

**REFRESHER COURSE IN DIABETOLOGY**  
**ASSESSMENT TEST**  
**EXAMINATION SESSION – JULY 2015**  
**Answer All Questions**

**Time: 60 min.**

**Maximum: 60 Marks**

1. The Insulin polypeptide has
  - A. 21 amino acids in alpha and 30 aminoacids in beta chains
  - B. 20 amino acids in alpha and 31 aminoacids in beta chains
  - C. 19 amino acids in alpha and 32 aminoacids in beta chains
  - D. 22 amino acids in alpha and 29 aminoacids in beta chains.
  
2. C-peptide level
  - A. Helps in diagnosing MODY
  - B. Shows the beta cells reserve
  - C. Indicates resistance of insulin receptors
  - D. Decreased in type 2 DM.
  
3. OGTT – True is
  - A. For diagnosing IGT
  - B. Criteria for interpretation is different for difference ages
  - C. WHO recommends 100 gm of glucose in 250-300 ml of water
  - D. Glycosuria is a reliable additional test recommended.
  
4. Characters of “Type 2 DM in youth” is
  - A. Lower level of insulin and C-peptide
  - B. Evidence of autoimmune destruction present
  - C. Good response to OHA
  - D. Acanthosis is present in 60-95% cases.
  
5. Which edible oil has highest PUFA
  - A. Sunflower
  - B. Olive
  - C. Safflower
  - D. Soyabean.
  
6. Dual PPAR-  $\alpha$  and PPAR-  $\gamma$  agonist is
  - A. Nateglinide
  - B. Saroglitazar
  - C. Rosiglitazone
  - D. Miglitol.
  
7. At rest, rate of insulin absorption is maximum in
  - A. Thigh
  - B. Abdomen
  - C. Upper limb
  - D. Gluteal region.

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8. Following drugs causes diabetes except
- A. Pentamidine
  - B. Thiazide
  - C. Chloroquine
  - D. Phenytoin.
9. Insulin inhibits
- A. Hormone sensitive lipase (HSL)
  - B. Lipoprotein lipase (LPL)
  - C. Both HSL & LPL
  - D. None of them.
10. All are the causes of secondary diabetes mellitus except
- A. Acromegaly
  - B. Addison's disease
  - C. Cushing's disease
  - D. Glucagonoma.
11. First priority in Acute DKA management is
- A. Insulin administration
  - B. Correcting dehydration
  - C. K<sup>+</sup> Correction
  - D. Acidosis correction.
12. Classical features of Type 1 DM include all except
- A. Insidious onset
  - B. Peak incidence is between 10 and 14 years of age
  - C. Prone to develop ketoacidosis
  - D. Autoimmune markers like GAD antibody positive.
13. A condition of untoward fluctuations in blood sugar levels is called as
- A. Fragile diabetes
  - B. Brittle diabetes
  - C. Unstable diabetes
  - D. Dangerous diabetes.
14. Fructosamine – false is
- A. Indicate the glycemic status of last 1-3 weeks
  - B. Not useful in GDM
  - C. Not influenced by anemia
  - D. Normal value is upto 2.8 mmol/L.
15. 'Incretin' hormones – true fact is
- A. Augmenting glucagon response to meal
  - B. GLP & GIP are incretin hormones secreted from small intestine
  - C. Inactivated by DPP 8 enzyme
  - D. Half life of GLP is 8 - 12hrs.
16. First stage in Diabetic Nephropathy is
- A. Silent stage
  - B. Incipient stage
  - C. Hyperfunction stage
  - D. Microalbuminuria stage.

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17. Treatment targets for management of diabetes (ADA)
- A. HbA1C < 7%; FPG < 130 mgs/dl; PPG < 180 mgs/dl
  - B. HbA1C < 6%; FPG < 90 mgs/dl; PPG < 120 mgs/dl
  - C. HbA1C < 8%; FPG < 100 mgs/dl; PPG < 140 mgs/dl
  - D. HbA1C < 6.5%; FPG < 108 mgs/dl; PPG < 180 mgs/dl.
18. True about diabetic retinopathy is
- A. Affects primarily arteries and arterioles
  - B. Pregnancy can improve DR
  - C. Hypertension contributes to progression
  - D. ACE inhibitors do not retard the progress.
19. WHO Diagnostic criteria for Diabetes
- A. Fasting  $\geq$  126 mg/dl and PPG  $\geq$  200 mg/dl
  - B. Fasting  $\geq$  100 mg/dl and PPG  $\geq$  140 mg/dl
  - C. Fasting  $\geq$  110 mg/dl and PPG  $\geq$  180 mg/dl
  - D. Fasting  $\geq$  126 mg/dl and PPG  $\geq$  140 mg/dl.
20. First line drug in coexisting diabetes and systemic hypertension is
- A. Diuretics
  - B. Calcium channel blockers
  - C. ACE Inhibitors / ARB
  - D. ARB + diuretics.
21. Gestational glucose intolerance is a postprandial blood sugar value of (in mg/dL)
- A. 120-140
  - B. 140-199
  - C. 120 -199
  - D. 90-140.
22. Antidiabetic drug which can safely be used in pregnancy but lacking large studies for clinical use is
- A. Glipizide
  - B. Sitagliptin
  - C. Saroglitazar
  - D. Glyburide.
23. Which disease has proven association with diabetes
- A. Hepatitis - B
  - B. AIDS
  - C. TB
  - D. Pneumococcal infection.
24. Test to differentiate psychogenic and organic causes of erectile dysfunction is
- A. Papaverin injection test
  - B. Testicular sensation test
  - C. Nocturnal penile tumescence test
  - D. Penile biothesiometry.

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25. Key features of dyslipidemia in Type-2 Diabetes Mellitus are:
- A. Increased small dense low-density lipoprotein cholesterol (LDL)
  - B. Increased triglycerides
  - C. Low high – density lipoprotein cholesterol (HDL)
  - D. All of the above.
26. Which of these statements is NOT true with regard to combination therapy?
- A. Statin can be combined with fibrates to treat mixed dyslipidemia
  - B. Fenofibrate is preferred to gemfibrozil when used as combined therapy with statin.
  - C. Gemfibrozil is preferred to fenofibrate when used as combined therapy with statin.
  - D. None of the above.
27. Which of the following is false about insulin secretion?
- A. Normal insulin secretion is in a pulsatile fashion.
  - B. Following a glucose load it shows a monophasic response.
  - C. First acute phase of insulin release occurs in 4-5 minutes.
  - D. High level of insulin secretion is seen in initial stages of Type-2 DM.
28. Canagliflozin is
- A. SGLT 2 inhibitor
  - B. SGLT 1 inhibitor
  - C. Both SGLT 1 & 2 inhibitor
  - D. Both SGLT 2 & 3 inhibitor.
29. Drugs causing hypoglycemia are all except
- A. Pentamidine
  - B. Salicylate
  - C. Quinines
  - D. Quinolones.
30. Post Hypoglycemic rebound hyperglycemia is seen in
- A. Brittle diabetes
  - B. Dawn phenomenon
  - C. NPH insulin effect wearing off
  - D. Somogyi phenomenon.
31. Mechanism of hyperglycemia induced tissue damage are all except
- A. Polyol sorbitol pathway
  - B. Free fatty acids accumulation
  - C. Myoinositol pathway
  - D. Advanced glycation end products.
32. First sensation lost in Diabetes peripheral sensory neuropathy is
- A. Touch
  - B. Position
  - C. vibration
  - D. Pain.
33. Drug not useful in painful neuropathy is
- A. Pregabalin
  - B. Tramadol
  - C. Pramlintide
  - D. Topical capsaicin.

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34. Earliest ophthalmological evidence of Diabetic Retinopathy is  
A. Soft exudates  
B. Hard exudates  
C. Microaneurysm  
D. Venous beading.
35. Adverse effects of beta blockers in DM patients with heart failure are all except  
A. Peripheral vasodilatation  
B. Loss of Glycemic control  
C. Increased insulin resistance  
D. More atherogenic lipid profile.
36. Consequences of Diabetes on pregnancy is increased occurrence of all except  
A. Hypoglycemia  
B. Diabetic keto acidosis  
C. Oligohydramnios  
D. Diabetic Gastropathy.
37. Which is not a feature of Diabetic Neuropathic foot  
A. Fissures and ulcers  
B. Weak peripheral pulses  
C. Loss of touch and pain sensation  
D. Deformity of foot.
38. The increased incidence of Rhinocerebral mucormycosis in DKA patients is due to  
A. Increased Free Magnesium  
B. Increased free Copper  
C. Increased free Iron  
D. Increased free Selenium.
39. Which of the following is decreased in obesity?  
A. TNF-Alpha  
B. Resistin  
C. Leptin  
D. Adiponectin.
40. Which is not normally seen in Diabetic Gasroparesis  
A. Nausea  
B. Diarrhea  
C. Vomiting  
D. Post prandial fullness.
41. All the following are clinical features of LADA except  
A. Age at onset > 35 years  
B. GAD positivity  
C. Presence of metabolic syndrome features  
D. C-peptide level lower than Type 2 DM.
42. Diabetes mellitus occurring in 5 months old baby is most likely  
A. Type 2 DM in young  
B. Neonatal diabetes in young  
C. Type 1 DM  
D. MODY.
43. All stimulates insulin secretion except  
A. GLP-1  
B. GIP  
C. Ghrelin  
D. CCK.

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44. The following auto antibodies are related to Type 1 DM except
- A. TCFTL 2
  - B. znt8
  - C. GAD65
  - D. IAA.
45. All are clinical features of MODY except
- A. Age of onset <25 years
  - B. Family h/o DM in three successive generations
  - C. Usually obese
  - D. Non ketotic mode of presentation.
46. PATHOGENESIS of Type 2 DM include all except
- A. Increased glucagon
  - B. Defective insulin secretion and its action
  - C. Impaired GLP-1 secretion
  - D. Increased adiponectin secretion.
47. HbA1C is affected by all except
- A. Uremia
  - B. Hyperuricemia
  - C. Hemoglobinopathy
  - D. Iron deficiency anaemia.
48. Measurement of fructosamine reflects blood glucose level over previous
- A. 1-3 Weeks
  - B. 3-6 Weeks
  - C. 6-9 Weeks
  - D. 9-12 Weeks.
49. Screening for complications of Type 2 Diabetes has to be done
- A. At the time of diagnosis
  - B. After 1 year
  - C. After 5 years
  - D. After 10 years.
50. Garland's syndrome is
- A. Diabetic nephropathy
  - B. Proliferative diabetic retinopathy with CAD
  - C. Proximal motor neuropathy
  - D. Diabetic foot syndrome with PAD.
51. Somatostatin
- A. Increases glucagon secretion
  - B. Inhibits insulin secretion
  - C. Increases growth hormone
  - D. Inhibits prolactin secretion.
52. Which of the following causes hyperglycemia?
- A. Glucocorticoids
  - B. Atypical antipsychotics
  - C. Diazoxide
  - D. All of the above.

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53. Necrolytic migratory erythema seen in  
A. Somatostatinoma  
B. Glucagonoma  
C. Insulinoma  
D. VIPoma.
54. Hyperglycemia causes diabetic complications by  
A. Increased flux of sugar through polyol pathway  
B. Increased intracellular formation of AGE  
C. Activation of protein kinase C  
D. All of the above.
55. Third generation sulphonylurea  
A. Glimipride  
B. Gliclazide  
C. Glipizide  
D. None of the above.
56. Biothesiometer is used to detect  
A. Light touch sensation  
B. Crude touch sensation  
C. Vibration perception threshold  
D. Thermal threshold.
57. All of the following crosses placenta except  
A. Insulin  
B. Glucose  
C. Ketones  
D. Triglycerides.
58. Common adverse effect of Metformin is  
A. Weight gain  
B. Gastrointestinal disturbances  
C. Lactic acidosis  
D. Pedal edema.
59. The drug that causes weight loss is  
A. Pioglitazone  
B. Insulin  
C. GLP-1 analogue  
D. DPP4 inhibitor.
60. The drug that will not interfere with ischaemic preconditioning is  
A. Glimipride  
B. Glipizide  
C. Chlorpropamide  
D. Glibenclamide.

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