Exam questions for Students faculty of Medicine

MEDICAL REHABILITATION AND SPORTS MEDICINE

1. Goal and objectives of medical rehabilitation. Classification. Main tasks of a rehabilitation physician.
2. Physical, psychological and social/professional rehabilitation. Indications and contraindications.
3. Methods of physical rehabilitation: kinesitherapy (exercise therapy, massage, traction, mechanotherapy,), physiotherapy (physical modalities), kurortology (resort treatment), balneotherapy (spa treatment), acupuncture, manual therapy, occupational therapy, ride therapy.
4. Characterization of kinesitherapy as of the functional therapy method. Forms and tools of kinesitherapy. Indications and contraindications. Kinesitherapy during various movement regimens of the patient. Methods of controlling and demonstrating effectiveness of kinesitherapy.
5. Main principals of physical exercise. Curative effects of physical exercise on the human body. Physiologic curve and its importance for grading of intensity of therapeutic exercises.
6. Curative massage and its types. Indications and contraindications. Massage methods and their characterization. Influence of massage on different parts and physiological systems of the body.
7. Mechanotherapy.. Indications and contraindications.
8. Manual therapy. Principles, indications and contraindications.
9. Acupuncture. Principles, indications and contraindications.
10. Occupational therapy. Main principles. Forms and contents.
11. Use of various methods of physical rehabilitation in children.
12. Rehabilitation of patients with cardiovascular diseases: coronary heart disease (angina pectoris, myocardial infarction), hypertension, hypotension, valvular heart disease, rehabilitation after cardiac surgery.
13. Rehabilitation of children with cardiovascular diseases (valvular heart disease, complications of rheumatic fever, post cardiac surgery rehabilitation).
14. Functional tests of cardiovascular system. Exercise tolerance tests (stationary bicycle, treadmill, step test).
15. Drug therapy, kinesitherapy, psychological rehabilitation of patients with cardiovascular disorders. Indications and contraindications.
16. Medical rehabilitation of patients with respiratory diseases: pneumonia, pleuritis, bronchial asthma, chronic obstructive pulmonary disease, bronchiectasis, pneumosclerosis.
17. Functional tests of respiratory system. Spirometry .
18. Medical rehabilitation of patients with cerebrovascular disorders.
19. Medical rehabilitation of patients with diseases of peripheral nervous system.

20. Medical Rehabilitation of patients with traumatic injuries of brain and spinal cord. Medical rehabilitation of children with respiratory and neural diseases (pneumonia, bronchitis, bronchial asthma, cerebral palsy, polio consequences).
21. Drug therapy, kinesitherapy, psychological rehabilitation of patients with respiratory and neurological disorders. Indications and contraindications.
22. Medical rehabilitation of patients with musculoskeletal disorders: spinal deformities (scoliosis, kyphosis, lordosis), flatfoot (pes planus), arthritis, osteoarthrosis (osteoarthritis), spinal osteochondrosis (degenerative disk disease), chronic back pain, rehabilitation after joint and spinal surgery.
23. Rehabilitation of patients after traumatic injuries of various body parts.
24. Rehabilitation of children with musculoskeletal disorders (spinal and thoracic deformities, flatfoot).
25. Drug therapy, kinesitherapy, psychological rehabilitation of patients with above-mentioned disorders. Indications and contraindications.
26. Medical rehabilitation of patients with gastrointestinal disorders: gastritis, peptic ulcer, irritated bowel syndrome, biliary dysfunction, splanchnoptosis.
27. Medical rehabilitation of patients with metabolic disorders: diabetes mellitus, obesity.
28. Medical rehabilitation during pregnancy and in post-partum period. Fetal malpositions. Narrow pelvis. Pregnancy and valvular disease. Post Cesarean section period.
29. Medical rehabilitation of patients with gynecologic disorders: infertility, menopause, uterine prolapse and deviation, salpingitis, oophoritis, post gynecological surgery period.
30. Medical rehabilitation of patients with genitourinary disorders: chronic renal disease, kidney stones.
31. Medical rehabilitation of children with gastrointestinal, metabolic and genitourinary disorders.
32. Drug therapy, kinesitherapy, psychological rehabilitation of patients with above-mentioned disorders. Indications and contraindications.
33. Fundamentals of sports morphology and physiology. Influence of athletic training on the human body.
34. Medical control of athletes. Methods of assessment of physical development of athletes (anthropometry) and various estimates (indexes and standards). Athletes' hygienic regimen. Athletes' nutrition
35. Methods of functional investigation of athletes' cardiovascular system (Martine-Kushelevski test, Svanishvili test, Harvard step test). Types of response of cardiovascular system towards physical exertion.
36. Assessment of athlete's physical working capacity by sub-maximal exertion test PWC_{170}. Conduction and evaluation of test results.
37. Athlete's overexertion, overstrain, overtraining. Their causes.
38. Sudden death in sport.
39. Sports trauma. Traumatic injuries characteristic for various types of sport.
40. Peculiarities of sports medicine in children. Children's sports trauma.
41. Doping in sport.

Samples of MCQ test for the Medicine Faculty

1. Which statement is true about Rehabilitation?
   a. Rehabilitation is only for persons with disabilities
   b. Rehabilitation is only for athletes or a post-injury return to work service
   c. Rehabilitation is needed by anyone with a health condition, impaired or injury that limits functioning
   d. Rehabilitation is a luxury health service
2. How many phases (stages) does the rehabilitation process consist of?
   a. 2 phases
   b. 3 phases
   c. 4 phases
   d. 5 phases
3. What is one of the goals of passive exercise?
   a. Prevention of contractures
   b. Increase of muscle endurance
   c. Increase of cardiovascular fitness
   d. Improvement of balance and coordination
4. What is the primary determinant of development of "athlete's heart" in athletes?
   a. Increase of chest volume
   b. Deep respiration
   c. Myocardial hypertrophy
   d. Dilatation of ventricles
5. What is the recommended frequency of regular medical screening of the athletes?
   a. Once in a month
   b. Every other month
   c. Once or twice per year
   d. Every other year