

University of Mumbai
Online Examination 2020-21
Program: TE Automobile Engineering
Curriculum Scheme: Revised 2016
Examination: Third Year Semester V
Course Name: Design of Jigs and Fixtures
Sample question bank
Time: 1 hour Max. Marks: 50

No.	Question
Q1	A fixture does not,
Option A:	Locate the workpiece
Option B:	Holds the workpiece
Option C:	Position the workpiece
Option D:	Guide the tool
Q2	The following is a quick acting clamp,
Option A:	Cam operated clamp
Option B:	Hinged clamp
Option C:	Bridge clamp
Option D:	Edge clamp
Q3	Jigs are used in,
Option A:	Drilling
Option B:	Milling
Option C:	shaping
Option D:	CNC milling
Q4	Commonly used material for making locating and clamping devices is,
Option A:	Die steel
Option B:	High speed steel
Option C:	Low carbon steel
Option D:	High carbon steel
Q5	The following type of jig is used for machining in more than one plane,
Option A:	Template jig
Option B:	Box type jig
Option C:	Plate type jig
Option D:	Open type jig
Q6	Principle of _____ states that "In order to achieve the maximum accuracy in location the locating points should, therefore, be placed as far apart from one another as it is possible".
Option A:	Extreme positions
Option B:	Six point location
Option C:	Least points
Option D:	Mutually perpendicular planes
Q7	For grinding outside diameter of bushes----are used
Option A:	hydraulic collets
Option B:	pneumatic collets

Option C:	axial clamping mandrels
Option D:	nut and bolts
Q8	For reducing vibrations in fixtures
Option A:	balance weights are used
Option B:	more weights are used
Option C:	no weights are used
Option D:	very less weights are used
Q9	Which of the following is the type of bush?
Option A:	slip bush
Option B:	run bush
Option C:	radial bush
Option D:	gear bush
Q10	Which of the following are the most common type of bushings and are pressed interference fit in the bushing plates also referred to as jig plates?
Option A:	Press fit bushings
Option B:	loose bushing
Option C:	threaded bushes
Option D:	running fit bushing
Q11	Which of the following is the type of drilling jig in production tooling?
Option A:	tempered jigs
Option B:	hardened jigs
Option C:	trunnion jigs
Option D:	grounded jigs
Q12	In drill jig _____ are used to guide drills, reamers etc.
Option A:	screws
Option B:	bushes
Option C:	nuts
Option D:	clamps
Q13	Which clamping system is convenient for securing thin flat sheets which are vulnerable to distortion under heavy clamping force?
Option A:	hydraulic clamping
Option B:	manual clamping
Option C:	vacuum clamping
Option D:	screw clamping
Q14	The following holds the workpiece securely in a jig or fixture against the cutting forces
Option A:	Guiding device
Option B:	Clamping device
Option C:	Indexing device
Option D:	Locating device
Q15	The following type of jig is used to drill a series of the equidistant hole along a circle in production tooling,
Option A:	Pot type jig

Option B:	Index jig
Option C:	Plate type jig
Option D:	Open type jig
Q16	Which of the following are used to locate the workpiece from a tapered hole or shaft, and when applied in this manner are similar to location posts and pots,
Option A:	conical locators
Option B:	c washers
Option C:	captive clamps
Option D:	flat locators
Q17	Which of the following is a clamping device?
Option A:	bridge clamp
Option B:	diamond pin
Option C:	conical locator
Option D:	jack pin
Q18	_____ is said to exist when two locators are attempting to constrain one freedom from two location points,
Option A:	Conical location
Option B:	Redundant location
Option C:	partially nest location
Option D:	Nest location
Q19	Which fixtures are used for machining parts which must have machined details evenly spaced?
Option A:	Profile Fixture
Option B:	Duplex Fixture
Option C:	Indexing Fixture
Option D:	Reciprocating Fixture
Q20	Push fit refer to high precision is
Option A:	H7/f6
Option B:	H7/h6
Option C:	H7/p6
Option D:	H7/s6
Q21	Face plate fixtures are suitable to face
Option A:	at a time
Option B:	simultaneously
Option C:	continuous
Option D:	discontinuous
Q22	Which locator is best suitable for location of round shaped job in fixture
Option A:	pin type
Option B:	Vee type
Option C:	adjustable stop type
Option D:	Wedge type
Q23	The cheapest and most widely used material in jig and fixture is
Option A:	Mild steel

Option B:	carbon steel
Option C:	cast iron
Option D:	HSS
Q24	With the use of Jigs and fixture total cost of production,
Option A:	Increases
Option B:	Decreases
Option C:	Remains same
Option D:	Jigs and fixtures are not used in any production process
Q25	Function of drill bushes is
Option A:	holds the workpiece securely in a jig or fixture against the forces applied over it during on operation.
Option B:	helps a work piece to seat in proper position
Option C:	direct the tool to the correct position on the workpiece
Option D:	prevents denting of clamping area of workpiece.

