## **BIO 103**

Q1 : Most of glucose monomers in starch are joined by ?? a- 1-2 linkage b- 1-4 linkage
Q2 : The most common monosacchraide is ? <u>a- Glucose</u> b- Ribose  c- Fructose  d- Maltose
Q3- The bonding two glucose units forms ? a- Sucrose b- Ribose c- Maltose d- Fructose
Q4- The name of glycosodic linkage that bind Glucose and Fructose is ? a- 1-4 of glycosodic linkage b- 1-2 of glycosodic linkage
Q5- The carbohydrate used by arthropods to build their exoskeletons is ? <u>a- Chitin</u> b- Strach  c- Glucose  d- Pharmacy
Q6- A molecule is a Ketoses and pentoses ? a- Ribose b- Ribulose

c- Glyseraldehyde d- Galactose Q7- all of the following polymer except? a-proteins b- Lipds c- Nucleic acids d- Glucose Q8- Three Fatty acid moleculeseach joints to glycerol by? a- glycosodic linkage b- ester linkage c- peptide bond d-chapoeronins Q8- What is the different between saturated and unsaturated fat? a- saturated is solid and unsaturated is liquid b- saturated has double bond c- unsaturead has double bond causes bending d- A+C Q9- What characterized by a carbon Skelton for steroids/ cholesterol? a- trans fats b- three fatty acid + clycerol c- four fused rings d- triacyhglycerol Q10- polymers of amino acid is? a- polypeptides b- proteins c-Glucose d-polynucleotides

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Q11- Polymer of Amino Acid liked by?
a- ester likage
b- peptide bond
c- Nucleotides
d- Purines
Q12- All of the following is weak bond except?
a- Hydrogen bond
b- Van dar waals
c- Hydrophobic
d- Disulfide bridge
Q13- All of the following is fibrous protein except?
a- collagen
b- Keratin
c- Hemoglobin
d- actin
Q14- All of the following is used to determine 3-d structure for proteins
except ?
a- X-ray crystallography
b- NMR
c- bioinfor-matics
d- centrifugation
Q15- Nucleotides composed of?
a- nitrogen base
b- pentose suger(fove carbon suger)
c- all of the above
d- Phosphate group
Q16- one of the following found just in DNA?
a- U
b-A
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<u>c- T</u> d- G
Q17- These cells are Eukaryotic cells except ? a- bacteria b- protists c- A+D d- Archaea
Q18- the Function of the ribosomes ? <u>a- make proteins</u> b- transport  c- phagocytosis  d- storage
Q19- All of the following is a double membrane except ? a- nucleus b- mitochondria c-peroxisome d- vacuoles
20- All of the following are part of the endomembrane system except ? a- Nuclear envelope b- plasma membrane c- Golgi body d- Mitochondria
21- The function of smooth ER ? a- Synthesis lipds b- metabolisms of carbohydrates c- detoxification of drugs d- all of the above
22- One of the following found in mature plants ? a- Food vacuoles

- b- contractile vacuoles
- c- Central vacuoles
- d- ATP
- 23-The function of mitochondria?
- a- Cellular respiration
- b- generate ATP
- c- Autophagy
- <u>d- A+b</u>
- 24- One of the following is a not part of the endomembrane system?
- a- Vacuoles
- b-ER
- c- Nuclear envelop
- d- peroxisome
- 25- The main of proteins facilitated water only ??
- a- integral
- b- aquaporin
- c-peripheral
- d- intracellular joining