A=ANSN answer_description answer_ answer_ answer_ ostition wafers are Q Type of silicon wafers are A n-type, p-type A a-type, p-type Q Silicon Wafers are of the shape Q Silicon Wafers are of the shape A Heagonal A Heagonal A Square Q A Circle Q A Circl			question_explanat			
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QSilicon wafer is made up ofM1Asilicon nitride01Asilicon dioxide02Apure silicon13Asilicon monoxide04QDopant used for polyphenylene sulfide isM1AHCI01ANaCl02AAsF513AH2O04QULPA filter isM1AUltra Light Particulate Air01AUltra Light Particle Air02				-		
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A AsF5 1 3 A H2O 0 4 Q ULPA filter is M 1 A Ultra Light Particulate Air 0 1 A Ultra Light Particle Air 0 2				0		
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A Ultra Light Particulate Air O 1 Ultra Light Particle Air O 2				0		
A Ultra Light Particulate Air O 1 Ultra Light Particle Air O 2	Q	ULPA filter is		М	1	
A Ultra Light Particle Air 0 2		Ultra Light Particulate Air		0	1	
		_		0		
	А	<u> </u>		1		
A Ultra Low Pressure Air 0 4		Ultra Low Pressure Air		0		
Q Which of the following is a MEMs device or component? M 1	Q	Which of the following is a MEMs device or component?		М	1	
A Micro gear 1 1	Α			1	1	
A inductor 0 2	Α	inductor		0	2	

A	microscope		0	3
A	transformer		0	4
Q	Common p-type dopant for silicon is	M		1
A	boron		1	1
A	phosphorus		0	2
A	arsenic		0	3
A	antimony		0	4
Q	Micromotors are most commonly produced by	М		1
A	etching		0	1
A	AFM		0	2
A	LIGA process		1	3
A	CVD		0	4
Q	Toxic gases such as CO, CO2, NO, O3 can be detected using	М		1
A	Pressure sensor		0	1
A	Thermal sensor		0	2
A	Chemical sensor		1	3
A	Optical sensor		0	4
Q	Smaller systems tend to move more quickly than larger systems because of	М		1
A	smaller displacement		0	1
A	lower inertia of mass		1	2
A	less workdone		0	3
A	higher frequencies associated		0	4
Q	In MEMs Silicon nitride is used as	M		1
A	lens		0	1
A	actuator		0	2
A	Insulator		1	3
A	sensor		0	4
Q	Select the appropriate material for wafer	M		1
A	Silicon		1	1
A	Pure gold		0	2
A	Platinum		0	3
A	Aluminium		0	4
Q	Silicon wafer orientation is defined by the	M		1
A	quality		0	1
A	Miller index		1	2
A	packing material		0	3

A		type of silicon used		0	4
Q		Equal amount of gallium and arsenic atoms	М		1
Α		makes a metal		0	1
Α		makes a liquid		0	2
Α		makes gallium arsenide		1	3
Α		is not a good substrate		0	4
Q	Į.	Which of the following material is used in MEMs for its optical property	М		1
Α		silicon		0	1
Α		argon		0	2
Α		PDMS		1	3
Α		helium		0	4
Q		HEPA filters are used in	М		1
Α		clean room		1	1
A		air dryer		0	2
A		water purifier		0	3
A		HCI filtering		0	4
Q	Į.	Wafers are produced by slicing	M		1
A		condiments		0	1
A		glass		0	2
A		Silicon cylindrical ingots		1	3
A		Sand		0	4
Q	Į.	Silicon is as light as	M		1
A		Aluminium		1	1
A		gold		0	2
A		iron		0	3
A		steel		0	4
Q	Į.	Silicon has same Young's modulus as	М		1
A		Aluminium		0	1
A		gold		0	2
A		iron		0	3
A		steel		1	4
Q	Į.	Silicon wafer orientation is defined by the	M		1
A		quality		0	1
A		Miller index		1	2
A		packing material		0	3
A		type of silicon used		0	4

C	L	As per scaling law in electricity current and length possesses following relation	M	1
A		inverse		0 1
A		cube		0 2
A		square		1 3
A		square root		0 4
C	Į	is an optical technique used for determination of the dielectric properties of thin films	М	1
A		AFM		0 1
A		TEM		0 2
A		SEM		0 3
A		Ellipsometer		1 4
C	l l	In, transmitted electrons are involved to view thin specimens	М	1
A		TEM		1 1
A		Profilometer		0 2
A		Ellipsometer		0 3
A		AFM		0 4
C	Į	is a resist used in electron beam lithography	М	1
A		PDMS		0 1
A		conducting polymer		0 2
A		polyaniline		0 3
A		PMMA		1 4
C	Į	Typical spin speed of photoresists depends on	М	1
A		velocity		0 1
A		viscosity		1 2
A		intensity		0 3
A		pressure		0 4
C	Į	dry etching involves the creation of	М	1
A		plasma		1 1
A		SiO2		0 2
A		photoresist		0 3
A		metal		0 4
C	Į	RIE stands for	М	1
A		Resonative ion etching		0 1
A		Reactive ion etching		1 2
A		Reaction ion etching		0 3
A		Reflective ion etching		0 4
C	Į	Role of photosensitive film is to produce on substrate	М	1

Α	coating	(0 1
A	pattern		1 2
A	defects	(3
A	etching) <u>4</u>
Q	The most popular light source for photolithography	М	1
A	mercury vapour lamp	:	1 1
A	LCD	(2
A	incandescent lamp	(3
A	LED	() <u>4</u>
Q	The wet etching technique	М	1
A	removes unmasked area	:	1 1
A	removes masked area	(2
A	add material on masked area	(3
A	add material on unmasked area	() <u>4</u>
Q	technique is based on the emission of secondary electrons from the surface of a specimen	M	1
A	AFM	(1
A	SEM	:	1 2
A	Profilometer	(3
A	Ellipsometer	() <u>4</u>
Q	DRIE stands for	M	1
A	deep reactive ion etching	(1
A	diode reactive ion etching	(2
A	deep regenerative ion etching	(3
A	deep reflective ion etching		1 4
Q	Common light sources used in photolithography have wavelength in range	M	1
A	100 - 250 nm	(1
A	300 - 500 nm	:	1 2
A	500 - 700 nm	(3
A	850 - 1000 nm	() <u>4</u>
Q	Ion implantation is implanting foreign substances by	M	1
A	slow diffusion	(1
A	melting	(2
A	insertion by force	;	1 3
A	diffusion	() 4
Q	RCA is used for the cleaning substrate	M	1
Α	Glass	(0 1

Α	PMMA		0	2
A	Silicon		1	
A	PDMS		0	
Q	Following deposition methods used for Silicon dioxide	I	M	1
A	Spinning		0	1
A	Spray		0	2
A	Wet Oxidation		1	3
A	Electroplating		0	4
Q	Thermal Deposition is popular for the following material	1	M	1
A	Polymers		0	1
A	Dielectrics		0	2
A	Semi-conductors		0	3
A	Metals		1	4
Q	Select the appropriate technique for coating of polymers	1	M	1
A	Spin coating		1	1
A	Chemical Vapour Depositing		0	_
A	Physical Vapour Depositing		0	3
A	Electroplating		0	4
Q	Following is a type of chemical vapour deposition	I	M	1
A	Electroplating		0	1
A	Evaporation		0	
A	LPCVD		1	3
A	PVD PVD		0	4
Q	What is the evaporation temperature of copper in degree Celsius?	I	M	1
A	200		0	1
A	1516		1	
A	<mark>-</mark> 0		0	3
A	2 5		0	4
Q	Following doping can be carried out at lower temperature	I	M	1
A	spraying spraying		0	
A	oxidation		0	
A	ion implantation		1	
A	diffusion		0	
Q	In MEMs fabrication, following type of water is used		M	1
A	tap water		0	
Α	filtered water		0	2

A	salted water		0	3
Α	DI water		1	4
Q	In MEMs fabrication, following is a critical environmental parameter for patterning submicron devices	1	M	1
Α	size of the dust particle		1	1
Α	size of silicon wafer		0	2
Α	type of silicon wafer		0	3
Α	size of the room		0	4
Q	In photolithography, sensitivity of resist depends on	1	M	1
A	shape of substrate		0	
Α	size of substrate		0	
A	type of substrate		0	3
A	wavelength of light		1	4
Q	In which technique of deposition step coverage is poor	1	M	1
A	Evaporation		1	
A	DC sputter		0	
A	RF sputter		0	-
Α	PECVD		0	4
Q	Which of the following deposition technique grain size is minimum	1	M	1
A	Thermal Evaporation		0	
A	Sputtering Sputtering		1	
A	electron beam evaporation		0	
A	Electroplating		0	4
Q	Which of the following deposition technique uses electrochemical reaction	1	M	1
A	evaporation evaporation		0	1
A	electroplating		1	
Α	PECVD		0	_
Α	Sputtering Sputtering		0	4
Q	Followings is a dielectric layer deposition techniques	1	M	1
Α	Spin coating		0	
Α	Electrolessplating		0	_
Α	Chemical Vapour Deposition		1	
A	Electroplating		0	-
Q	One of the major problems of surface micromachining is	I	M	1
Α	Absorption		0	
Α	Adhesion of layers		1	
A	Epitaxy		0	3

Α	Evaporation		0	4
Q	Sacrificial layer is an essential component in	N	Λ	1
A	Bulk micromachining		0	1
A	LIGA		0	2
A	Surface micromachining		1	3
A	wet etching		0	4
Q	lithography technique can pattern nonplanar substrate, unusual materials and large areas	N	/1	1
A	X- ray		0	1
A	Photo Photo		0	
A	soft		1	3
A	electron beam		0	4
Q	is a common metal used in the process steps of LIGA.	N	/1	1
A	Nickel		1	
A	Aluminium		0	
A	Steel		0	_
A	Cobalt		0	4
Q	Micro-contact Printing is a technique related to	N	/1	1
A	photolithography		0	_
A	electron beam lithography		0	
A	X- ray lithography		0	_
A	soft lithography		1	4
Q	Stamp, mold, or mask having relief structures on its surface is the key element of	N	/1	1
A	X- ray lithography		0	
A	soft lithography		1	
A	photolithography		0	~
A	electron beam lithography		0	4
Q	Lithography, Electroforming, molding are essential steps of	N	/1	1
A	Bulk micromachining		0	_
A	LIGA		1	2
A	Surface micromachining		0	3
A	Evaporation		0	4
Q	Select appropriate material for substrate in LIGA	N	Λ	1
A	Glass with thin metal layer		1	
A	Glass		0	_
A	Dielectric		0	_
A	polymer		0	4

Q	Replica molding can be used in	М	1
A	photolithography		0 1
A	electron beam lithography		0 2
A	X- ray lithography		0 3
A	soft lithography		1 4
Q	μTAS systems comprised of	M	1
A	only result analysis		0 1
A	a sampling unit, a microfluidic unit, a detector system and an electronic controller		1 2
A	only separation and detection of samples		0 3
A	only sample analysis		0 4
Q	In μTAS, separation methods used	M	1
A	Titration		0 1
A	Capillary electrophoresis		1 2
A	Sedimentation		0 3
A	Centrifugation		0 4
Q	Detection technique used in μTAS is	M	1
A	Fluorescence		0 1
A	Dielectrophoresis		0 2
A	Electrophoresis		1 3
A	Chromatography		0 4
Q	What is the full form of μTAS?	M	1
A	Mini Thermal Analytical System		0 1
A	Micro Total Analysis System		0 2
A	Micro Transfer Analytical System		1 3
A	Micro Total Analytics Signal		0 4
Q	In thermal microactuator, change in length depends on	M	1
A	temperature		1 1
A	flow		0 2
A	width of channel		0 3
A	size of channel		0 4
Q	In electroosmotic flow, direction of flow depends on	M	1
A	concentration of ion		0 1
A	DC supply polarity		1 2
A	particle size		0 3
A	frequency of supply		0 4
Q	In μTAS, following technique does not require charged particle	M	1

A electrophoresis	Α	Electro osmosis		0	1
A capillary	A	electrophoresis		0	2
In microsyringe pump, dispense capacity depends on displacement of stem 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A	Dielectrophoresis		1	3
A displacement of stem 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A	capillary		0	4
A material of stem 0 2 A diameter of stem 0 3 Q In µTAS, micro channels is made up of M 1 A silver 0 1 A gold 0 2 A PDMS 1 3 A fluoride 0 4 Q The sampling subsystem should contain a micro filter consists of M 1 A filter paper 0 1 A conventional polymer membrane 1 2 A metal filter 0 3 A muslin cloth 0 4 Q The immobilization of bioreceptor is achieved by M 1 A Assimilation 0 1 A Assimilation 0 1 A Assimilation 0 1 A Assimilation 0 3 A cohesion 0 3 A cohesion 0 4 Q Which of the following is presen	Q	In microsyringe pump, dispense capacity depends on	M		1
A diameter of stem 0 4 shape of stem 0 4 shape of stem 0 4 shape of stem 0 4 silver 0 5 silver 0 5 silver 0 5 silver 0 5 silver 1 5	A	displacement of stem		1	1
A shape of stem 0 4 Q In µTAS, micro channels is made up of M 1 A silver 0 1 A gold 0 2 A PDMS 1 3 A fluoride 0 4 Q The sampling subsystem should contain a micro filter consists of M 1 A filter paper 0 1 A conventional polymer membrane 1 2 A metal filter 0 3 A description of bioreceptor is achieved by M 1 A Adsorption 1 2 A Addesion 0 3 A Adhesion 0 3 A cobesion 0 4 Q Which of the following is present in glucose biosens	A	material of stem		0	2
N	A	diameter of stem		0	3
A silver 0 1 A gold 0 2 A PDMS 1 3 A fluoride 0 4 Q The sampling subsystem should contain a micro filter consists of M 1 A filter paper 0 1 A conventional polymer membrane 1 2 A metal filter 0 3 A muslin cloth 0 4 Q The immobilization of bioreceptor is achieved by M 1 A Assimilation 0 1 A Addresion 0 1 A Addresion 0 3 A cohesion 0 4 Q Which of the following is present in glucose biosensors M 1 A amino acids 0 1 A glucose oxidase 1 2 A nucleic acid 0 3 A glactose 0 4 Q In case of Biosensors,	A	shape of stem		0	4
A gold 0 2 A PDMS 1 3 A fluoride 0 4 Q The sampling subsystem should contain a micro filter consists of M 1 A filter paper 0 1 A conventional polymer membrane 1 2 A metal filter 0 3 A muslin cloth 0 4 Q The immobilization of bioreceptor is achieved by M 1 A Assimilation 0 1 A Assimilation 0 1 A Adhesion 0 3 A cohesion 0 3 Q Which of the following is present in glucose biosensors M 1 A amino acids 0 1 A glucose oxidase 0 1 A nucleic acid 0 3 A galactose 0 4 Q In case of Biosensors, can be a biorecognition element 0 1 <t< td=""><td>Q</td><td>In μTAS, micro channels is made up of</td><td>M</td><td></td><td>1</td></t<>	Q	In μTAS, micro channels is made up of	M		1
A PDMS A fluoride Q The sampling subsystem should contain a micro filter consists of A filter paper A conventional polymer membrane A metal filter A muslin cloth Q The immobilization of bioreceptor is achieved by A Assimilation A Adsorption A Adsorption A Adsorption A Adhesion A cohesion Q Which of the following is present in glucose biosensors A amino acids A glucose oxidase A nucleic acid A galactose Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme metals	A	silver		0	1
A fluoride 0 4 Q The sampling subsystem should contain a micro filter consists of M 1 A filter paper 0 1 A conventional polymer membrane 1 2 A metal filter 0 3 A muslin cloth 0 4 Q The immobilization of bioreceptor is achieved by M 1 A Assimilation 0 1 A Adhesion 0 3 A cohesion 0 3 Q Which of the following is present in glucose biosensors M 1 A amino acids 0 1 A glucose oxidase 1 2 A nucleic acid 0 3 A galactose 0 4 Q In case of Biosensors, can be a biorecognition element M 1 A Oxide 0 1 A Enzyme 1 2 A metals 0 3	A	gold		0	2
QThe sampling subsystem should contain a micro filter consists ofM1Afilter paper01Aconventional polymer membrane12Ametal filter03Amuslin cloth04QThe immobilization of bioreceptor is achieved byM1AAssimilation01AAdsorption12AAdhesion03Acohesion04QWhich of the following is present in glucose biosensorsM1Aamino acids01Aglucose oxidase12Anucleic acid03Agalactose03QIn case of Biosensors, can be a biorecognition elementM1AOxide01AEnzyme12Ametals03	A	PDMS		1	3
A filter paper A conventional polymer membrane A metal filter A metal filter A muslin cloth Q The immobilization of bioreceptor is achieved by A Assimilation A Adsorption A Addosion A cohesion Q Which of the following is present in glucose biosensors A amino acids A glucose oxidase A nucleic acid A galactose Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals	A	fluoride		0	4
A conventional polymer membrane A metal filter A muslin cloth C The immobilization of bioreceptor is achieved by A Assimilation A Assimilation A Adsorption A Adhesion A cohesion C Which of the following is present in glucose biosensors A amino acids A amino acids A glucose oxidase A nucleic acid A galactose C In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals C 3 A metals	Q	The sampling subsystem should contain a micro filter consists of	M		1
Ametal filter03Amuslin cloth04QThe immobilization of bioreceptor is achieved byM1AAssimilation01AAdsorption12AAdhesion03Acohesion04QWhich of the following is present in glucose biosensorsM1Aamino acids01Aglucose oxidase12Anucleic acid03Agalactose04QIn case of Biosensors, can be a biorecognition elementM1AOxide01AEnzyme01Ametals03	A	filter paper		0	1
Amuslin cloth04QThe immobilization of bioreceptor is achieved byM1AAssimilation01AAdsorption12AAdhesion03Acohesion04QWhich of the following is present in glucose biosensorsM1Aamino acids01Aglucose oxidase12Anucleic acid03Agalactose04QIn case of Biosensors, can be a biorecognition elementM1AOxide01AEnzyme12Ametals03	A	conventional polymer membrane		1	
QThe immobilization of bioreceptor is achieved byM1AAssimilation01AAdsorption12AAdhesion03Acohesion04QWhich of the following is present in glucose biosensorsM1Aamino acids01Aglucose oxidase12Anucleic acid03Agalactose04QIn case of Biosensors, can be a biorecognition elementM1AOxide01AEnzyme12Ametals03	A	metal filter		0	3
A Assimilation 0 1 A Adsorption 1 2 A Adhesion 0 0 3 A cohesion 0 0 4 Q Which of the following is present in glucose biosensors M 1 A amino acids 0 1 A glucose oxidase 1 2 A nucleic acid 0 1 A galactose 0 0 4 Q In case of Biosensors, can be a biorecognition element M 1 A Oxide 0 1 A Enzyme 1 2 A metals 0 0 3	A	muslin cloth		0	4
A Adhesion A Adhesion Cohesion CO Which of the following is present in glucose biosensors A amino acids A glucose oxidase A nucleic acid A galactose CO In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals CO S S S S S S S S S S S S S S S S S S S	Q	The immobilization of bioreceptor is achieved by	M		1
A ddhesion 0 3 A cohesion 0 4 Q Which of the following is present in glucose biosensors M 1 A amino acids 0 1 A glucose oxidase 1 2 A nucleic acid 0 3 A galactose 0 4 Q In case of Biosensors, can be a biorecognition element M 1 A Oxide M 1 A Enzyme 1 2 A metals 0 3	A	Assimilation		0	1
A cohesion Q Which of the following is present in glucose biosensors A amino acids A glucose oxidase A nucleic acid A galactose Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals O 4 Q In acide	A	Adsorption		1	2
QWhich of the following is present in glucose biosensorsM1Aamino acids01Aglucose oxidase12Anucleic acid03Agalactose04QIn case of Biosensors, can be a biorecognition elementM1AOxide01AEnzyme12Ametals03	A	Adhesion		0	3
A amino acids A glucose oxidase A nucleic acid A galactose Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals O 1 A 0 1	A	cohesion		0	4
A glucose oxidase A nucleic acid A galactose Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals 1 2 2 3 4 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Q	Which of the following is present in glucose biosensors	M		1
A nucleic acid A galactose O 4 Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals O 3 O 4 O 4 O 1 O 3 O 3	A	amino acids		0	1
A galactose 0 4 Q In case of Biosensors, can be a biorecognition element	A	glucose oxidase		1	2
Q In case of Biosensors, can be a biorecognition element A Oxide A Enzyme A metals M 1 A 2 A 3	A	nucleic acid		0	3
A Oxide 0 1 A Enzyme 1 2 A metals 0 3	A	galactose		0	4
A Enzyme 1 2 A metals 0 3	Q	In case of Biosensors, can be a biorecognition element	M		1
A metals 0 3	A	Oxide		0	1
	A	Enzyme Enzyme		1	2
	Α	metals		0	3
A ceramics 0 4	A	ceramics		0	4
Q Which of these biosensors use the principle of heat released or absorbed by a reaction M 1	Q	Which of these biosensors use the principle of heat released or absorbed by a reaction	M		1
A Potentiometric biosensor 0 1	Α	Potentiometric biosensor		0	1

Α	Optical biosensors	C	2
A	Piezo-electric biosensors	C	3
A	Calorimetric biosensors	1	4
Q	In glucose biosensor, a measure of change in is a measure of the glucose value.	M	1
A	carbons dioxide	C	1
A	oxygen	1	. 2
A	nitrogen	C	3
A	ammonia	C	4
Q	Following acts as detector in Optical sensor	M	1
A	Light emitting diode	C	1
A	Transistor	C	2
A	light pipe	C	3
A	Photo diode	1	4
Q	For microencapsulation of bioreceptor can be utilized	M	1
A	liposomes	1	. 1
A	glucose	C	2
A	Urea	C	3
A	Urease	C	4
Q	Nanoparticles that are used as drug delivery systems are called as	M	1
A	nanocarriers	1	. 1
A	nanotubes	C	2
A	nanosensors	C	3
A	nanoarray	C	4
Q	A characteristic of DNA biosensors is	M	1
A	formation of DNA recognition layer	1	. 1
A	detection of the change in light absorption	C	2
A	detection of the photon out for luminescent	C	3
A	detection of the angle at which electrons are emitted	C	4
Q	Coat and poke drug delivery approach is followed in	M	1
Α	Drug-coated microneedle	1	. 1
A	Solid microneedle	C	2
Α	Dissolving microneedle	C	3
Α	Hollow microneedle	C	4
Q	In case of Biosensors, is the most important component.	M	1
Α	display	C	1
Α	metals	C	2

A	ceramics		0	3
A	biorecognition element		1	4
Q	In biosensor, is the physico-chemical component	M		1
A	Enzymes		0	1
A	Anti-bodies Anti-bodies		0	2
A	Transducer		1	3
A	Cells or tissues		0	4
Q	What is an Analyte?	M		1
A	Any molecule may be protein, toxin, antigen, etc.		1	1
A	The concentration of the molecule		0	2
A	The component which should not be detected		0	3
A	The component which gives background noise		0	4
Q	Polymer membrane permeation is a type of	M		1
A	intravenous drug delivery		0	1
A	oral drug delivery		0	2
A	injection		0	3
A	Transdermal drug delivery system		1	4
Q	Which of the following is a painful way of drug delivery?	M		1
A	Topical cream		0	1
A	Transdermal patch		0	2
A	Hypodermic needle		1	3
A	Microneedle		0	4
Q	The simplest amperometric biosensors for glucose detection involve	M		1
A	pH electrode		0	1
A	Clark oxygen electrode		1	2
A	Carbon dioxide electrode		0	3
A	copper electrode		0	4
Q	Magnetic bio sensor is widely used for	M		1
A	Blood detection		0	1
A	DNA detection		1	2
A	particle detection		0	3
A	photo detection		0	4
Q	The generation of ions by various chemical events that change the electrical properties of the analyte so	plution is detected M	0	1
A	Ion Sensitive Biosensors		0	1
Α	Colorimetric biosensors		0	2

Α	Magnetic Biosensors		0	3
A	Electrochemical Biosensors		1	4
Q	Self assembled closed colloidal structures composed of lipid bilayers are called as	N	Λ	1
A	dendrimers		0	1
A	liposomes		1	2
A	polymers		0	3
A	GNP		0	4
Q	Poke and patch drug delivery approach is seen in	N	Λ	1
A	Drug-coated microneedle		0	1
A	Solid microneedle		1	2
A	Dissolving microneedle		0	3
A	Hollow microneedle		0	4
Q	Transdermal devices deliver the drug through the	N	Λ	1
A	Eye		0	1
A	nose		0	2
A	mouth		0	3
A	Skin		1	4
Q	is Level 3 of microsystems packaging	N	Л	1
A	Die		0	1
A	Device		0	2 3
A	System		1	3
A	Card		0	4
Q	levels of packaging are there in microsystems packaging	N	Λ	1
A	Three		1	1
A	Two		0	2
A	One		0	3
A	Four		0	4
Q	level is Level 2 of microsystems packaging	N	Λ	1
A	Die		0	1
A	Device		1	2
A	System		0	3
A	Card		0	4
Q	levels of packaging are there in electronic systems packaging	N	Л	1
Α	Three		0	1
Α	Two		0	2
A	One		0	3

Α	Four		1	4
Q	Sawing the wafer is related to	M		1
Α	surface bonding		0	1
Α	Wire bonding		0	2
Α	sealing		0	3
Α	die preparation		1	4
Q	of microsystem component is challenging in microsystems packaging compared to microelectronics packaging	M		1
Α	bonding		1	1
Α	cutting		0	2
Α	sawing		0	3
Α	dicing		0	4
Q	level is Level 1 of microsystems packaging	M		1
Α	Die		1	1
Α	Device Provide		0	2
Α	System Sy		0	3
Α	Card		0	4
Q	Wafer dicing means	M		1
Α	sawing the wafer		1	1
Α	printing the wafer		0	2
Α	implanting the wafer		0	3
Α	surface bonding		0	4
Q	In die bonding, are used for better die isolation	M		1
A	solder alloys		0	1
A	epoxy resin		0	2
A	silicon carbide		0	3
Α	silicon rubber		1	4
Q	Self assembled closed colloidal structures composed of lipid bilayers are called as	M		1
Α	dendrimers		0	1
Α	liposomes		1	2
Α	polymers		0	3
Α	GNP CONTRACTOR OF THE PROPERTY		0	4
Q	The packaging of MEMS or microsystems together with signal processing is known as	M		1
Α	lab on a chip		1	1
Α	lab on a computer		0	2
Α	lab on a silicon		0	3
A	lab in a chip		0	4