

Total No. of Questions : 4]

SEAT No. :

PE13030

[Total No. of Pages : 2

[6506]-1001

F.Y.B.Sc. (Wine Brewing & Alcohol Technology)

WT-101-T : BASIC MICROBIOLOGY-I

(2024 Pattern) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Answer the following. (any five) [5]

- a) Write down alternative name of in direct staining.
- b) Yeast belongs to _____ Kingdom.
- c) What is HEPA?
- d) What is DRT?
- e) State name of one Cryoprotectant.
- f) Define media.
- g) Enlist one example of disinfectant.

Q2) A) Answer the following. (any two) [5]

- a) Explain Pasteurization process.
- b) Describe taxonomy of yeast.
- c) Describe scope of microbiology.

B) Explain principle and procedure of Gram's staining process. [4]

Q3) A) Answer the following. (any two) [5]

- a) Write brief contribution of Antonie Van Leeuwenhoek.
- b) Draw well labelled diagram of yeast.
- c) Describe two types of fermenter.

B) Explain periodic subculturing and storage in silica gel. [4]

P.T.O.

Q4) Write a short notes on any four of the following.

[7]

- a) Hot air oven
- b) Ethylene oxide as chemical sterilant.
- c) Fixatives and decolourizer in staining
- d) Morphology of yeast
- e) Nutritional requirement of fungi.



Total No. of Questions : 4]

SEAT No. :

PE13031

[Total No. of Pages : 2

[6506]-1002

F.Y.B.Sc. (Wine Brewing & Alcohol Technology)

WT -102T : BASIC BIOCHEMISTRY - I

(2024 Pattern) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Illustrate your answers with neat diagrams wherever necessary.*

Q1) Solve any five of the following

[5]

- a) Explain water is a Universal Solvent.
- b) What is mean by proteins?
- c) Give the chemical reaction of Alcoholic Fermentation.
- d) Give an example of Catabolic Reactions.
- e) Define - Covalent bond.
- f) State First law of thermodynamics.
- g) How Hydrogen bond is formed?

Q2) A) Solve any two of the following.

[5]

- a) Write a note on Anabolism.
- b) Define-Buffer. Explain the importance of Biological Buffers in brief.
- c) Describe the concept of Biomolecules.

B) Solve the following.

[3]

Explain the Reactions of TCA cycle in Brief.

P.T.O.

Q3) A) Solve any two of the following. [5]

- a) Explain sucrose is a non-reducing sugar.
- b) Describe the concept of fermentation with example.
- c) Water has a tetrahedral geometry explain.

B) Solve the following. [4]

Explain Reactions of Glycolysis in brief.

Q4) Solve any four of the following. [8]

- a) Explain Functions of Water Soluble Vitamins.
- b) Describe the concept of Bioenergetics.
- c) Explain the Functions of Carbohydrates.
- d) Comment on fates of Pyruvate.
- e) Explain the properties of Proteins.



Total No. of Questions : 4]

SEAT No. :

PE13032

[Total No. of Pages : 2

[6506]-1003

F.Y. B.Sc. (Wine Brewing and Alcohol Technology)
WT - 103 - T : BASIC IN WINE TECHNOLOGY - I
(2024 Pattern) (NEP 2020) (Semester - I)

Time : 2 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Illustrate your answer with neat diagram wherever necessary.*

Q1) Solve any five of the following :

[5]

- a) Write two names of Red grape varieties.
- b) Explain two importance of Terroir.
- c) Write the names of two enzymes used in wine production.
- d) Write about wine clarity.
- e) Define sensory Evaluation of wine.
- f) What is Maturation?
- g) Define Wine.

Q2) a) Solve any two of the following :

[5]

- i) Draw the flow chart of white wine production.
- ii) Describe the Sweetness of Wine.
- iii) Explain the types of Harvesting.

b) Describe the Neuro-Physiological mechanism of tasting.

[3]

P.T.O.

Q3) a) Solve any two of the following : **[5]**

- i) Describe the health benefits of Wine.
- ii) Explain the skin contact of Wine.
- iii) Write the serving temperature of Wine.

b) Describe the selection and different types of Wine glasses. **[4]**

Q4) Solve any four of the following : **[8]**

- a) Write the chemical composition of Wine.
- b) Describe the commercial Wine making Practices.
- c) Short note on - Acidity in Wine.
- d) Write the steps of Sensory Evaluation.
- e) Short note on -Pressing.

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