



<b>Q 9</b>	Which of the following is <b>CORRECT</b> about callus? a) Tissues that grow to form an embryoid. b) An unorganized actively dividing the mass of cells maintained in a culture. c) An insoluble carbohydrate. d) A tissue that grows from an embryo.	<b>1</b>	<b>CO3</b>
<b>Q 10</b>	In plant tissue culture, the callus tissues are generated into a complete plantlet by altering the concentration of _____. a) sugars b) hormones c) amino Acids d) vitamins and minerals	<b>1</b>	<b>CO3</b>
<b>Q 11</b>	First edible vaccine was produced in _____. a) banana. b) maize. c) tobacco. d) both a and b.	<b>1</b>	<b>CO3</b>
<b>Q 12</b>	The types of stomata with 2 guard cells covered with 3 subsidiary cells with 1 extremely smaller than other 2 is _____. a) diacytic. b) anisocytic. c) anomocytic. d) paracytic.	<b>1</b>	<b>CO4</b>
<b>Q 13</b>	Name two instrumental methods of crude drug analysis.	<b>1</b>	<b>CO4</b>
<b>Q 14</b>	Ecuelle method of extraction has been used specially used for _____ class of secondary metabolites.	<b>1</b>	<b>CO4</b>
<b>Q 15</b>	Which disease is caused due to deficiency of iron in plants?	<b>1</b>	<b>CO4</b>
<b>Q 16</b>	_____ and _____ are key physical properties of alkaloids which helps in deciding their extraction procedures.	<b>2</b>	<b>CO5</b>
<b>Q 17</b>	Vitali Morin test gives _____ color for _____ class of secondary metabolites.	<b>2</b>	<b>CO5</b>
<b>Q 18</b>	Give two examples of true alkaloids.	<b>1</b>	<b>CO5</b>
<b>SECTION B (20 Marks)</b> <b>(2Qx10M=20 Marks)</b>			
<b>Attempt 2 Question out of 3</b>			
<b>Q 1</b>	Discuss principles and mode of therapy followed in Unani and Chinese system of medicine.	<b>10</b>	<b>CO1</b>
<b>Q 2</b>	Water extract of a crude drug gives positive test with Molish's and Fehling's test on hydrolysis. Secondary metabolites present in the extract are soluble in water and insoluble in organic solvent. Identify the class of secondary metabolites. Illustrate the classification and general chemical tests for using a flow diagram.	<b>10</b>	<b>CO4</b>
<b>Q 3</b>	Describe the biological sources, active constituent and at least one important use of a) agar b) beeswax c) tragacanth	<b>2.5X4</b>	<b>CO5</b>

	d) papain		
<b>SECTION-C (35 Marks)</b> <b>(7Qx5M=35 Marks)</b>			
<b>Attempt 7 Question out of 9</b>			
<b>Q 1</b>	DEFINE: Biological evaluation, Palisade ratio, Vein islet number, stomatal index, vein termination number.	<b>5</b>	<b>CO1</b>
<b>Q 2</b>	Differentiate primary and secondary metabolites.	<b>5</b>	<b>CO2</b>
<b>Q 3</b>	“Soil and pests influence the cultivation of medicinal plants”. Justify the statement.	<b>5</b>	<b>CO2</b>
<b>Q 4</b>	Briefly illustrate the function of (Auxins and Cytokinin) in growth and development of plant.	<b>5</b>	<b>CO3</b>
<b>Q 5</b>	Illustrate the method of development of edible vaccine.	<b>5</b>	<b>CO3</b>
<b>Q 6</b>	Discuss method of evaluation of fixed oils with special reference to acid value and iodine number.	<b>5</b>	<b>CO4</b>
<b>Q 7</b>	Explain the construction, working principle, and use of camera lucida.	<b>5</b>	<b>CO4</b>
<b>Q 8</b>	Organize marine natural products in drug discovery as per their therapeutic activity.	<b>5</b>	<b>CO5</b>
<b>Q 9</b>	Describe biological source, preparation, and uses of serratiopeptidase and bromelin.	<b>5</b>	<b>CO5</b>