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| MVP-001 |

POST GRADUATE DIPLOMA IN FOOD SAFETY AND QUALITY MANAGEMENT (PGDFSQM)

Term-End Examination

June, 2017

MVP-001 : FOOD FUNDAMENTALS AND CHEMISTRY

Time : 3 hours   *Maximum Marks : 100*

Note :   (i)   *Attempt any five questions.*

(ii)   *All the questions carry equal marks.*

1.   Define the following :   20x1=20

(a)   Ham

(b)   Trans fats

(c)   Maillard browning

(d)   Value addition

(e)   Organic foods

(f)   Functional Foods

(g)   Food Safety

(h)   Food Additives

(i)   Muta rotation

(j)   Water activity

(k)   Beer

(l)   Acid foods

(m)   Parboiling

(n)   Flash point

(o)   Gelatinization

(p)   Chromatography

(q)   Specific gravity

(r)   Oilseeds

(s)   COD

(t)   Packaging

2.   (a)   Highlight the uses and health benefits of honey.   5

(b)   Give classification of proteins on the basis of functions performed.   5

(c)   Briefly give an account of the non-nutritive sweeteners.   5

(d)   What is the effect of processing on vitamins present in food ?   5

3.   (a)   Give the layout of a sensory evaluation laboratory.   5

(b)   What is Composting ? How it can be used to maintain ecological balance ?   5

(c)   Give principle and application of atomic absorption spectroscopy.   5

(d)   Write full form of :   5

(i)   BHT

(ii)   HPLC

(iii)   IMFL

(iv)   MAP

(v)   HACCP

4.   (a)   What are the different analytical methods of moisture determination ?   **5**

       (b)   What is biodegradable plastic ? Name the sources from which it is obtained.   **5**

       (c)   What are the physico - chemical and biological parameters of water quality ?   **10**

5.   (a)   What are the food applications of starch polysaccharides ?   **5**

       (b)   How will you determine freshness of fish ?   **5**

       (c)   Briefly describe the various detectors used in gas chromatography.   **5**

       (d)   Name the antinutritional factors present in pulses.   **5**

6.   (a)   List all the pretreatments, primary and secondary treatments used to treat waste water and explain in detail the activated sludge process.   **5+5=10**

       (b)   Draw and explain an OC curve.   **5**

       (c)   What are the different types of processed meats available ?   **5**

7.   (a)   What is meant by enzyme immobilization ? Give its advantages.   **5**

       (b)   What are fat constants ? What is their importance in detection of adulteration in fats and oils ?   **15**