Shivaji University , Kolhapur

Seat No.	

Paper Code(ENT202003)

M.Sc Entrance Exam , MAY-2020

71133-Alcohol Tech Ent

Day And Date : Thursday 19/11/2020 **Total Marks :** 100

Time : 10:30 To 12:00

		Marks
1	P.H.E. is used for …….. A) heat exchanger B) heat doner C) heat generator D) none of these	1
2	. The first stable compound produced in C4 plants is _____. A) Oxaloacetic acid B) RuBP C) PEPA D) Malic acid	1
3	Main energy source of yeast is …….. A) protein B) vitamin C) carbon D) amino acid	1
4	In D.M. plant activated carbon used for ……. A) Odour B) filtration C) coloring D) None of these	1
5	In first grade molasses sulphited ash % is …… A) 12 B) 16 C) 50 D) 95	1
6	Starch Molecule amylase molecule bind …… A) 1 – 4 link B) 1 – 4 – ß link C) 1 – 6 link D) 1 – 6 ß link	1
7	In starch amylase % …….. A) 20 – 25 B) 75 – 80 C) 10 – 20 D) 30 – 40	1

8	Power house of cell is ……..	1
	A) DNA	
	B) RND	
	C) mitochondria	
	D) nucleolus	
9	In molasses water % is …….	1
	A) 2 – 4	
	B) 10 – 15	
	C) 16 – 20	
	D) 40 – 80	
10	Mashing temperature of starch is ……	1
	A) 80oC	
	B) 65oC	
	C) 90oC	
	D) 40oC	
11	Yeast cell active on PH ……	1
	A) 3.5	
	B) 4.5	
	C) 6.5	
	D) 9.5	
12	M.tuberculosis is causative agent of …….	1
	A) Tuberculosis	
	B) syphilis	
	C) typhoid	
	D) brucellosis	
13	solvent moves from higher concentration to lower concentration is called as	1
	A) Plasmolysis	
	B) Osmotic pressure	
	C) Hypoplasmolysis	
	D) Hyperplasmolysis	
14	Coagulase contributes to virulence of …….. organisms	1
	A) S.aureus	
	B) E.coli	
	C) S.typhi	
	D) Salmonella	
15	Batch fermentation period is ……..	1
	A) 10 hr	
	B) 20 hr	
	C) 30hr	
	D) 50 hr	
16	Power hours of cell is ……..	1
	A) DNA	
	B) RND	
	C) mitochondria	
	D) nucleolus	

17 Specific gravity of alcohol is …….. 1
A) 0.7923
B) 1.200
C) 1.300
D) 0.9597

18 Azeotropic distillation entrainer is used by removal …… 1
A) Water
B) alcohol
C) ethar
D) none of these

19 Virus is cultivated in ..... medium 1
A) Natural media
B) Semi synthetic media
C) Synthetic media
D) Egg inoculation

20 Gram positive bacteria appear ..... colour 1
A) Pink
B) Violet
C) White
D) Red

21 Structural and functional unit of life is called as 1
A) Cell
B) Tissue
C) Organ
D) All of these

22 Drinking water hardness limit is……. 1
A) 30 ppm
B) 60 ppm
C) 200 ppm
D) 400 ppm

23 Areation treatment used …….. 1
A) removal of gasses
B) remove of salt
C) removal of chemical
D) None of these

24 In molasses unfermentable sugar is…… 1
A) 4.5
B) 12
C) 10
D) 15

25 In maturation of alcohol is sorted …….. 1
A) Oak wood
B) plastic
C) sesam wood
D) none of these

26 In first grade molasses sulphited ash % is …… 1
A) 14
B) 10
C) 8
D) 18

27 In malt milling section is removed ……. 1
A) arist
B) tannic
C) lignin
D) none of these

28 In molasses water % is ……. 1
A) 2 – 4
B) 10 – 15
C) 16 – 20
D) 40 – 80

29 Mashing temperature of starch is …… 1
A) 80oC
B) 65oC
C) 90oC
D) 40oC

30 Yeast cell active on PH …… 1
A) 4.5
B) 6.5
C) 2.2
D) 8.8

31 Main energy source of yeast is …….. 1
A) protein
B) vitamin
C) carbon
D) amino acid

32 T.R.S. 1st grade molasses is …….. 1
A) 55
B) 30
C) 35
D) 40

33 The small amount of energy captured during glycolytic reaction is started in …….. 1
A) ATP
B) ADP
C) a and b
D) None of these

34 Proteins are linear hetero polymers of ……. Molecular weight. 1
A) High
B) Low
C) High or low
D) None of these.

35 Yeast cell multiply by……. 1

A) branching

B) budding

C) fussion

D) none of these

36 In a proteins , amino acids are joined together by …….. 1

A) Covalent

B) Ionic

C) Peptide

D) None of these

37 fluorscein and fluorite are the examples of..... 1

A) fluorescence

B) phosphorescence

C) chemiluminescence

D) none of these

38 The term (2s+1) is called as..... 1

A) spin multiplicity

B) spin pairing

C) ground state

D) excited state

39 The mixture of glucose (dextrose) and fructose (laevulose) obtained on hydrolysis of sucrose is termed as ---------- sugar. 1

A) reducing

B) invert

C) icing

D) refine

40 Work done per unit time is called ……. 1

A) force

B) power

C) work

D) pressure

41 The carbohydrates which on hydrolysis gives 2-10 monosaccharides unit is called ……. 1

A) monosaccharides

B) disaccharides

C) trisaccharides

D) polysaccharides

42 Enzymes that are catalysed transfer of functional group are called as …….. 1

A) Transferase

B) Oxidoreductase

C) Lyase

D) Hydrolyses

43 The unit of cell constant is……. 1

A) cm3

B) Cm2

C) cm-1

D) cm-2

44 The rate of radioactive disintegration ….. with time. 1
A) increases
B) decreases
C) fluctuates
D) None of these

45 Generally solubility increases as temperature……. 1
A) decreases
B) increases
C) neither decrease or increase
D) remain constant

46 Micropropagation technique is used for 1
A) Obtaining clones in short time period
B) Conservation of rare plants
C) Obtaining large number of porpagules
D) all of these

47 Alpha particle is nothing but ……. 1
A) Helium atom
B) Hydrogen atom
C) Helium nucleus
D) Hydrogen nucleus

48 Inversion of cane sugar is an example of …… reaction. 1
A) first order
B) second order
C) third order
D) pseudo unimolecule

49 Norman E. Borlaug is called as..... 1
A) Father of genetics
B) Father of hybridization
C) Father of Green Revolution
D) Father of rice and wheat

50 A solidifying agent agar agar is obtained from…… 1
A) Brown algae
B) Red algae
C) Soil bacterium
D) Yeast

51 Meristematic tissue is present at… 1
A) Flower
B) Leaf
C) Apical bud
D) Stem

52 Entire collection of all diverse alleles for all genes in a particular crop is called as 1
A) Genome
B) DNA substitute
C) Cytoplasm
D) Germplasm

53	Haberlandt demonstrated ------ ability of plant cells which was further explored in PTC. A) Somatic hybridization B) Pluiripotency C) Micropropogation D) Totipotency	1
54	-------- is being utilized as SCP. A) Spirulina B) Diplococcus C) coli D) pneumoniae	1
55	Which compound is not a secondary metabolite? A) Enzymes B) Hormones C) Anti-tumor agents D) carbohydrates	1
56	Saccharumofficinarum is a A) Grown in north India B) Tropical variety grown in south India C) Tropical variety grown in north India. D) Have low sugar and poor yield	1
57	Nature of the nerve impulses conduction is …… A) Mechanical B) Chemical C) Thermal D) Electrochemical	1
58	Sewage treatment plant has A) Primary physical process B) Secondary biochemical process d. C) Tertiary anaerobic process D) All of the above	1
59	Which of the following is mainly responsible for ozone depletion A) CFCs B) Carbon monoxide C) Hydrocarbons D) Carbon dioxide	1
60	The microbial source of vinegar in _____. A) Aspergillus niger B) Rhizopus C) Acetobacter D) Streptomyces	1
61	moisture content in composting material shoude be the …….. rang A) 20-30% B) 5-10% C) 25-30% D) 50- 70%	1

62 ……. Is non distilled alcohol product 1
A) wine
B) vodka
C) rum
D) brandy

63 In W.T.P. sedimentation process used for …….. 1
A) chemical separation
B) mud separation
C) hard water separation
D) none of these

64 In plant steam heat exchanger name is ……. 1
A) condenser
B) Reboiler
C) evaporator
D) none of these

65 Flash point of alcohol is …….. 1
A) 12
B) 16
C) 24
D) 32

66 In pH range boiler water is used……. 1
A) 12 – 14
B) 8 – 9
C) 3 – 4
D) 5 – 7

67 Boiler blow down method & it's benefit…… 1
A) removal of hardness
B) removal of gasses
C) removal of chemical
D) none of these

68 Chemical transmission in synapse occurs due to…… 1
A) Cholesterol
B) Acetyl-choline
C) Choline esterase
D) ATP

69 Molecular formula of glucose is ……. 1
A) C6H12O6
B) C12H22O11
C) C2H5O11
D) C4H8O12

70 In starch amylase % …….. 1
A) 20 – 25
B) 75 – 80
C) 10 – 20
D) 30 – 40

71 Starch Molecule amylase molecule bind …… 1
A) 1 – 4 link
B) 1 – 4 – ß link
C) 1 – 6 link
D) 1 – 6 ß link

72 Single Fermenter is known as …… fermentation. 1
A) ferm
B) Biostill
C) cascade
D) none of these

73 In biostill fermentation ……. yeast stain used. 1
A) schizosaccaromyces prombe
B) sacchromyses cerivisae
C) rodotorola
D) none of these

74 .....of the following non fermentable sugar? 1
A) glucose
B) fructose
C) galactose
D) none of these

75 Sludge % in Fermenter is……. % 1
A) 12 %
B) 4 %
C) 10%
D) 14 %

76 Thiols are represented by general formula …….. 1
A) R-SH
B) R-OH
C) R-OR
D) R-S-R

77 Which enzyme is involved in lactose metabolism? 1
A) Permease
B) transcriptase
C) aldolase
D) Ligase

78 The net gain of ATP per glucose molecule in aerobic respiration is __. 1
A) 38
B) 36
C) 19
D) 40

79 Mitochondria are regarded as semiautonomous cell organelles due to the presence of _____. 1
A) Cristae
B) RNA
C) DNA
D) F1 particles

80 Function of condenser is …… 1
A) condensed vapour
B) condensed mineral
C) condensed salt
D) none of these

81 Boiling point of Ethanol is …… 1
A) 74
B) 75
C) 78
D) 73

82 Corrected formula of Methane is …….. 1
A) CH3
B) CH4
C) CH2
D) none of these

83 Rectified spirit contains …… % alcohol 1
A) 95.5
B) 100
C) 40
D) 60

84 Specific gravity of alcohol is …….. 1
A) 0.7923
B) 1.200
C) 1.300
D) 1.400

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86 Azeotropic distillation entrainer is used by removal …… 1
A) Water
B) alcohol
C) chemical
D) none of these

87 In scaling which salt deposited on plant …….. 1
A) Ca,Mg
B) Na, Mg
C) Ar,I
D) Cl, fe

88 Drinking water hardness limit is……. 1
A) 30 ppm
B) 60 ppm
C) 200 ppm
D) 400 ppm

89 Areation treatment used …….. 1
A) removal of gasses
B) remove of salt
C) removal of chemical
D) None of these

90 Which of the following is not a dairy product? 1
A) SCP
B) Cheese
C) Yoghurt
D) Buttermilk

91 Boiler blow down method & it's benefit…… 1
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B) removal of gasses
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98 Batch fermentation period is …….. 1

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B) 20 hr

C) 30hr

D) 50 hr

99 In malt milling section is removed ……. 1

A) arist

B) tannic

C) lignin

D) none of these

100 T.R.S. 1st grade molasses is …….. 1

A) 10

B) 20

C) 30

D) 50