Vidyavardhini's College of Engineering and Technology

Program: **Mechanical Engineering** Curriculum Scheme: CBCGS (REV-2016)

Examination: TE Semester V

Course Code: MEDLO5013 Course Name: Design of Jigs and Fixture Time: 2 hour Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks. 2 Marks each
1	
1.	Clamping force should be in direction of cutting force
Option A:	Same
Option B:	Opposite
Option C:	Lateral
Option D:	Perpendicular
2.	Equalizer clamps are used for clamping of two components.
Option A:	Different
Option B:	Uneven
Option C:	Defect
Option D:	Uneven Surface
3.	Fool proofing arrangement avoids of workpiece
Option A:	Quality
Option B:	Proper loading
Option C:	Improper loading
Option D:	Productivity
4.	Diamond pins locator are used whenholes are to be located on the workpiece
Option A:	One
Option B:	Two
Option C:	Three
Option D:	Four
5.	Jigs and fixture body is generally made up of to absorb shocks and vibration
Option A:	Gun metal
Option B:	Aluminum
Option C:	Cast iron
Option D:	Mild steel
6.	Jigs are production tools used to

Option A:	Guide the tool
Option B:	Locate the workpiece
Option C:	Guide tool and locate workpiece
Option D:	Locate the tool
•	
7.	Interchangeability is not associated with
Option A:	Accuracy
Option B:	Quality
Option C:	Repeatability
Option D:	Rigidity
8.	String Milling fixture are normally used in
Option A:	High production
Option B:	Low production
Option C:	Batch production
Option D:	Single piece
9.	Machine vice can be called as
Option A:	Locating Device
Option B:	Resting Device
Option C:	Clamping Device
Option D:	Milling Fixture
10.	Below given is not the part of milling fixture
	m.
Option A:	Tennon
Option B:	Setting block
Option C:	T bolt
Option D:	Locator
11.	Jigs used to perform drilling multiple holes at different axis
Option A:	Open type jig
Option B:	Template jig
Option C:	Box jig
Option D:	Leaf jig
•	,, ,
12.	Bush used to drill the hole in the face at some distance from drill plate
Option A:	Special bush
Option B:	Headed bush
Option C:	Extended bush
Option D:	Renewable Bush
•	
13.	Fool proofing arrangement avoids of workpiece in a jig
Option A:	Quality
Option B:	Proper loading

Option C:	Improper loading
Option D:	Productivity
option 2.	
14.	Liner Bush has fit with the drill plate
Option A:	Interference
Option B:	Transition
Option C:	Clearance
Option D:	Running
15.	Bushes used to support the tool from bending or deflecting.
Option A:	Special bush
Option B:	Headed bush
Option C:	Extended bush
Option D:	Renewable Bush
16.	Which type of bush is permanently fixed to the jig body
Option A:	Headed bush
Option B:	Liner Bush
Option C:	Renewable Bush
Option D:	Slip Bush
17.	Jigs used for few components
Option A:	Open type jig
Option B:	Template jig
Option C:	Box jig
Option D:	Leaf jig
18.	Bush used for multiple operations at same
O::4: - :: A :	The ded beauti
Option A:	Headed bush Headless Bush
Option B:	Renewable Bush
Option C:	
Option D:	Slip Bush
19.	Bushes are generally made up of
Option A:	Medium Carbon
Option B:	High carbon steel
Option C:	Low carbon steel
Option D:	Stainless steel
20.	Bush used for high wear application
Option A:	Headed bush
Option B:	Headless Bush
Option C:	Renewable Bush
Option D:	Slip Bush

Q2.	Solve any Four Questions. 10 marks each
A	Categorize the use of various materials for different elements in Jigs and fixture.
В	List various clamping system. Select clamping system considering clamping is not possible on the top surface of the workpiece
С	Design a Jig for drilling two holes of 10 mm diameter on the given work piece
D	With neat sketches explain construction of Milling fixtures
E	Describe internal & External broaching fixtures