

removed. 5. How is formaldehyd prepared? In what forms is it used as a disinfectant? 6. What is the composition of butter? Describe a good method of determining the volatile fatty acids in a sample. How does this assist you in deciding the question of adulterations? 7. What are the respective alcoholic strengths of beer, claret, sherry, gin, whisky? 8. Name the solids contained in normal blood. What proportions do the solids bear to the water in the blood? 9. Give the composition of starch, cane-sugar, grape-sugar and sugar of milk. Calculate the number of grains of carbon present in 1,000 grains of starch and cane-sugar, respectively. 10. What is ozone? Is there any real evidence of its presence in the atmospheric air? What other substances give similar actions? How is its presence or absence any sanitary importance? 11. How would you recognize each of the following gases, chemically, when mixed with air: Carbon monoxid, sulphur dioxide, sulphuretted hydrogen and hydrochloric acid? 12. How would you detect the presence of tartaric acid in lemon or lime juice?

PHYSIOLOGY

[Answer ten questions only]

1. Describe the phenomenon of muscular tone. 2. What is the chemical theory of fatigue? 3. What is the difference in the paralysis from injury to the spinal and the pyramidal neurons, respectively? 4. Name four sensory qualities of cutaneous nerves and tell how they are distributed in the skin. 5. What is the function of the Eustachian tube? 6. What normal conditions produce a variation in the number of red-blood corpuscles? 7. Mention four factors concerned in producing normal pressure and velocity of the blood. 8. What physical changes take place in expired air? 9. What conditions affect the action of ptyalin? 10. What is the general physiologic importance of bile? 11. What is the physiologic rôle of the adrenals? 12. Mention four ways by which the body loses its heat.

BACTERIOLOGY

[Answer ten questions only]

1. Explain how diphtheria antitoxin is made. 2. Give two methods of producing immunity (active). 3. What is a bacterial vaccine? How does it act? 4. Give positive tests distinguishing gonococci from other cocci. 5. Describe in detail a method of staining tubercle bacilli. 6. Name five pus-producing organisms. 7. Explain how pus is produced by germs. 8. Give two methods by which *Bacillus typhosus* may be distinguished from *Bacillus coli communis*. 9. Show by drawing appearance under the microscope of the following: *Spiracheta pallida*, *Bacillus diphtherie*, *Bacillus proteus*, *Bacillus tetani*, *Amoeba coli*. 10. Describe cause and usual method of entry of epidemic cerebrospinal meningitis. 11. What is meant by Widal's reaction? Describe two methods of doing it. 12. Describe the different methods by which bacteria propagate. Give three.

OBSTETRICS

[Answer ten questions only]

1. Between what points are the four measurements taken in external pelvimetry? 2. How is the pelvic inlet bounded? 3. What are the anomalies calling for cephalic version? 4. In mammary abscesses what is the usual source of infection and how can it be prevented? 5. Give the etiology and diagnosis of phlegmasia alba dolens in the puerperal state. 6. In breech presentations, occiput anterior, in what position would you place the body of the child in the application of forceps to the after-coming head? 7. Describe hyperemesis and its dangers. 8. Give the symptoms and diagnosis of puerperal septicemia? 9. What are the causes of secondary post-partum hemorrhage? 10. Describe the "Braxton-Hicks" method of manipulation in placenta previa. 11. What are the causes and dangers of precipitate labor? 12. Describe polyhydramnos and its dangers.

GYNECOLOGY

[Answer ten questions only]

1. What is the menopause? Its physiologic establishment? What are the especial dangers of this period? 2. What are the causes of hemorrhage of the non-pregnant uterus, other than menstruation? 3. Diagnosis of uterine fibroids. What pathological change often takes place? Prognosis. 4. Acute pelvic peritonitis, causes and symptoms. 5. What is the differential diagnosis between ascites and ovarian cyst? 6. What is amenorrhea, its causes and dangers? 7. What are the symptoms and management of imperforate hymen, with prolonged retention of secretion? 8. What is chronic endometritis, etiology and symptoms? 9. Early diagnosis of cancer of the uterus. What are operable cases? At what period in a woman's life is it most liable to occur? 10. Urethral caruncle, diagnosis and symptoms. 11. Hematoma of the vulva, symptoms and diagnosis. 12. Specific vaginitis, symptoms, diagnosis, and complications.

GENERAL DIAGNOSIS

1. Give the causes of enlargement of the liver and describe atrophic cirrhosis of the liver in detail. 2. Differentiate tetanus from hydrophobia. 3. Name the different varieties of casts found in the urine and what is the significance of each. 4. Give the symptoms of multiple sclerosis. 5. Give the symptoms and signs on which you would diagnose a typhoid intestinal perforation. 6. Differentiate variola from varicella. 7. Describe an attack of acute appendicitis. 8. Describe an attack of acute pericarditis. 9. Give the causes and physical signs of ascites. 10. Differentiate blits from glaucoma. 11. Give the relations of the abdominal aorta: diagnose a fracture through the neck of the femur. 12. Describe the symptomatic development of a severe hemorrhage which presses on the upper one-half of the fissure of Rolandi following a blow on the head.

HYGIENE

[Answer ten questions only]

1. What deleterious gases accumulate in improperly ventilated rooms? 2. What diseases may be propagated by drinking water? How may the impurities in water be detected? 3. Name four methods used in communities for the disposal of sewage and describe one method. 4. Outline a rational method by which the condition of milk supplied to a community might be materially improved.

5. Name four diseases which may be transmitted by milk. 6. Name four diseases that may be transmitted by the eating of diseased meat or fish. 7. What is the germ theory of disease? What laws were made to prove this theory? 8. What is an endemic disease? An epidemic disease? A miasmatic disease? A sporadic disease? 9. What are deodorants? Antiseptics? Germicides? 10. With what is ground coffee said to be frequently adulterated, and how may the adulterants be detected? 11. With what is vinegar sometimes adulterated, and how would you test for the adulterant? 12. How may the presence of lard in olive oil be detected?

Pennsylvania December Reports

The Medical Council of Pennsylvania reports the written examinations held at Philadelphia and Harrisburg, Dec. 14-17, 1910. The number of subjects examined in was 7; percentage required to pass, 75.

At the examination held by the State Medical Society of Pennsylvania, at Philadelphia, the total number of candidates examined was 95, of whom 79 passed and 16 failed. The following colleges were represented:

College	PASSED	Year Grad.	Total No. Examined.
University of Colorado		(1909)	1
Howard University, Washington, D. C.		(1907) (1909)	2
Georgetown University		(1910)	3
Atlanta School of Medicine		(1910)	1
Indiana University		(1910)	1
Kentucky University		(1906)	1
University of Louisville		(1910)	1
Johns Hopkins University		(1909)	1
Baltimore Medical College		(1910)	4
University of Maryland		(1909) (6, 1910)	7
College of Physicians and Surgeons, Baltimore		(1910)	4
Detroit College of Medicine		(1910)	1
Syracuse University		(1910)	1
Albany Medical College		(1905)	1
Columbia University, College of Physicians and Surgeons		(1906) (1907) (1909)	3
Temple University		(1910)	4
Jefferson Medical College		(1902) (1906)	
(2, 1909)		(9, 1910)	13
University of Pittsburg		(1909) (3, 1910)	4
University of Pennsylvania		(1895) (1907)	
(2, 1908); (1909)		(5, 1910)	10
Medico-Chirurgical Coll., Philadelphia		(1909) (6, 1910)	7
Woman's Medical College of Pennsylvania		(2, 1909)	4
University of Vermont		(1910)	1
McGill University, Montreal		(1907)	1
University of Toronto, Ontario		(1902) (1909)	2
Queen's University, Kingston, Ontario		(1910)	1

College	FAILED	Year Grad.	Per Cent.
Howard University, Washington, D. C.		(1907)	70.2
University of Louisville		(1910)	72.7
Maryland Medical College		(1910) 23.7, 63.3, 64.5, 70.4.	
Baltimore Medical College		(1910)	65.5
University of Maryland		(1910)	72.4
University Medical College, Kansas City		(1903)	46.8
Leonard Medical School		(1909)	73.4
Medico-Chirurgical College, Philadelphia		(1909) 73.9; (1910) 61, 72.6.	
University of Pittsburg		(1910)	72.5
University of Pennsylvania		(1910)*	
Mebary Medical College		(1910)	68.5

* Expelled from examination.

At the examination held by the Homeopathic Medical Society at Philadelphia, the total number of candidates examined was 5, of whom 4 passed and 1 failed. The following colleges were represented:

College	PASSED	Year Grad.	Total No. Examined.
Cleveland Homeopathic Medical College		(1910)	1
Hahnemann Medical College and Hospital, Philadelphia		(1904) (2, 1910)	3

College	FAILED	Year Grad.	Per Cent.
Hahnemann Medical College and Hospital, Chicago		(1909)	61.4

At the examination held by the Eclectic Medical Society at Harrisburg, the total number of candidates examined was 12, of whom 11 passed and 1 failed. The following colleges were represented:

College	PASSED	Year Grad.	Total No. Examined.
Maryland Medical College		(1907) (3, 1910)	4
Atlantic Medical College		(1908)	1
Baltimore University		(1905)	1
Eclectic Medical University, Kansas City		(1910)	1
St. Louis College of Physicians and Surgeons		(1906)	1
Medico-Chirurgical College, Philadelphia		(1910)	2
Temple University		(1910)	1

College	FAILED	Year Grad.	Per Cent.
Baltimore University		(1908)	72.1