

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

Time: 60 min.

Maximum: 60 Marks

1. Fructosamine – false is
 - A. Indicates the glycaemic status of previous 1-3 weeks
 - B. Not useful in GDM
 - C. Not influenced by anemia and hypoproteinemia
 - D. Normal value is up to 2.8 mmol/L

2. First stage in Diabetic Nephropathy is
 - A. Silent stage
 - B. Incipient stage
 - C. Hyperfiltration stage
 - D. Microalbuminuria stage.

3. 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.

4. First line drug in treatment of diabetes and coexisting systemic hypertension is
 - A. Diuretics
 - B. Calcium channel blockers
 - C. ACE Inhibitors / ARB
 - D. ARB + diuretics.

5. 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

6. Antidiabetic drug which is safely used in pregnancy but lacking large studies for clinical use is
 - A. Glipizide
 - B. Sitagliptin
 - C. Saroglitazar
 - D. Glyburide

7. Which disease has proven association with diabetes?
 - A. Hepatitis – B
 - B. AIDS
 - C. Tuberculosis
 - D. Pneumococcal infection.

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8. 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. |
9. Key features of Dyslipidaemia 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. |
10. Which of these statements is not true with regard to combination therapy?
- | |
|---|
| A. Statin can be combined with fibrates to treat mixed dyslipidemia |
| B. Among fibrates, fenofibrate is preferred to gemfibrozil when used as combined therapy with statin |
| C. Among fibrates, gemfibrozil is preferred to fenofibrate when used as combined therapy with statin. |
| D. None of the above. |
11. Post hypoglycemic rebound hyperglycemia is seen in
- | |
|-----------------------------------|
| A. Brittle diabetes |
| B. Dawn phenomenon |
| C. NPH insulin effect wearing off |
| D. Somogyi phenomenon. |
12. 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 product deposition. |
13. First sensation lost in Diabetic peripheral sensory neuropathy is
- | | |
|--------------|-------------|
| A. Touch | B. Position |
| C. Vibration | D. Pain. |
14. Drug not useful in painful neuropathy is
- | | |
|---------------|-----------------------|
| A. Pregabalin | B. Tramadol |
| C. Amiodarone | D. Topical capsaicin. |

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15. Earliest ophthalmological evidence of Diabetic Retinopathy is
A. Soft exudates
B. Hard exudates
C. Microaneurysms
D. Venous beading.
16. Adverse effects of beta blockers in Diabetic patients with heart failure are all except
A. Peripheral Vasodilatation
B. Loss of Glycemic control
C. Increased insulin resistance
D. More atherogenic lipid profile.
17. Consequences of Diabetes on pregnancy is increased occurrence of all except
A. Hypoglycemia
B. Diabetic keto acidosis
C. Polyhydramnios
D. Diabetic Gastropathy.
18. Which is not a feature of Diabetic Neuropathic Foot?
A. Cracks and ulcers
B. Weak peripheral pulses
C. Loss of touch and pain sensation
D. Deformity of foot.
19. The increased incidence of Rhino cerebral mucormycosis in DKA patients is due to
A. Increased Free magnesium
B. Increased Free Copper
C. Increased Free Iron
D. Increased Free Selenium.
20. Which of the following is decreased in obesity?
A. TNF-Alpha
B. Resistin
C. Leptin
D. Adiponectin.
21. Which is not normally seen in Diabetic Gastroparesis?
A. Nausea
B. Diarrhoea
C. Vomiting
D. Post prandial fullness.
22. Which is associated with a significant risk for CHF?
A. Microalbuminuria
B. Macroalbuminuria
C. Both
D. None of the above.
23. Most common organism causing asymptomatic Bacteriuria?
A. Proteus vulgaris
B. Klebsiella pneumonia
C. Escherichia coli
D. None of the above.
24. Symmetric neuropathy includes
A. Insulin neuritis
B. Painful autonomic neuropathy
C. Diabetic polyneuropathy
D. All of the above.

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25. Which is false regarding IBS?
- A. Most common reason for referral to Gastroenterologist
 - B. Diabetics experience IBS symptoms significantly more frequently than general population.
 - C. Abdomen pain localised to periumbilical / Left Hypochondriac region.
 - D. None of the above.
26. Regarding glycemic control and monitoring in Diabetic patients with Tuberculosis which is false ?
- A. Insulin is a must in both intensive and continuation phase.
 - B. Increased oral hypoglycemic agents may be needed because of interaction with rifampicin.
 - C. Patients with microvascular complications need close monitoring.
 - D. Addition of pyridoxine is recommended.
27. Which Insulin analogue is not recommended in Gestational Diabetes Mellitus?
- A. Lispro
 - B. Aspart
 - C. Detemir
 - D. Glulisine.
28. Basic underlying mechanism in NAFLD is?
- A. Insulin resistance
 - B. Increased fat intake in diet
 - C. Preexisting hepatitis
 - D. Familial tendency.
29. Gold standard test for diagnosing delayed gastric emptying is?
- A. Barium meal follow through studies
 - B. Gastric scintigraphy
 - C. Manometry studies
 - D. None of the above.
30. Drug of choice for NASH (Non alcoholic steatohepatitis) is?
- A. Pioglitazone
 - B. Metfomin
 - C. SGLT 2 Inhibitors
 - D. Statins.
31. Beta cells in each islet range from
- A. 1000-2000
 - B. 5000-10000
 - C. 15-30,000
 - D. 10-20,000
32. Number of amino acid residues in alpha and beta chain of insulin respectively are
- A. 31, 20
 - B. 21, 30
 - C. 11, 20
 - D. 21, 20

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33. MODY-2 results due to mutation in the following gene
A. HNF 4 alpha
B. Glucokinase
C. HNF 1 alpha
D. IPF-1
34. HLA type commonly associated with type 1 diabetes is
A. Dq3, Dq4
B. Dq1, Dq2
C. Dr3, Dr4
D. Dr1, Dr2
35. Concordance rate of monozygotic twins in type 1 diabetes is
A. 10-20%
B. 20-40%
C. 40-60%
D. 30-50%
36. Normal fasting insulin level is
A. 5-15mu/ml
B. 10-20 mu/ml
C. 15-30 mu/ml
D. 20-40 mu/ml
37. All are second class proteins except
A. Peas
B. Beans
C. Nuts
D. Oats.
38. Recommended protein intake for individuals with nephropathy is
A. 0.8 gm/kg/day
B. 1 gm/kg/day
C. 2 gm/kg/day
D. 1.5 gm/kg/day.
39. Following are components of metabolic syndrome except
A. Blood pressure
B. TGL
C. HDL
D. LDL.
40. All the following reduce insulin signaling except
A. Leptin
B. Adiponectin
C. Resistin
D. TNF alpha.
41. All are 2nd generation sulfonylureas except
A. Glibenclamide
B. Glipizide
C. Glimepride
D. Gliclazide.
42. Primary failure of sulfonylureas is inability to achieve glycemic control within
A. 1 month
B. 2 months
C. 3 months
D. 6 months

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43. Mechanism of action of Metformin does not include
- | | |
|---------------------------------------|--------------------------------|
| A. Increase in hepatic glucose output | B. Inhibition of lipolysis |
| C. Increased insulin binding | D. Enhanced glucose transport. |
44. TECOS was a cardiovascular safety trial conducted on the following drug
- | | |
|-----------------|-------------------|
| A. Vildagliptin | B. Canagliflozin |
| C. Sitagliptin | D. Empagliflozin. |
45. All are rapid acting analogues except
- | | |
|--------------|-------------|
| A. Glulisine | B. Lispro |
| C. Aspart | D. Detemir. |
46. Number of amino acids in beta chain of glargine is
- | | |
|-------|-------|
| A. 32 | B. 30 |
| C. 29 | D. 31 |
47. The DPP-4 inhibitor that is eliminated totally in bile & hence safe in renal failure is
- | | |
|----------------|-----------------|
| A. Saxagliptin | B. Linagliptin |
| C. Alogliptin | D. Sitagliptin. |
48. The insulin analogue that has a fatty acid attached to it is
- | | |
|------------|---------------|
| A. Detemir | B. Glargine |
| C. Lispro | D. Glulisine. |
49. Duration of action of degludec is
- | | |
|-----------|-----------|
| A. 30 hrs | B. 20 hrs |
| C. 40 hrs | D. 15 hrs |
50. The insuline analogue that is formed by the reversal of amino acids is
- | | |
|--------------|--------------|
| A. Aspart | B. Lispro |
| C. Glulisine | D. Glargine. |
51. Percentage of PUFA is highest in
- | | |
|--------------------|------------------|
| A. Cotton seed oil | B. Sunflower oil |
| C. Safflower oil | D. Soybean oil. |
52. The frederickson class of lipoproteinemia associated with diabetes is
- | | |
|-----------|-----------|
| A. Type 1 | B. Type 2 |
| C. Type 4 | D. Type 5 |

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53. 24 hr urinary albumin excretion rate in microalbuminuria is
A. Less than 300 mg/day
B. 30-300 mg/day
C. Less than 30 mg/day
D. None of the above.
54. Convulsions and coma in hypoglycemia occur when the blood sugar level is
A. 2-2.5 mmol/l
B. 3-3.5 mmol/l
C. 1.5-2 mmol/l
D. Less than 1.5 mmol/l
55. Endocrine causes for Hypoglycemia are all except
A. Addison's
B. Cushing's
C. Hypopituitarism
D. Glucagon deficiency.
56. The following drugs cause hypoglycemia except
A. Pentamidine
B. Quinine
C. Salicylates
D. Hydrochlorothiazide.
57. Therapeutic agents causing HONK include all except
A. Glucocorticoids
B. diuretics
C. Diazoxide
D. Quinine.
58. Serum Osmolarity in HONK usually is
A. 250-350 mmol/l
B. 150-250 mmol/l
C. 350-450 mmol/l
D. 450-550 mmol/l
59. Carnitine Acyl Transferase is present on the
A. Outer surface of inner mitochondrial membrane
B. Inner surface of outer mitochondrial membrane
C. Outer surface of outer mitochondrial membrane
D. Inner surface of inner mitochondrial membrane.
60. The antidiabetic drug isolated from venom of Gila monster is
A. Liraglutide
B. Exenatide
C. Dulaglutide
D. Albiglutide.

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