

Topics and study materials for the 5th credit test
General medicine
2021/2022

Endocrinology and diabetes mellitus, gastrointestinal tract, liver and pancreas

1. Endocrinology and diabetes mellitus

- a) General endocrinology, classification, etiology
- b) Hypothalamic-pituitary syndromes; hypo-, hyperpituitarisms – causes, symptoms; posterior, anterior pituitary syndromes
- c) Thyroid disorders; hypo-, hyperthyroidism – etiopathogenesis, forms, symptoms, goitre
- d) Adrenal cortex disorders; adrenocortical hypofunction – Addison's disease – etiopathogenesis, symptoms; hypercortisolism – Cushing's disease and syndrome - etiopathogenesis, symptoms; hyperaldosteronism – Conn's sy. - etiopathogenesis, symptoms; congenital adrenal hyperplasia
- e) Disorders of adrenal medulla
- f) Parathyroid gland disorders; hypo-, hyperparathyroidism - classification, etiopathogenesis, symptoms; hormonal regulation of calcium homeostasis – incl. calcitonin, calcitriol
- g) Diabetes mellitus (DM), definition, classification, symptoms, diagnosis
 - Type 1 DM – etiopathogenesis, genetic background, epidemiology, symptoms, LADA
 - Type 2 DM – etiopathogenesis, genetic background, epidemiology, symptoms, insulin resistance
 - Other types of DM – MODY, gestational DM
 - Acute complications of DM – hypo- and hyperglycemic
 - Chronic complications of DM – micro- and macrovascular

Study materials

- Unit 9 Endocrine system; Ch31 Mechanisms of Endocrine Control, p. 753 – 766; Ch32 Disorders of Endocrine Control of Growth and Metabolism, p. 767 – 792; Ch33 Diabetes Mellitus and the Metabolic Syndrome, p. 793 – 820 In: Porth, C.M. (Ed.) Essentials of pathophysiology, 4th Edition, Wolters Kluwer/Lippincott Williams & Wilkins, 2011, ISBN-13: 978-1-4511-9080-9.
- Unit VI Ch21 Mechanisms of Hormonal Regulation, p. 689 – 716; Ch22 Alterations of Hormonal Regulation, p. 717 – 767 In: McCance, K.L., Huether, S.E. (Ed.) Pathophysiology, 7th Edition, Mosby, Elsevier Inc., 2014, ISBN: 978-0-323-08854-1.
- Recommended: lectures, tutorials, data on dept. web; Other reading: pract. seminars, internet resources (Wikipedia, etc.).

2. Gastrointestinal tract, liver, pancreas, gall bladder

- a) Disorders of oral cavity, pharynx and esophagus; caries, periodontitis, manifestation of systemic diseases in oral cavity; dysphagia, gastroesophageal reflux disease
- b) Peptic ulcer, classification, etiology, symptoms, complication; gastric vs. duodenal ulcer
- c) Inflammatory bowel diseases, classification, etiopathogenesis, symptoms; Crohn's disease, ulcerative colitis
- d) Intestinal motility disorders, classification, etiopathogenesis, symptoms; diarrhea, constipation, irritable bowel syndrome
- e) Malabsorption and maldigestion, classification, etiopathogenesis, symptoms; specific disorders of nutrient absorption and digestion; Celiac disease
- f) Exocrine pancreas disorders; acute and chronic pancreatitis, pancreatic insufficiency
- g) Liver disorders; hyperbilirubinemia, jaundice – classification, etiology, clinical signs; acute and chronic viral hepatitis; hepatic insufficiency - classification, etiology, clinical signs, hepatic encephalopathy and coma. liver cirrhosis, ascites, portal hypertension
- h) Disorders of gallbladder and bile ducts, gallstones

Study materials

- Unit 8 Gastrointestinal and Hepatobiliary Function Ch 28 Structure and Function of the Gastrointestinal system, p. 675 – 695; Ch29 Disorders of the Gastrointestinal Function, p. 696 – 723; Ch30 Disorders of Hepatobiliary and Exocrine Pancreas Function, p. 724 – 752 In: Porth, C.M. (Ed.) Essentials of pathophysiology, 4rd Edition, Wolters Kluwer/Lippincot Williams & Wilkins, 2011, ISBN-13: 978-1-4511-9080-9.
- Unit XII, Ch40 Structure and Function of the Digestive System, p. 1393 – 1422; Ch41 Alterations of Digestive Function, p. 1423 – 1485 In: McCance, K.L., Huether, S.E. (Ed.) Pathophysiology, 7th Edition, Mosby, Elsevier Inc., 2014, ISBN: 978-0-323-08854-1.
- Recommended: lectures, tutorials, data on dept. web; Other reading: pract. seminars, internet resources (Wikipedia, etc.).

Composition of the test

Multiple choice (30). Approximate composition:

1. Endocrinology and diabetes mellitus

- a) General endocrinology, classification, etiology
- b) Hypothalamic-pituitary syndromes
- c) Thyroid disorders
- d) Adrenal cortex disorders; Addison's disease, Cushing's disease and syndrome, Conn's sy., congenital adrenal hyperplasia
- e) Disorders of adrenal medulla
- f) Parathyroid gland disorders
- g) Diabetes mellitus, type 1 DM, type 2 DM, other types of DM, acute and chronic complications

2. Gastrointestinal tract, liver, pancreas, gall bladder

- a) Disorders of oral cavity, pharynx and esophagus
- b) Peptic ulcer
- c) Inflammatory bowel diseases
- d) Intestinal motility disorders, diarrhea, constipation, irritable bowel syndrome
- e) Malabsorption and maldigestion
- f) Exocrine pancreas disorders
- g) Liver disorders
- h) Disorders of gallbladder and bile ducts

Open questions. Approximate composition:

- a) Hypothalamic-pituitary syndromes
- b) Thyroid disorders
- c) Adrenal cortex disorders
- d) Disorders of adrenal medulla
- e) Parathyroid gland disorders
- f) Diabetes mellitus, type 1 DM, type 2 DM, other types of DM, acute and chronic complications
- g) Disorders of oral cavity, pharynx and esophagus
- h) Peptic ulcer
- i) Inflammatory bowel diseases
- j) Intestinal motility disorders, diarrhea, constipation, irritable bowel syndrome
- k) Malabsorption and maldigestion
- l) Exocrine pancreas disorders
- m) Liver disorders
- n) Disorders of gallbladder and bile ducts

In multiple choice test (via Rogo system) each question consists of 5 independent choices (a-e) to which students answer by Yes or No. Every one choice is awarded by 1 point. Altogether it is possible to achieve 150 points in multiple-choice part of test.

Test rating grade - %

A - 100 - 93

B - 92 - 85

C - 84 - 77

D - 76 - 69

E - 68 - 60

Fx - 59 and less

Each open question is credited by certain maxima of points, which can differ in various questions according to importance, content and difficulty.

2 May 2022

Doc. MUDr. Roman Beňáčka, CSc., mim. prof.
Head of Department