Preparing for the CDE Practice Exam 2018

This paper exam is the same version as the computerized test located on our Online Diabetes Education University - www.DiabetesEdUniversity.com in the online course "Preparing for the CDE Exam". Some of our students requested a paper version of the test, so they could print it out and put pencil to paper. To find the correct answers, simply take the online computerized test. From the transcript page, you can print out your test results to help you prioritize your areas of study. Thank you, Beverly

Course Exam

- 1. Which of the following confirmed values meet the diagnostic threshold for diabetes? [Multiple Choice]
 - 1. fasting blood glucose equal to or greater than 140mg/dl
 - 2. random glucose greater than 160 mg/dl
 - 3. 2 hour post prandial glucose greater than or equal to 126 mg/dl
 - 4. fasting blood glucose equal to or greater than 126mg/dl
- 2. Circle the statement that reflects the action of insulin. [Multiple Choice]
 - 1. enhances lipogenesis
 - 2. inhibits glycogenolysis
 - 3. promotes protein synthesis
 - 4. all of the above
- 3. At risk or pre-diabetes is best defined as: [Multiple Choice]
 - 1. Fasting glucose of 100 125mg/dl
 - 2. Borderline diabetes
 - 3. Random glucose greater than 140mg/dl
 - 4. Blood glucose level less than 140 mg/dl after oral glucose tolerance test result
- 4. Which of the following confirmed values meet the diagnostic threshold for diabetes? [Multiple Choice]
 - 1. fasting blood glucose equal to or greater than 140mg/dl A1c 7% or greater
 - 2. A1c 6% or greater
 - 3. 2 hour post prandial glucose greater than or equal to 180 mg/dl
 - 4. fasting blood glucose equal to or greater than 126mg/dl

5. Of the following, who is at greatest risk for type 1 diabetes? [Multiple Choice]

- 1. Someone with family members who have celiac and thyroid disease.
- 2. Someone with family members who have type 2 diabetes.
- 3. Someone who is overweight and smokes cigarettes.
- 4. Someone who has a history of severe and chronic hypoglycemia.

6. Carlos is worried about starting dapagliflozin (Farxiga) because of the side effects. Which of the following reflects the main action of SGLT-2 Inhibitors? [Multiple Choice]

- 1. opposes the action of insulin
- 2. enhances gastric emptying
- 3. promotes glucagon release
- 4. decreases glucose re-absorption in the proximal tubules

7. Which of the following best describes type 1 diabetes? [Multiple Choice]

- 1. insulin resistance secondary to obesity
- 2. hyperglycemia that can be treated with pills or insulin
- 3. auto-immune disease that attacks the beta cells of the pancreas
- 4. a disease that is more common in children who drink cows milk

8. **Glycogenolysis is metabolic conversion of:** [Multiple Choice]

- 1. glycogen into glucose
- 2. glucagon into glucose
- 3. glucose into glycogen
- 4. glucose into glucagon

9. Which statement best describes the differences between the characteristics of type 1 and type 2 diabetes: [Multiple Choice]

- 1. persons with type 2 diabetes usually require lower doses of insulin because they have a milder form of diabetes.
- 2. persons with type 1 diabetes may be asymptomatic at the time of diagnosis, but rapidly develop complications.
- 3. persons with type 1 diabetes can increase endogenous insulin production by taking oral hypoglycemic agents.
- 4. autoimmune factors are more likely to be a cause or contributing factor for type 1 diabetes than for type 2 diabetes

- 10. Which of the following are the ADA recommended blood pressure and lipid goals for non-pregnant adults with diabetes? [Multiple Choice]
 - 1. B/P < 140/80, Trig < 200, LDL < 100
 - 2. B/P < 130/85, Trig < 300
 - 3. B/P < 135/80, Trig < 200, LDL < 130
 - 4. B/P < 140/90, Trig < 150
- 11. According to the ADA, people with type 2 diabetes should be screened for microalbuminuria/ GFR: [Multiple Choice]
 - 1. five years after diagnosis and then yearly
 - 2. at diagnosis and then yearly
 - 3. the onset of renal failure and then yearly
 - 4. with the first signs of hypertension and then yearly
- 12. Tight glucose control reduces the risk of diabetes related complications. Circle the blood glucose targets as outlined by the American Diabetes Association. [Multiple Choice]
 - 1. before meal glucose 80mg/dl 120mg/dl, post prandial glucose 100mg/dl 140mg/dl
 - 2. glucose between 70mg/dl 150mg/dl, A1c less than 6.5%
 - 3. before meal glucose 80mg/dl 130mg/dl, 1-2 hours after a meal, < 180mg/dl, A1c < 7% for most people
 - 4. fasting glucose < 126mg/dl, random < 200mg/dl
- 13. Circle the blood glucose targets as outlined by the AACE (Association of the American College of Endocrinology): [Multiple Choice]
 - 1. A1c < 6.5% for most, A1c > 6.5% if at risk for hypoglycemia
 - 2. Before meal glucose 60 mg/dl 120 mg/dl, post prandial glucose 100-140 mg/dl
 - 3. Glucose between 70 -150mg/dl, A1c less than 7.5%\
 - 4. Fasting glucose < 126mg/dl, random < 200mg/dl.
- 14. According to the UKPDS, patients with type 2 diabetes can reduce their risk of diabetes complications by: [Multiple Choice]
 - 1. delaying insulin therapy
 - 2. following a flexible meal plan
 - 3. using metformin as monotherapy
 - 4. controlling blood glucose and blood pressure

15. According to the Diabetes Control and Complicat	tions [Trial (DCCT),	patients	with i	intensive
diabetes management had a significant reduction in:	[Mu	ıltiple	Choice]			

- 1. retinopathy progression only
- 2. all three microvascular complications of diabetes
- 3. macrovascular complications
- 4. macrovascular and microvascular complications

16. According to the Diabetes Prevention Program (DPP) 2001, for patients with pre diabetes, the risk of diabetes can be reduced by 58% by doing the following: [Multiple Choice]

- 1. Eating a low carb diet and losing at least 5-10 pounds.
- 2. Losing 5-7% of body weight through a low fat diet and 30 minutes of daily activity
- 3. Consuming a diet high in monounsaturated fats coupled with daily vigorous exercise
- 4. Initiating metformin 850 mg BID and yearly nutrition counseling by a registered dietitian

17. Which of the following medication does not cause hyperglycemia? [Multiple Choice]

- 1. phenytoin
- 2. salicylates
- 3. prednisone
- 4. prograf

18. AJ has been instructed to take Starlix 60mg before each meal. AJ frequently eats only breakfast and dinner. What would be the best recommendation for AJ?: [Multiple Choice]

- 1. Only take the Starlix if AJ plans to eat a meal.
- 2. Only take the Starlix at lunch time if blood glucose levels are greater than 110mg/dl.
- 3. Take the Starlix three times a day, whether or not AJ eats lunch.
- 4. Double the dinner dose if blood glucose levels are greater than 150mg/dl.

19. Patients taking sulfonylureas or meglitinides should be counseled about which of the following? [Multiple Choice]

- 1. take medication, even if they are not able to eat
- 2. signs of hypoglycemia and appropriate action
- 3. medications may cause nausea and weight loss
- 4. take extra medications if glucose levels are elevated

- 20. TR is taking 15 units of glargine at bedtime and 4 units of humalog before each meal. TR is experiencing at least one episode of hypoglycemia a week, usually between breakfast and lunch. TR checks glucose levels before each meal. Pre meal glucose levels are 110mg/dl on average. What initial change in self-management would you recommend? [Multiple Choice]
 - 1. move the glargine to the am to prevent post meal hypoglycemia
 - 2. decrease the humalog by 1 unit at lunch
 - 3. decrease humalog by 1 unit at breakfast
 - 4. ask TR to increase carbohydrate intake by 15 gms at each meal
- 21. BT has been on glipizide (Glucotrol) 10 mg BID for the past four years, but BTs A1c has progressively increased and is now 7.8%. Pioglitazone (Actos) 45 mg daily was added to BTs regimen a month ago. During your initial assessment, BT complains that she has had a recent weight gain of 6 lbs and can not figure out why. The most likely cause of BTs weight gain is: [Multiple Choice]
 - 1. recent stressful life events
 - 2. fluid retention
 - 3. decreasing frequency of exercise
 - 4. acute renal failure
- 22. KL is a 24 year old admitted in DKA. Which of the following insulins may be used intravenously to treat his hyperglycemia? [Multiple Choice]
 - 1. regular
 - 2. lantus
 - 3. NPH
 - 4. a basal bolus combination
- 23. Indicate which of the following conditions is a contraindication for metformin (Glucophage) therapy. [Multiple Choice]
 - 1. thyroid disorders
 - 2. hypertriglyceridemia
 - 3. gout
 - 4. renal impairment

24. LS is being started on a glucosidase inhibitor. Which of the following would you include in your instructions? [Multiple Choice]

- 1. take only if blood glucose is elevated
- 2. if you experience hypoglycemia, drink some milk
- 3. take medication 30 to 45 minutes after a meal
- 4. if you experience hypoglycemia, eat 6-8 lifesavers

25. RT is taking exenatide XR (Bydureon) once a week injections. Of the following issues, which one should RT report to his provider immediately? [Multiple Choice]

- 1. Slight inflammation at injection site.
- 2. Nausea after injections.
- 3. Sudden abdominal pain.
- 4. Blood glucose level of 187 mg/dl.

26. Patients taking thiazolidinediones should: [Multiple Choice]

- 1. be warned about the risk of fluid retention
- 2. have renal function studies done at the start of therapy and then monthly
- 3. have cystoscopy performed to rule out bladder cancer
- 4. take with meals to avoid GI upset
- 27. Mr. Pasteur is started on the following insulin regimen: 22uNPH/10uReg before breakfast, 5u Reg before dinner and 10uNPH before bedtime. His BMI is 33. His before morning blood glucose levels are consistently above 140 mg/dl. What change in insulin therapy could help improve his a.m. glucose levels? [Multiple Choice]
 - 1. Decrease before dinner regular insulin
 - 2. Increase am NPH insulin
 - 3. Change bedtime NPH to before dinner instead of before bedtime
 - 4. Increase bedtime NPH

28. Patients taking HMG-CoA Reductase Inhibitors (statins) to lower LDL should:

[Multiple Choice]

- 1. Report any muscle pain to provider immediately
- 2. Have EKG done after one year of therapy
- 3. Get a baseline hearing test before initiating therapy
- 4. Take after meals to avoid GI upset

29. According to ADA Standards, people with diabetes should be on started on a statin if the following is true. [Multiple Choice]

- 1. Only if there LDL is more than 70 and they have a history of heart disease
- 2. Only if they have a LDL of 100 or greater
- 3. Only if they have a family history of heart disease
- 4. They are over the age of 40

30. Which of the following is an accurate statement regarding Beta Blockers? [Multiple Choice]

- 1. May prevent second heart attack
- 2. Recommended for people with diabetes after a heart attack.
- 3. Can cause hypoglycemia
- 4. May mask the signs of hyperglycemia

31. The leading cause of death for people with diabetes is: [Multiple Choice]

- 1. amputation
- 2. kidney failure
- 3. pancreatic neoplasm
- 4. heart disease

32. Patients with diabetes are at greater risk for which of the following dental problems:

[Multiple Choice]

- 1. mouth cancer
- 2. mouth ulcerations
- 3. periodontal disease
- 4. tooth impaction

33. Simple education can save lower extremities. Which of the following is correct foot care advice? [Multiple Choice]

- 1. soak your feet every day in warm water for 15 minutes
- 2. only walk barefoot at home
- 3. apply lotion between the toes to prevent dry skin
- 4. quit smoking

34. Which of the following are examples of autonomic neuropathy? [Multiple Choice]

- 1. excess perspiration on lower extremities and gastroparesis
- 2. foot ulcers and skin infections
- 3. gastroparesis and silent MI
- 4. decreased taste and smell sensation
- 35. Which of the following tests can detect loss of protective sensation? [Multiple choice]
 - 1. Pin prick assessment
 - 2. monofilament testing
 - 3. Ankle Brachial Index ABI
 - 4. gustatory sweating analysis

36. Of the following, which risk factor is most predictive for future foot ulcers?

[Multiple Choice]

- 1. loss of protective sensation
- 2. smoking
- 3. insulin treatment
- 4. history of previous foot ulceration or amputation

37. How would you counsel your 24-year-old female patient with type 1 diabetes for the past 8 years to help prevent development of an eating disorder? [Multiple Choice]

- 1. encourage her to eat 3 meals a day with at least 2 snacks
- 2. instruct her to weigh herself daily to assess weight fluctuations
- 3. have her keep a daily food diary and review it weekly
- 4. give her permission to express negative feelings about diabetes

38. Which of the following is true about anxiety disorders and diabetes? [MultipleChoice]

- 1. people with diabetes are less likely to have anxiety disorders than the general population.
- 2. anxiety disorders can cause visual hallucinations
- 3. anxiety disorders are exaggerated emotional responses to normal fears
- 4. anxiety disorders can actually improve glucose control

39. The following are symptoms of clinical depression EXCEPT: [Multiple Choice]

- 1. trouble sleeping or excessive sleeping nearly every day
- 2. restlessness or feeling keyed-up or on edge nearly every day
- 3. feeling sad or empty most of the day, nearly every day
- 4. fatigue or loss of energy nearly every day.

40. You suspect your 16 year old client, MZ, may have disordered eating. Which self-reported behavior may be an indication that MZ has disordered eating? [Multiple Choice]

- 1. occasionally skips meals
- 2. cuts down on calories when clothes start getting tight
- 3. takes less insulin than required for blood glucose control
- 4. eats half a chocolate bar every evening after dinner

41. Pattern management of blood glucose is a method of: [Multiple Choice]

- 1. supplementing insulin when a single elevated blood glucose occurs
- 2. using regular sliding scale insulin whenever blood glucose reaches 200 mg/dl or higher
- 3. controlling blood glucose during a hospital stay
- 4. examining the factors contributing to several days of blood glucose results before changing medication dosages

42. Which of the following will affect the accuracy of results in blood glucose monitoring?

[Multiple Choice]

- 1. A1c levels greater than 2% above the mean
- 2. Abnormal hematocrit levels
- 3. Abnormal renal threshold
- 4. Blood ketone levels

- 43. Which of the following is a necessary component of a quality assurance program for blood glucose meter usage? [Multiple Choice]
 - 1. memory capability
 - 2. user training
 - 3. comparison with A1c levels
 - 4. using outdated control solutions
 - 44. During a diabetes education session, you notice the patient is beginning to sweat and get shaky. She uses her meter to test her blood glucose and it is 58. The patient tells you she has a box of raisins in her purse. What is the best action? [Multiple Choice]
 - 1. advise the patient to eat about 2 tablespoons of her raisins
 - 2. leave the room to get 3 glucose tablets
 - 3. call the doctor for orders
 - 4. give a glucagon injection
- 45. You are teaching a patient's wife about how to use a Glucagon Emergency Kit if her husband with type 1 diabetes and a history of heart disease is found unconscious. Which of the following statements is accurate? [Multiple Choice]
 - 1. glucagon is glucose in powder form
 - 2. always check blood glucose level before injecting glucagon
 - 3. Glucagon Emergency Kits can be purchased over the counter
 - 4. give calorie-containing foods to the person as soon as they are able to safely swallow
- 46. Diabetes Ketoacidosis (DKA) is a dangerous condition for people with diabetes. Which of the following statements is NOT accurate? [Multiple Choice]
 - 1. Sub-Q insulin should be given 4 hours after the intravenous insulin infusion is discontinued.
 - 2. the two most important things the patient needs are fluid and insulin
 - 3. DKA is often precipitated by illness or infection.
 - 4. people with type 1 diabetes are more likely to go into DKA

- 47. Which of the following is a risk factor for HHNS (hyperglycemic, hyperosmolar nonketotic syndrome) in persons with type 2 diabetes? [Multiple Choice]
 - 1. stress
 - 2. viral infection
 - 3. occasional alcohol intake
 - 4. over insulinization
- 48. When assessing a participants educational needs and readiness to learn, it is most important to evaluate all of the following EXCEPT: [Multiple Choice]
 - 1. life experiences
 - 2. cultural beliefs about diabetes
 - 3. preferred style of learning
 - 4. the last school grade they completed
- 49. Adult learners have all of the following characteristics EXCEPT: [Multiple Choice]
 - 1. subject oriented learners
 - 2. problem-oriented learners
 - 3. prefer active learning
 - 4. incorporate past experiences into current learning experience
- 50. The most realistic and effective way to assess a patient's understanding of educational materials is to: [Multiple Choice]
 - 1. determine the last grade they completed in school
 - 2. have them read educational materials out loud in front of a group
 - 3. have them read educational materials and explain what they have read
 - 4. have every patient take the TOFHLA test
- 51. KR is newly diagnosed with type 2 diabetes and has low literacy skills. When teaching KR which strategy is most effective? [Multiple Choice]
 - 1. speak slowly and clearly
 - 2. limit the number of educational objectives
 - 3. speak slightly louder than usual
 - 4. focus on abstract concepts.

52. One of the best ways to determine how a patient of a certain cultural group understands their diabetes is to: [Multiple Choice]

- 1. determine their ethnic identification and research their cultural beliefs
- 2. evaluate their socioeconomic status
- 3. have a one-one meeting with their significant other
- 4. ask questions regarding their personal beliefs about diabetes

53. Components of the health belief model include all of the following EXCEPT:

[Multiple Choice]

- 1. locus-of-control
- 2. susceptibility to disease
- 3. benefits of self-care
- 4. costs of self-care

54. A patient says to you, "I can avoid diabetes complications." Which of the following are they exhibiting? [Multiple Choice]

- 1. powerful other locus of control
- 2. internal locus of control
- 3. chance locus of control
- 4. magical thinking

55. Your patient tells you she is drinking aloe juice to control her diabetes. The best response is: [Multiple Choice]

- 1. "aloe juice has not been scientifically proven to control blood glucose levels"
- 2. "aloe juice has been proven to decrease glucose levels"
- 3. "tell me about your overall blood sugar control"
- 4. "folk remedies usually don't work"

56. You are taking care of a 13-year-old admitted for the second time this month in ketoacidosis. Which of the following issues would be most important to assess? [Multiple Choice]

- 1. his grades in school
- 2. his literacy level
- 3. adherence to his meal plan
- 4. his risk taking behaviors

57. AT is a 43-year old newly started on insulin. Circle the survival topic that is essential for AT to know before discharge. [Multiple Choice]

- 1. managing insulin doses when traveling across time zones
- 2. how to adjust his insulin dose before exercise
- 3. signs of hypoglycemia
- 4. how to adjust insulin dose based on carbohydrates consumed

58. RL is a 45 year old with type 2 diabetes and is 30 pounds overweight. Which of the following is an example of a measurable, behavioral goal for RL?: [Multiple Choice]

- 1. I will walk 3 times a week for 20 minutes for the next month
- 2. I will eat less at every meal
- 3. I will lose 3 pounds a week
- 4. I will lose 25 pounds in the next 3 months

59. Which of the following is considered an outcome measure of a diabetes education program [Multiple Choice]

- 1. participant satisfaction with the physical class environment
- 2. evaluation of quality of educational materials
- 3. A1c levels before and after program
- 4. waiting time to enter education program

60. Diabetes self management education is best described as: [Multiple Choice]

- 1. the healthcare professional knows what is best for patients with diabetes
- 2. facilitating the knowledge, skill and ability necessary for diabetes self-care.
- 3. change is a result of the healthcare professionals coaching and encouragement
- 4. all patients can totally self-manage their diabetes

61. To enhance self-management skills, diabetes educators should: [Multiple Choice]

- 1. encourage rigid adherence to a treatment plan
- 2. focus on flexibility and problem solving skills
- 3. instruct patients to contact educator right away if glucose levels are out of range
- 4. remind patients that diabetes self-care should always be their first priority

- 62. Which of the following are characteristics of peripheral arterial disease? [Multiple Choice]
 - 1. Ingrown toenails
 - 2. Pulses difficult to palpate due to edema
 - 3. Callus formation on the ball on the foot
 - 4. Intermittent claudication
- 63. The American Diabetes Association Standards of Care indicates that Medical Nutrition Therapy (MNT) provided by a Registered Dietitian Improves outcomes. Which of the following statements are true? [Multiple Choice]
 - 1. Medical Nutrition Therapy always results in 10-15% weight loss.
 - 2. Medical Nutrition Therapy can lower A1c's by 1-2%
 - 3. Medical Nutrition Therapy can increase triglycerides by 20%.
 - 4. Medical Nutrition Therapy decreases depression in most patients.
- 64. In the process of providing medical nutrition therapy for a person with diabetes, the goal is to improve overall diabetes control by [Multiple Choice]
 - 1. Providing a written meal plan
 - 2. Emphasizing portion control
 - 3. Assisting the person to make self-directed behavior changes
 - 4. Using carbohydrate counting
- 65. For a person with type 1 diabetes who is using intensive diabetes therapy, meals and snacks can be scheduled according to [Multiple Choice]
 - 1. Usual eating habits
 - 2. Insulin action times
 - 3. The calorie content
 - 4. Meal spacing
- 66. For a person with type 2 diabetes, a moderate calorie restriction is recommended in order to [Multiple Choice]
 - 1. Achieve a weight loss of 5 lb. (2 kg)
 - 2. Achieve a weight loss of 30 lb. (14 kg)
 - 3. Improve insulin sensitivity
 - 4. Avoid the need for insulin

- 67. You are seeing Meg for nutrition counseling. She has a 5 year history of type 2 diabetes and currently weighs 280 lbs. Her total cholesterol is 224 and LDL is 130. Meg wants to know how many pounds she needs to lose to lower and maintain her total and LDLcholesterol levels. You tell her: [Multiple Choice]
 - 1. 56 lbs
 - 2. 10 lbs
 - 3. 42 lbs
 - 4. 28 lbs
- 68. When evaluating the effectiveness of a carbohydrate-to-insulin ratio, it is important to consider: [Multiple Choice]
 - 1. Intake of carbohydrate
 - 2. Timing of exercise
 - 3. Post-prandial blood glucose levels
 - 4. All of the above
- 69. Your client MS asks you to help her read the label on a bag of potato chips which she enjoys. The nutrient content claim states that it is "low fat" and she wants to know if she can eat them without hurting her diabetes control. She understands and uses the exchange system for meal planning. You use this opportunity to educate her on label reading, emphasizing: [Multiple Choice]
 - 1. Serving size, grams for carbohydrate and fat
 - 2. Serving size and percent daily value for fat
 - 3. Percent daily value for fat and sodium
 - 4. Serving size and calories per serving
- 70. Which of the following is a true statement about diabetes and alcohol? [MultipleChoice]
 - 1. People with diabetes should not drink alcohol
 - 2. Alcohol stimulates glycogenolysis
 - 3. Hypoglycemia can occur 8-12 hours after drinking alcohol
 - 4. Alcohol is a source of glucose

- 71. During an exercise session for a person without diabetes, changes in the concentration of which hormones result in an increase in blood glucose supply to exercising muscles? [Multiple Choice]
 - 1. insulin and glucagon
 - 2. glucagon and epinephrine
 - 3. epinephrine and growth hormone
 - 4. all of the above
- 72. Hypoglycemia during exercise is more likely to be experienced by people who are treated with insulin or: [Multiple Choice]
 - 1. biguanides
 - 2. thiazolidinediones
 - 3. sulfonylureas
 - 4. alpha-glucosidase inhibitor
- 73. JJ is 45 years old and has had type 2 diabetes for 5 years. He would like to begin an exercise program, which includes jogging 3 times a week with a friend for 2 miles, which takes about 30 minutes. He takes a sulfonylurea to control his diabetes. If his blood glucose is 80 before exercise, how much carbohydrate will he need to consume to prevent hypoglycemia? [Multiple Choice]
 - 1. None
 - 2. 15 g CHO
 - 3. 30 g CHO
 - 4. 45 g CHO
- 74. All are benefits of exercise for people with diabetes except [Multiple Choice]
 - 1. decreased triglycerides
 - 2. decreased LDL and HDL cholesterol
 - 3. increased insulin sensitivity
 - 4. adjunct to controlling hypertension
- 75. MJ is a 78-year-old with type 2 diabetes taking 2 daily insulin injections. Since MJ lives alone, which of the following is MOST important to assess: [Multiple Choice]
 - 1. ability to check urine ketones
 - 2. level of activity
 - 3. level of social support
 - 4. ability to accurately draw up and inject his insulin

76. Match the medications to their main action:	[Matching]					
 1. Metformin (Glucophage) 2. Exenatide (Byetta 3. Acarbose (Precose) 4. Sulfonylureas 5. Meglitinides 	A. Insulin sensitizer B. Oral agent that stimulates insulin release C. Decreases glucose release from liver D. Slows absorption of carbohydrates E. Slows gastric emptying (type 1 and 2 can					
6. Pramlintide (Symlin) 7. pioglitazone (Actos) 8. dapagliflozin (Invokana)	use) F. Injection that stimulates insulin release w/ meals G. "Glucoretic"					
77. Match the following: [Matching]						
1. Glargine (Lantus), Detemir	A. basal insulin (intermediate acting)					
(Levemir) insulin	B. bolus insulin analog (rapid acting)					
2. 70/30 insulin	C. pre mixed basal/ bolus					
3. Aspart (Novolog) insulin	D. basal insulin (long acting)					
4. NPH	E. bolus insulin (short acting)					
5. Regular insulin						

78. All of the following are required elements of a Diabetes Self-Management Program except: [Multiple Choice]

- 1. Education plan for each participant
- 2. Establishment of a behavioral goal of each participant
- 3. Documentation of at least one outcome measure of the program
- 4. Establishment of an advisory committee that includes at least one MD

79. Under Medicare guidelines, which of the following statements is accurate?

[Multiple Choice]

- 1. Patients with type 2 diabetes are covered for 100 strips every 3 months.
- 2. Patients with diabetes can re-take the group classes every calendar year with approval from their referring MD
- 3. Medicare Part A will cover the costs of Diabetes Self-Management Program
- 4. Under Medicare, only group classes are reimbursed.

80. Olive oil and canola oil are sources of: [Multiple Choice]

- 1. Monounsaturated fat
- 2. Polyunsaturated fat
- 3. Saturated fat
- 4. Transfat
- 81. Bill uses MDI to manage his diabetes. His insulin-to-carbohydrate ratio is 1:12 and his correction factor is 1 unit per 50 mg/dL. His target is 100 mg/dL, and his pre-breakfast blood glucose is 205 mg/dL. He is going to eat 2 pieces of toast, 2 scrambled eggs and ½ cup of orange juice for breakfast. What should be his bolus dose of rapid acting insulin? [Multiple Choice]
 - 1. 6 units
 - 2. 5 units
 - 3. 8 units
 - 4. 4 units

82. Diabetes during pregnancy affects women with type 1, type 2 and gestational diabetes. Which of the following statements does NOT apply: [Multiple Choice]

- 1. insulin may be necessary to achieve euglycemia during pregnancy in type 1, 2 and gestational diabetes.
- 2. women who develop gestational diabetes during pregnancy must be screened for vascular complications.
- 3. pregnant women with type 1 and type 2 diabetes are at risk for having a fetus with congenital anomalies if she is not in good glycemic control prior to pregnancy.
- 4. Gestational diabetes is usually diagnosed after the first trimester.

83. Which of the following statements is true regarding preconception care for women with existing diabetes: [Multiple Choice]

- 1. spontaneous abortion rates have been found to correlate with A1c values during the first trimester.
- 2. preconception glucose control can eliminate the risk of congenital anomalies and spontaneous abortion.
- 3. most women in the United States with type 1 and type 2 diabetes achieve optimal glycemic control prior to pregnancy.
- 4. major malformations occur after 8 weeks gestation.

84. Which of the following medications are approved for use in pregnancy? [Multiple Choice]

- 1. HMG-CoA reductase inhibitors (Statins)
- 2. ACE Inhibitors
- 3. Human insulin
- 4. Thiazolidinediones

85. Pregnancy is said to be a diabetogenic state. Which of the following statements best describes this phenomenon? [Multiple Choice]

- 1. during the second half of pregnancy, the need for insulin increases as the placenta produces hormones that cause insulin resistance.
- 2. significant rate of hypoglycemia during the last trimester due to increased prolactin production.
- 3. insulin pump therapy is contraindicated during pregnancy due to increased risk of hypoglycemia.
- 4. hyperglycemia persists after delivery in most women with gestational diabetes.

- 86. Which of the following are desirable blood glucose goals for pregnant women with preexisting or gestational diabetes according to the American Diabetes Association? [Multiple Choice]
 - 1. Premeal \leq 99 mg/dl, peak post prandial 100-139 mg/dl, AIC < 6%
 - 2. Premeal 70-99 mg/dl, 1 hour prandial < 180mg/dl, AIC < 6.5%
 - 3. Fasting 80-130 mg/dl, 2-hour post prandial <180 mg/dl, AIC < 6%
 - 4. Fasting \leq 95 mg/dl, 1-hour post prandial \leq 140 mg/dl, AIC < 6.5%
- 87. Which of the following complications is NOT associated with gestational diabetes:
 [Multiple Choice]
 - 1. macrosomia and hyperbilirubinemia
 - 2. birth defects and small for gestational age
 - 3. hypoglycemia and hyperbilirubinemia
 - 4. macrosomia and hyperbilirubinemia
- 88. Which of the following has been identified as a predictor of poor perinatal outcomes? [Multiple Choice]
 - 1. age of onset of diabetes
 - 2. duration of maternal diabetes
 - 3. presence of diabetes vascular complications
 - 4. background retinopathy
- 89. Mrs. S is 25 pounds overweight, has type 2 diabetes and a normal A1c. She takes canagliflozin (Invokana) and follows her meal plan. In discussing preconception care, the educator will suggest which of the following? [Multiple Choice]
 - 1. delay conception until she achieves a 25 pound weight loss
 - 2. discontinue Invokana and start patient on insulin
 - 3. start patient on prenatal vitamins
 - 4. discontinue Invokana and start glyburide
- 90. A woman with type 1 or type 2 diabetes should seek preconception counseling 3-6 months prior to conception. Which is the most important topic to discuss: [Multiple Choice]
 - 1. an exercise plan
 - 2. insulin needs may increase two to threefold during pregnancy
 - 3. target glucose goals
 - 4. preventing constipation

91. To evaluate glucose control, which of the following patients should have a fructosamine tested instead of an A1c? [Multiple Choice]

- 1. Asian American 53-year-old with type 2 diabetes
- 2. 67-year-old receiving chemotherapy
- 3. An 82-year-old type 2 patient receiving blood transfusions
- 4. A 48-year-old type 1 with autonomic neuropathy

92. The American Diabetes Association recommends universal screening for at risk pregnancies as soon as possible after the confirmation of pregnancy. Criteria for high risk include: [Multiple Choice]

- 1. glycosuria, obese, > 25 years of age, strong family history of diabetes
- 2. the same risk factors for type 2 as listed in the ADA standards of medical care.
- 3. Obese, >35 years of age, member of high-risk ethnic group, strong family history of diabetes.
- 4. Glycosuria, > 25 years of age, member of high-risk ethnic group, strong family history of diabetes

93. The main feature of proliferative retinopathy is: [Multiple Choice]

- 1. Proliferation of cotton wool spots.
- 2. Venous beading
- 3. Thickening of the retina
- 4. Growth of new blood vessels

94. Risk factor reduction prevents complications. Which of the following actions will reduce microvascular disease? [Multiple Choice]

- 1. Increasing fiber intake
- 2. taking a daily aspirin
- 3. controlling hypertension
- 4. stress management

95. Which of the following is a correct retinopathy screening guideline according to the American Diabetes Association. [Multiple Choice]

- 1. For both Type 1 and Type 2 diabetes, a dilated eye exam should be done upon diagnosis.
- 2. Eye examinations must be provided in-person by an experienced Ophthalmologist or Optometrist.
- 3. Laser photocoagulation should be provided to patients with non-proliferative retinopathy.
- 4. Patients with new onset type 2 diabetes require a dilated eye exam upon diagnosis.

96. Which of the following is a true statement about microvascular disease. [MultipleChoice]

- 1. Erectile dysfunction is an indicator of nephropathy,
- 2. Glucose control is the most effective treatment for neuropathy.
- 3. Alcohol consumption decreases neuropathic pain.
- 4. Proteinuria is an early indicator of retinopathy.

97. Seven million people in the United States have diabetes and don't know it. Which of the following may be a sign of diabetes? [Multiple Choice]

- 1. weight gain
- 2. frequent urinary tract infections
- 3. shaky and sweaty
- 4. decreasing urination

98. Which of the following findings may occur when a person with diabetes has a severe infection? [Multiple Choice]

- 1. hypoglycemia
- 2. hyperglycemia
- 3. decreased insulin requirements
- 4. somogyi effect

99. What are symptoms of angina for people with diabetes and cardiac autonomic neuropathy? [Multiple Choice]

- 1. Fatigue, dyspnea, and diaphoresis
- 2. Crushing chest pain
- 3. Pain radiating to the jaw
- 4. Burning pain in legs

- 100. Women with type 1 diabetes are encouraged to breastfeed but will need additional support. Which of the following is NOT true when working with these clients postpartum? [Multiple Choice]
 - 1. they are at risk for hypoglycemia
 - 2. infants are at risk for hypoglycemia
 - 3. insulin dosage will need to be adjusted
 - 4. they are at risk for post partum depression.