



END TERM EXAM - 2020
SECOND YEAR MBBS PART II – MCQs

Total marks: 30
Time Allowed: 25 minutes

06/03/2019

Select one best answer

<p>1 The enzyme involved in the activation of tRNA in translation is</p> <p>(a) Amino acyl-tRNA synthase (b) Amino acyl-tRNA synthetase (c) Amino acyl-m RNA synthetase (d) Helicase</p>	<p>2 The amino acid binds to the tRNA at:</p> <p>(a) 5' end (b) 3' end (c) D-loop (d) Anticodon arm</p>
<p>3 The conversion of acetyl CoA to malonyl CoA is the rate-limiting step in the fatty acid synthesis. Which of the following enzyme catalyzes the above-mentioned reaction?</p> <p>(a) Acetyl CoA carboxylase (b) Malonyl CoA synthetase (c) Acetyl CoA decarboxylase (d) Malonyl CoA synthase</p>	<p>4 The shape of tRNA is</p> <p>(a) Double Helix (b) Single Helix (c) Globular (d) Clover leaf like</p>
<p>5 All are true regarding alpha oxidation except</p> <p>(a) Energy is generated (b) Oxidation does not require COA (c) 1 molecule of CO₂ is produced in each cycle (d) 1 Carbon is removed from carboxylic end</p>	<p>6 21 carbon Fatty acid will be finally catabolized into</p> <p>(a) Acetyl-SCoA (b) Propionyl CoA (c) Succinyl-SCoA (d) Malonyl-SCoA</p>
<p>7 The tRNA on its 5' end has</p> <p>(a) 7 methyl guanosine cap (b) Shine-dalgarno sequence (c) Phosphate group attached (d) Binds to cap of mRNA</p>	<p>8 Carnitine acyl transferase I (CAT I) controls fatty acid entry into the cell for oxidation. It is inhibited by:</p> <p>(a) Carnitine (b) Malonyl CoA (c) Palmitate (d) Carnitine acyl transferase II</p>
<p>9 Lauric acid a C12 fatty acid will undergo how many beta oxidation cycles and how many acetyl SCoA are formed</p> <p>(a) 6 cycles + 5 acetyl SCoA (b) 5 cycles + 6 acetyl SCoA (c) 5 cycles + 5 acetyl SCoA (d) 6 cycles + 6 acetyl SCoA</p>	<p>10 During translation in prokaryotes the ribosomal unit that binds to the shine-dalgarno sequence of mRNA is:</p> <p>(a) Large ribosomal unit (b) Small ribosomal unit (c) 16s RNA (d) 5.8s rRNA</p>
<p>11 Cholesterol is converted to bile acids in liver by losing</p> <p>(a) Acetyl CoA (b) Propionyl CoA (c) Succinyl CoA (d) Malonyl CoA</p>	<p>12 HMG CoA synthase cytosolic isoform in hepatocytes is responsible for</p> <p>(a) Cholesterol synthesis (b) Ketone body synthesis (c) Fat synthesis (d) Fatty acid synthesis</p>
<p>13 Bile acid synthesis requires addition of hydroxyl group at carbon number</p> <p>(a) 3 (b) 5 (c) 7 (d) 9</p>	<p>14 During translation in eukaryotes the unit that binds to the Cap structure of mRNA is:</p> <p>(a) 70S RNA (b) Small ribosomal unit (c) Large ribosomal unit (d) 16s RNA</p>

<p>15 When one whole codon triplet is inserted or deleted, it is called</p> <p>(a) Silent mutation (b) Frame shift mutation (c) Nonsense mutation (d) Missense mutation</p>	<p>16 Renin</p> <p>(a) Converts angiotensinogen to angiotensin-I (b) Converts angiotensin-I to angiotensin-II (c) Converts angiotensin-I to angiotensinogen (d) Converts angiotensin-II to angiotensin-I</p>
<p>17 Triacylglycerol is found in highest concentration in</p> <p>(a) VLDL (b) HDL (c) LDL (d) Chylomicrons</p>	<p>18 Which of the following is not a function of Progesterone?</p> <p>(a) Inhibits lactation during pregnancy (b) Contracts smooth muscles (c) Converts endometrium to its secretory phase (d) During gestation it decreases maternal immune response</p>
<p>19 Testosterone is converted to estradiol by enzyme</p> <p>(a) 5 α reductase (b) Isomerase (c) Aromatase (d) Lyase</p>	<p>20 VLDL is converted to all except</p> <p>(a) VLDL remnants (b) IDL (c) HDL (d) LDL</p>
<p>21 Lipoprotein lipase deficiency leads to</p> <p>(a) Steatohepatitis (b) Type I hyperlipoproteinemia (c) Type II hyperlipoproteinemia (d) Type III hyperlipoproteinemia</p>	<p>22 Cholesterol is found in highest concentration in</p> <p>(a) Chylomicrons (b) VLDL (c) HDL (d) LDL</p>
<p>23 Primary building block of triglycerides and phospholipids is</p> <p>(a) Phosphatidic acid (b) Sphingosine (c) Ceramide (d) Glucose</p>	<p>24 Pregnenolone is formed from cholesterol by the enzyme</p> <p>(a) 17 α hydroxylase (b) Desmolase (c) 21 hydroxylase (d) 11 β hydroxylase</p>
<p>25 The end product of purine degradation in birds is</p> <p>(a) Urea (b) Allantoin (c) Xanthine (d) Uric Acid</p>	<p>26 Respiratory Distress Syndrome is deficiency of</p> <p>(a) Cephalin (b) Phosphotidyl serine (c) Phosphotidyl inositol (d) Dipalmityl lecithin</p>
<p>27 Phosphatidylglycerol + phosphatidylglycerol forms</p> <p>(a) Cardiolipin (b) plasmalogen (c) Lecithin (d) Platelet activating factor</p>	<p>28 Ceramide is synthesized from</p> <p>(a) Sphingosine and glycerol (b) Sphingosine and phosphate (c) Sphingosine and fatty acid (d) Sphingosine and amino acid</p>
<p>29 The enzyme xanthine oxidase catalyzes the conversion of</p> <p>(a) Inosine to hypoxanthine (b) Guanosine to guanine (c) Xanthine to uric acid (d) Inosine monophosphate to inosine</p>	<p>30 Low activity of which enzymes leads to orotic aciduria</p> <p>(a) Dihydroorotase (b) Carbamoyl phosphate synthetase II (c) Dihydroorotate dehydrogenase (d) Orotate phosphoribosyl transferase and OMP decarboxylase</p>