

3. (*Case.*)—A man aged thirty complains of *cough, dyspnoea, a feeling of tightness across the upper part of the abdomen, and general weakness.* On examination, the cardiac dulness is not found to be increased, the apex beats feebly between the fifth and sixth ribs, a systolic bellows murmur is heard over the apex, it is very faintly heard at the base. Pulse 100, soft and small, considerable dyspnoea and cough *sputa tinged with blood, sibilant and crepitating râles heard over both lungs, but there is no dulness or increase of vocal resonance, the general surface is slightly jaundiced, and there is occasional vomiting; there is some œdema, which in a few days increases, and fluid accumulates in the abdomen: soon there is found dulness on percussion on right side as high as the scapula, and increased vocal resonance, the dyspnoea increases and mouthfuls of florid blood are spit up; in a few days after, he can lie only on the left side, which is found to be quite dull on percussion, with absence of respiration: death soon results.* Point out the significance of the symptoms and physical signs, give the appropriate treatment, and state what morbid conditions you would expect to find on making a *post-mortem examination.*

4. Give and diagnose the morbid conditions which produce vomiting.

5. On what does the dropsy depend which is apt to follow scarlatina? What treatment would you adopt to prevent its occurrence? In what ways may this dropsy prove fatal? What steps would you take to prevent a fatal termination?

6. How would you recognise and treat a case of diphtheria occurring in the throat?

TOXICOLOGY.—GEORGE LOGAN, M.D., *Examiner.*

1. Give the difference between corrosive and irritant poisons, and name two or more of each kind.

2. State the causes and parts of the body which may favour or retard the absorption of poisons.

3. Give the symptoms, treatment, and ordinary tests in poisoning by belladonna.

4. How would you distinguish cholera from poisoning by tartar emetic?

PHYSIOLOGY.—1st Year.—J. E. KENNEDY, M.D., *Examiner.*

1. What are the peculiarities of cartilage.

2. What is meant by the terms (a) residual air; (b) supplemental air; (c) breathing or tidal air; (d) complementary air?

3. Describe the arrangement of the capillaries of the air cells of the human lungs.

4. State the pulse rate of (a) new born infant; (b) child of third year. Also within the limits of ordinary health, what are the chief causes of variations in the pulse rate in the adult?

5. What glands secrete the saliva? Give (a) composition of secretion; (b) probable uses in the process of digestion.

6. Name the ductless glands.

PHYSIOLOGY.—2nd Year.—J. E. KENNEDY, M.D., *Examiner.*

1. Describe the air cells of the human lung.

2. How are bones developed and how nourished?

3. What are the natural methods for reduction of temperature?

4. Name (a) the constituents of healthy urine; (b) the quantity voided in twenty-four hours; (c) the specific gravity.

5. Name the coats and structure of the arteries.

6. What is the structure of the pons varolii.

MATERIA MEDICA AND THERAPEUTICS.—H. H. WRIGHT, M.D., *Examiner.*

1. Give of each sample enclosed (in envelope) the official name, therapeutic properties and doses, the active principles and doses, and official preparations. (The samples enclosed were: a nutgall, buchu leaves, some santonica seeds, a slice of a colchicum corn, and a piece of socotrine aloes.)

2. Give the official name of cod-liver oil; its commercial history; its composition; its physiological effects; its therapeutics; and its mode of administration.

3. Give rule for apportioning doses to ages, with an example of a hydragogue cathartic at eight years; and a tonic mixture at sixteen years, and an active emetic at one year.

4. How do you classify the so-called "mineral waters?" Give the therapeutic properties of each class.

5. Mention the various modes by means of which medicinal substances enter the organization, with an example of each.

SANITARY SCIENCE.—H. H. WRIGHT, M.D., *Examiner.*

1. Describe water, and give the usual sources of its supply.

2. What impurities are most probably present in water from each of these separate sources?

3. What quantity is supposed to be sufficient for a healthy adult daily? In what form or forms is it supplied to him?

4. Give a detailed account of means for purifying it.

5. Enumerate and briefly describe the steps you would advise on the occurrence of an epidemic in a Canadian village.

6. What is the ordinary mortality average annually per 1,000 in the principal cities of Ontario? At what periods of life is it greatest, from what diseases, and from disease or disorders of what particular organs?

MIDWIFERY OTHER THAN OPERATIVE, ETC.

1. Why in the early stage of what is called a natural labour, is the character of the presentation more obscure than in less favourable cases?