AJEENKYA
D Y PATIL UNIVERSITY

End Term Examination (December 2019)

School: School of Engineering **Program:** B.Tech. Biotechnology (Food)

Course: Nutraceuticals, Functional Foods And Nutrigenomics **Course Code**: BTE318

Semester: V **Max Marks:** 40 **Duration (mins) :** 90

Q 1. Write short notes on nutraceuticals derived from any of the five following spices and describe their therapeutic benefits. **[15]**

(Each question carry 3 mark)

a) Black Cumin (*Nigella sativa*)
b) Fennel (*Foeniculum vulgare*)
c) Onion (*Allium cepa*)
d) Clove (*Syzygium aromaticum or Eugenia caryophyllata*)
e) Nutmeg (*Myristica fragrans*)
f) Bay Leaf (*Laurus nobilis*)
g) Saffron (*Crocus sativus*)

Q 2. Name the important nutraceuticals component present in the following **[5]**

(Each question carry 1mark)

a) Tulsi (*Ocimum sanctum*)
b) Licorice (*Glycyrrhiza glabra*)
c) Aloe (*Aloe vera*)
d) Ephedra (*Ephedra sinica*)
e) Bilwa or Bel (*Aegle marmelos*)

Q.3 What are the different classes of nutraceuticals based on chemical group? Give names with suitable examples. **[7.5]**

Q.4 Name the food rich in the following nutraceuticals (Any five) **[5]**

a) Lignans
b) Allyl sulphur compounds
c) Isoflavones
d) Lycopene
e) Inulin
f) Ellagic acid

Q.5 What are the different classes of nutraceuticals based on their mechanism of action? Explain giving examples of each class. **[7.5]**