

Topics and study materials for the 5<sup>th</sup> credit test

Dental medicine

2019/2020

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, 4<sup>rd</sup> 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, 7<sup>th</sup> 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, caries, periodontitis, infections, precanceroses, cancers in oral cavity, manifestation of systemic diseases in oral cavity
- b) Disorders of esophagus, dysphagia, gastroesophageal reflux disease
- c) Peptic ulcer, classification, etiology, symptoms, complication; gastric vs. duodenal ulcer
- d) Inflammatory bowel diseases, classification, etiopathogenesis, symptoms; Crohn´s disease, ulcerative colitis
- e) Intestinal motility disorders, classification, etiopathogenesis, symptoms; diarrhea, constipation, irritable bowel syndrome
- f) Malabsorption and maldigestion, classification, etiopathogenesis, symptoms; specific disorders of nutrient absorption and digestion; Celiac disease
- g) Exocrine pancreas disorders; acute and chronic pancreatitis, pancreatic insufficiency
- h) 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
- i) 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, 4<sup>rd</sup> 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, 7<sup>th</sup> Edition, Mosby, Elsevier Inc., 2014, ISBN: 978-0-323-08854-1.
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### Composition of the test

**Multiple choice (20)** 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 (5)** Approximate composition:

1. Endocrinopathies
2. Endocrinopathies
3. Diabetes mellitus
4. GIT diseases
5. Liver or pancreas diseases

In multiple choice test each question consists of 5 independent choices (a-e) to which students answer by Y or N. Everyone choice is awarded by 1 point. Altogether it is possible to achieve 100 points in multiple-choice part of test. Each open question is credited by certain maxima of points, which can differ in various questions according to importance, content and difficulty (obviously 3 points and above).

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