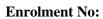
Name:





UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, May 2022

Course: Cereals, Pulses and Oilseed Technology Semester: IV

Program: B.Tech- Food Technology Course Code: HSFT2008

Time : 03 hrs. Max. Marks: 100

Instructions:

| Q.No | Section A | (20Q x1.5M= 30 Marks) | COs |
|------|---|-----------------------|-----|
| | Short answer questions/ MCQ/T&F | | |
| Q | | | |
| 1. | Chemical composition of wheat consists of a) Protein b) Fat c) Carbohydrates d) All of the above. | 1,5 | CO1 |
| 2. | Gluten comprises of: a) gliadin and glutenin b) amylase c) proteases d)lipids. | 1.5 | CO1 |
| 3. | Lipid content of Indian wheat consists of endosperm and bran. a) True. b) False | 1.5 | CO2 |
| 4. | Enzymes in wheat flour consists of a) Amylases b) Proteases. c) Lipases. d)All of the above. | 1.5 | CO2 |
| 5. | Enzymes present in rice are albumin and globulin.a) True.b) False. | 1.5 | CO1 |
| 6. | Major protein fractions of maize are: a) Albumin b) Globulin. c) Prolamine. d)All of the above. | 1.5 | CO2 |

| 7. | Minerals of vitamin consists of: | 1.5 | CO |
|-----|--|-----|-----|
| | a) Iron | | |
| | b) Thiamine | | |
| | c) Riboflavin | | |
| 0 | d) All of the above. | | |
| 8. | Aleurone layer is the outermost layer of endosperm. | 1.5 | CO |
| | a) True. | | |
| | b) False | | |
| 9. | Germ or embryo consists of | 1.5 | CO |
| | a) Embryonic axis. | | |
| | b) Scutellum. | | |
| | c) Sucrose | | |
| | d) All of the above | | |
| 10. | The four major parts of the kernel of corn consists of | 1.5 | CO |
| | a) Hull | | |
| | b) Endosperm. | | |
| | c) Tip cap | | |
| | d) All of the above. | | |
| 11. | Main parts of the kernel comprises of | 1.5 | |
| | a)Pericarp | | CO |
| | b)Aleurone. | | |
| | c) Endosperm | | |
| | d) All of the above | | |
| 12. | Wheat consists of proteins and carbohydrates. | 1.5 | CO4 |
| | a) True. | | |
| | b) False. | | |
| 13. | Pearl millet comprises of : | 1.5 | |
| | a) Pericarp | | CO |
| | b) Germ | | |
| | c) Endosperm | | |
| | d) All of the above | | |
| 14 | Modern milling of wheat consists of grain cleaning and roller milling. | 1.5 | СО |
| | a) True. | _ | |
| | b) False | | |
| | | | |
| 15. | Bleaching is a flour treatment of | 1.5 | СО |
| | a) Wheat | | |
| | b) Corn | | |
| | c) Maize | | |
| | d) Pearl millet. | | |
| 16. | Maturing is a flour treatment of | 1.5 | CO |
| | a) Rice | | |
| | b) Wheat | | |
| | c) Maize | | |
| | •) | | |

| 17. | White flour consists of a) Moisture b) Protein c) Ash d) All of the above. | 1.5 | CO3 |
|-----|--|-------------------|-----|
| 18. | United Kingdom flour production consists of a) Cake b) Biscuit c) White bread making. d) All of the above. | 1.5 | CO3 |
| 19. | Biscuit flours consists of a) Short dough. b) Hard sweet c) Hard crackers. d) All of the above. | 1.5 | CO5 |
| 20. | The milling of rice involves a) Cleaning b) Dehusking c) Handpounding d) All of the above | 1.5 | CO4 |
| | Section B | (4Qx5M=20 Marks) | СО |
| Q | | | |
| 1. | Discuss milling of rice. | 5 | CO1 |
| 2. | Describe milling and processing of wheat. | 5 | CO3 |
| 3. | Discuss in details processing of maize. | 5 | CO1 |
| 4. | What do you mean by wet-milling process of maize? | 5 | CO2 |
| | Section C | (2Qx15M=30 Marks) | |
| Q | | | СО |
| 1. | Discuss bread making. The effect of treatment with nitrogeneous fertilizers depends on the time of application and the availability of nitrogen in the soil. Nitrogen taken up by the wheat plant early in growth results in increased tillering which can result in increased grain yield. Discuss these aspects of wheat cultivation. | 15 | CO3 |

| 2. | Discuss processing of cakes and pastries. The average human consumption of cereals is only about half of the figures, as a variable proportion is used for other processes, mainly animal feed, industrial processing, and seed, and there is considerable wastage. Discuss about this trend. | 15 | CO1 |
|----|---|-------------------|-----|
| | Section D | (2Qx10M=20 Marks) | |
| Q | Statement of question | | СО |
| 1. | Discuss in details present status of wheat production in India? The world production of wheat , barley , oats, rye, paddy, maize, sorghum, millet, was estimated at 1233 million tonnes in 1969-1979, rising to 1652 million tonnes in 1981 and to 1784 million tonnes in 1987-1989. Discuss the reasons behind it. | 10 | CO3 |
| 2. | Discuss manufacture of oats. | 10 | CO2 |