University of Mumbai

Examination 2020 under cluster 4 (PCE)

Program: BE Mechanical Engineering
Curriculum Scheme: Rev2016
Examination: Third Year Semester V
Course Code: MEDLO5013 and Course Name: Design of Jigs and Fixtures
Time: 1 hour Max. Marks: 50

==========

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

Q1.	The device which place the workpiece in the same position, in jig and fixture, cycle after cycle is called as
Option A:	Placing device
Option B:	Fixing device
Option C:	Locating device
Option D:	Positioning device
Q2.	The device which is used to remove workpiece from close-fitting locators, after the workpiece has been removed is called as
Option A:	Remover
Option B:	Ejector
Option C:	Escaper
Option D:	Blocker
Q3.	_____ holds the work piece securely in a jig or fixture against the cutting forces
Option A:	Locating device
Option B:	Clamping device
Option C:	Guiding device
Option D:	Indexing device
Q4.	Lathe mandrels are
Option A:	Jig
Option B:	Fixture
Option C:	Gauge
Option D:	Template
Q5.	Which of the following is the type of nonconventional clamping?
Option A:	Fusion clamping
Option B:	Electrostatic clamping
Option C:	Magnetic clamping
Option D:	Vacuum clamping
Q6.	The quickest clamping device is a
Option A:	wing nut
Option B:	knurled nut
Option C:	cam/eccentric
Option D:	conventional nut

Q7.	_____ are used where a heavy clamping force is required
Option A:	Hydraulic pistons
Option B:	Pneumatic pistons
Option C:	Vacuum pistons
Option D:	Electro-pneumatic pistons
Q8.	Vacuum clamping is used for _____ flat sheets.
Option A:	Thick
Option B:	Thin
Option C:	Heavy
Option D:	Small
Q9.	The supports should be located _____ to the clamping force.
Option A:	Opposite
Option B:	Same side
Option C:	Adjacent
Option D:	On
Q10.	Sandwich jigs are ideal for _____ parts which could bend.
Option A:	Thin
Option B:	Thick
Option C:	Hard
Option D:	Round
Q11.	Template jigs are _____ expensive and simplest type of jig.
Option A:	Least
Option B:	More
Option C:	Most
Option D:	Moderate
Q12.	When bushing are not there in jig plate, the whole jig plate is normally _____
Option A:	Hardened
Option B:	Softened
Option C:	Polished
Option D:	Lubricated
Q13.	Which jig is used for machining in more than one plane?
Option A:	Template jig
Option B:	Plate type jig
Option C:	Open type jig
Option D:	Box type jig
Q14.	Which jig can be used for several different work pieces and operations?
Option A:	Template jig
Option B:	Universal jig
Option C:	index jig
Option D:	Multi-station jig

Q15.	Milling Fixtures for horizontal machines should be able to bear torque in the _____ plane.
Option A:	Vertical
Option B:	Horizontal
Option C:	Lateral
Option D:	Transverse
Q16.	String milling operation is used to perform
Option A:	Milling of multiple workpieces arranged in one line
Option B:	To cut complicated profile on the workpiece
Option C:	To cut two perpendicular slots in one workpiece
Option D:	to cut a through hole
Q17.	The type of bearing used in indexing fixtures is,
Option A:	Roller Bearing
Option B:	Thrust bearing
Option C:	Radial Ball bearing
Option D:	Pedestal bearing
Q18.	The fixtures can be located on the machine table by
Option A:	setting block
Option B:	3-2-1 principal of location
Option C:	Tennons
Option D:	V-block
Q19.	In welding fixture _____must be provided below the line of welding to prevent the workpiece from getting welded to the base plate by the welding spatter.
Option A:	Holes
Option B:	Slots
Option C:	Spatter grooves
Option D:	Stopper
Q20.	Jaw chucks can be used to
Option A:	Hold the workpiece from its front face
Option B:	Hold the workpiece from its rear face
Option C:	Hold the regular shaped workpieces from their bore
Option D:	To balance the tool
Q21.	Spring collets are used to locate bars on
Option A:	Slotter
Option B:	General purpose lathe
Option C:	Grinding machine
Option D:	Capstan Lathe
Q22.	for boring operation on lathe machine using turning fixture, the pilot bush is
Option A:	not used
Option B:	used on the rear side of the workpiece
Option C:	used in front of the workpiece

Option D:	used to set the workpiece
Q23.	Balance weight in the Turning fixture is used to
Option A:	To balance the workpiece
Option B:	To balance the fixture
Option C:	To support the workpiece
Option D:	To clamp the workpiece
Q24.	Indexing facilitating accurate positioning of a part around its axis is called_____.
Option A:	Linear indexing
Option B:	Rotary indexing
Option C:	Angular indexing
Option D:	Axial indexing
Q25.	The indexing plate can be rotated about the central pivot and clamped in position with_____.
Option A:	Handle
Option B:	Nut
Option C:	Lock
Option D:	Hand knob

University of Mumbai

Examination 2020 under cluster 4 (PCE)

Program: BE Mechanical Engineering
Curriculum Scheme: Rev2016
Examination: Third Year Semester V
Course Code: MEDLO5013 and Course Name: Design of Jigs and Fixtures
Time: 1 hour Max. Marks: 50

==========

Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	C
Q2.	B
Q3.	B
Q4	B
Q5	A
Q6	C
Q7	A
Q8.	B
Q9.	A
Q10.	A
Q11.	A
Q12.	A
Q13.	D
Q14.	B
Q15.	A
Q16.	A
Q17.	B
Q18.	C
Q19.	C
Q20.	C
Q21.	D
Q22.	B
Q23.	B
Q24.	B
Q25.	D