Tool strength
Q12.	following signs does not indicate that the tool life is over
Option A:	Poor surface finish
Option B:	Overheating
Option C:	Spoiled cutting edge
Option D:	good surface finish
Q13.	following term does not express tool life
Option A:	machining time unit
Option B:	Volume of material removed
Option C:	Number of workpiece machined
Option D:	Hardness of tool
Q14.	following workpiece property does not effect on tool life
Option A:	Tensile strength
Option B:	Hardness
Option C:	Microstructure of material
Option D:	Electrical conductivity
Q15.	_____ does not considered in machining input parameter
Option A:	Cutting speed
Option B:	Feed
Option C:	Depth of cut
Option D:	Roughness
Q16.	As indexable inserts are also known as _____
Option A:	Singular tips
Option B:	Throwaway tips
Option C:	Welded tips
Option D:	Sharp tips
Q17.	In the _____, the back rake angle is the inclination angle (i) between the principal cutting edge and a line passing through the point of the tool parallel to the principal plane.
Option A:	ORS

Option B:	MRS
Option C:	NRS
Option D:	ASA
Q18.	Inserts can be used in which of the following cutting tool?
Option A:	grinder
Option B:	single point cutting tool
Option C:	Lapping tool
Option D:	Honing tool
Q19.	Which of the following parameter is related to the single point cutting tool?
Option A:	Helix angle
Option B:	groove angle
Option C:	Rake angle
Option D:	Pitch
Q20.	In ORS system of i - α - γ - γ_1 - C_e - λ - R , symbol C_e stands for ?
Option A:	cutting edge angle
Option B:	back rake angle
Option C:	relief angle
Option D:	shear angle
Q21.	Broaching of outside surface is called as?
Option A:	surface broaching
Option B:	internal broaching
Option C:	hole broaching
Option D:	Grinding
Q22.	Range of relief angle for flat form tool is?
Option A:	300-320 degree
Option B:	80-90 degree
Option C:	50-60 degree
Option D:	125-150 degree
Q23.	In milling cutter, The _____ can either be right handed or left handed.
Option A:	Shank
Option B:	Helix
Option C:	Shaft
Option D:	Arbor
Q24.	The linear distance from the cutting edge from one tooth to corresponding point on another tooth in broach is called as?
Option A:	Pitch
Option B:	Land

Option C:	Rake face
Option D:	Heel
Q25.	In milling cutter, the additional space provided behind the relieved land (primary relief) of a cutter to eliminate undesirable contact between the cutter and the workpiece is called as?
Option A:	Undercut
Option B:	Contour
Option C:	Groove
Option D:	Clearance