Some new exercises popping up in the final of 2015 Biochemistry Ⅱ

1. In bacteria, the peptidyl transferase activity that catalyzes peptide bond formation is found in
2. the 23S ribosomal RNA.
3. the EF-G protein.
4. tRNAs.
5. the 30S ribosomal subunit.
6. All hormone
7. are able to enter their target cells.
8. are water-soluble
9. act through binding receptors.
10. act by changing the expression of specific genes.
11. Which of the following enzyme is inhibited by adenylation?
12. Glutamate dehydrogenase
13. Glutamine synthetase
14. Glutamate synthase
15. Glutaminase
16. Which of the following is not a form of RNA processing of eukaryotic RNA polymerase II primary transcripts?
17. Polyadenylation
18. Proteolytic cleavage
19. Splicing
20. 5’-end capping
21. Which of the following inhibits protein synthesis in prokaryotes?
22. Actinomycin
23. Puromycin
24. α-amanitin
25. Cycloheximide
26. Which of the following is not a component of the core histone?
27. H1
28. H2B
29. H2A
30. H3
31. H4
32. Which of the following is not the physiological role of nucleotide:
33. allosteric regulator
34. a component of many proteins
35. component of NAD, FAD and CoA
36. intracellular signaling molecule
37. How many high energy phosphodiester bonds are consumed in the synthesis of one specific peptide bond?
38. One
39. Two
40. Three
41. Four
42. Lovastatin is a treatment to inhibit which enzyme?
43. Acetyl-CoA carboxylase
44. HMG-CoA reductase
45. Xanthine oxidase
46. Tyrosinase
47. Which amino acids can be synthesized from α-ketoglutarate?(多选)
48. Glutamate
49. Proline
50. Arginine
51. Glutamine
52. Histidine
53. Which processes or substrates are related to cholesterol synthesis and degradation(多选)
54. Acetyl-CoA
55. Mevalonate
56. β-oxidation
57. chylomicrons
58. Which metal irons play a crucial rule in electron transfer chain?(简答题)
59. If C-14 labeled CO2 is added to intact mitochondria with the substrate lactate, please determine which carbons are labeled with C-14 and explain.(Given all the conditions and cofactors needed)（简答题）
60. What effect will valinomycin have on the secretion of insulin by β-pancreatic cell. （简答题）
61. Please explain the coordinative regulation between fatty acid synthesis and degradation.（简答题）
62. Describe three reactions of reverse transcriptase. Explain the importance of the discovery of reverse transcriptase. Explain how is reverse transcriptase widely used? Explain why telomerase is a reverse transcriptase.(综合题)

感觉李珍老师的两个综合题一定是血糖调节和DNA 复制酶、RNA转录酶、RNA复制酶、RNA逆转录酶的比较或者其中一种。