

## WHY APPLICANTS FAIL TO PASS THE STATE BOARD EXAMINATIONS.\*

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Why do men find it difficult to pass examination of the State Board of Pharmacy? It seems that almost every one gives a different reason. However, let us see what kind of answers the candidates give in the examinations, and we shall then be in a better position to judge the real reason.

The following answers were all given in examinations in *Materia Medica* before the New Jersey State Board of Pharmacy during the last year:

A Rubefacient "acts on worms."

*Cannabis Indica* "comes from Canada."

"*E-a-r-t-a-t-e-s* the nose" is the way one candidate describes the action of a drug.

Musk comes from the "Perpetual Follicles."

Musk "is a insect."

Musk "is Sumbul."

The official title of Alum is "Alumni."

Refrigerant was defined as "preventing from getting rancid." Example, "Benzoin would be a refrigerant in Benzoinated Lard."

"Citric Acid is mined."

"The *seed* of the plant is used in making *Gossypium Purificatum*."

"Suprenal Glands" is the way one candidate writes Suprarenal Glands.

"Troches are intended as receptacles for medicine."

"The physical difference between Paraffin and Spermaceti is that Paraffin is purer."

The official title of Diphtheria Antitoxin is "Mamalia."

"A chemical heart tonic is stomach pump and emetic."

"Digestive ferments are those substances that give off gas in the stomach, as Castor Oil."

"Two classes of plant principles used in medicine are cotyledons and dicotyledons: Example bark—pith and wood."

"The chief constituent of Oil of *Gaultheria* is resin, starch and sugar."

"An Anthelmintic is an agent that recovers from consciousness."

The following is the wonderful effort of one candidate: "Gum Benzoin contains Myrosin. Becomes active when heated, then it can be used as a glue."

"*Rhus Glabra* grows in *South America* and *tropical countries*."

"*Hydrastis* grows in *South America* and *tropical countries*."

"*Acacia* grows in the *United States*."

These last three were not given by one candidate only, but by many in the same examination.

"A Chologogue is an agent used in cases of kidney disease to act as a filtering medium when the kidneys do not."

One candidate gives the correct definition, but gives as an example, Resin Cerate.

"Diaphoretic, a drug capable of retarding *flem* from *bronical* tubes; example—*Matricaria*"

The official name of nutmeg is "Mysteria."

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Another says this drug is "odorless and tasteless."

"Honey—the official name is Mail—the source is bee combs."

"Honey—the official name is Ovis Orris deposited by the bee."

"Honey is Mel Scrofula."

"The scientific name of the source of honey is *Glucose*."

"Digitalis should be kept in tight sealed bottles because it picks up moisture from the air and it might deliquesce and become hardened."

"Digitalis should be made fresh often as the older it gets the stronger it is."

"Cod Liver Oil is the oil taken from the bladder of the Cod-fish."

"Cod Liver Oil is obtained from the bladder of the fish."

"The official title of Cod Liver Oil is *Oleum Origanum*."

"Couch Grass has a *vacuum* inside."

"Terebinthina Canadensis is a rhizome and root; the habitat is Europe."

"Spanish fly is *Diama*."

"Infusion of Wild Cherry should be made with *hot* water so as to liberate all traces of *Carbon Dioxide* and to prevent the liberation of HCn."

Another candidate guesses, "it should be made with cold water to prevent from decolorizing."

"A Febrifuge destroys worms."

"A Febrifuge is a substance which chases away."

"An Antiparasitic checks up perspiration."

"An Antiparasitic prevents paralysis."

"An Antiparasitic is a drug that will reduce fever."

"An Antiparasitic is a drug relieving or preventing spasms of fits."

"The source of Cantharides is *Mosche Cantharidu*."

"A vesicant is a mild cathartic as Compound Licorice Powder."

"A vesicant is a drug that will serve as a vehicle."

"A vesicant is a drug that will enlarge a vessel to increase blood pressure, as Struchnine."

"Tragacanth is Dandelion."

"Senna is a *folio*."

"The source of Wax is *Abies Melliferous*."

"Wax is Cetaceum obtained from Spermaceti gotten from *the bone of the whale*."

A wonderful display of knowledge on the part of one candidate follows:

"Amygdalin in the presence of Sulphuric Acid—Alcohol and Ether produces an aldehyde, acetone and H C N"; and he gave an equation, balanced on paper, to prove it.

Here is a candidate that surely does not need his own prescription. In answer to a question concerning the proper base for an Ichthyol Ointment he answers: "I would recommend a 20 percent ointment for all ordinary purposes where reducing *information* is desired."

Where the candidate got the following is a mystery: "Two classes of plant principles are *Mamalia* and *Insecta*. A substance belonging to Mamalia is *Lard* from the *Sheep* and the *botanical* name is Ovis Aries."

"Acacia is used in Brown Mixture to keep the mixture in *suspense*."

Here is a candidate who has a vivid impression:

"Asafetida—odor like a skunk, taste awful."

"Aqua Rosæ is obtained from the *pedestil* of the Rose—chiefly."

"Tinctura Ferri Chloridi—taste very dry."

"Flour of Sulphur is *groung* roll sulphur," is about all one candidate knew about the description of sulphur.

Another says: "Sulphur has k-n-o-w odor."

Prunum—"dose 25 of them—good help for the bowels."

Another describes prunes as "a liquid, dark red in color."

Still another gives a description and ends with, "as one might see in an Acme Tea Store."

The question was, "a. Define briefly each of the underscored words in the following definition:

The *concrete* milky *exudation* obtained by *incising* the unripe *capsules* of *Papaver Somniferum*.

"b. Why is unripe specified?"

A few of the answers are represented in the following:

"Concrete is a substance of very binding nature."

"Concrete is the *foundation* of the capsule."

"Exudation is the juice obtained from it by extracting it."

The man who gave the following is evidently a *Bible* student who became confused:

"Exudate means to be taken out of bondage."

"A capsule is a dehiscent fruit that splits and permits the seeds to come out *unsolicited*."

"A capsule is a substance having a *vacuum* which is capable of being filled by some other substance."

"Incising means exciting."

"Unripe is specified because it is of a *better nature* and yields more alkaloids."

"Cinchona is used as an *incipient* in pills."

"Two ferments of animal origin are Adeps Lanum and Adeps Lanum Hydrosus. Adeps Lanum is lard and is obtained from the fat of a hog."

"Uva Ursi is the bark of *Condendrunum Tomentosi*."

"Serum is Servum Antidiphtheritica obtained from the coagulated blood of a horse by separating the serum immerged by the inoculation of Diphtheria Toxin."

"Rosa is a bulb with fleshy scales."

"Concrete saccharine exudation means the inside secretions of the *stomachic*."

"Musk is obtained from the dried female insect."

"Moschus is spanish flies."

"Tri-iodo-methane is Denatured Alcohol."

"Tri-iodo-methane is Sulphonethylmethanum."

"The two varieties of *Serpentaria officinalis* are Cinnamon and Sanguinaria."

"Bees belong to the family Ruminantia."

"Galla is from the *blatter* of *Bos Taurus*."

"Mel is the excreted juice of the beehive."

"Honey is *Fel Bovis*."

"Cantharides is found on *trees* of *Cantharis vesicatoria*."

"Cochineal is the *female part of the insect*."

"Pistillate is when the *bark* of the plant contains pistils."

"Cera Alba is deposited by the *white bee*."

"Aloes occurs in the form of a *limpid mass*."

"Cerii Oxalas is from the intestinal juices of the ox (*Bos Taurus*) and the sheep (*Ovis Aries*)."

"Cerium Oxalate is a neutral principle from *Goa Powder*."

"Oxgall is a substance deposited in *Quercus infectoria* due to a puncture and ova of *Cynips Tinctoria*."

"Petrolatum makes it a softer *constituency*."

"Oxgall is from the element Cerium by interaction."

"Fel Bovis is from the active principle of the cow or the ox."

"Acetphenetidinum is a white, *crystalline*, amorphous powder."

"Punica Granatum is Pumice Stone."

"A compound of Chlorine and Calcium Hydroxide is Lime Water."

"Some drugs are easier to *commute* before they are dried."

"The chief constituent of Aloes is *trunk branches*."

"Chloroform and Ether are both liquids having a choking sensation."

"Thymol Iodide has a *strong viscid odor*."

"Cocaine, in solution, is colorless with *toxicating taste*."

"Aspidium contains *Cornutine*, Filicin, *Aspidospermine* and Filicic Acid."

"Opium is obtained from Coco Beans."

"Opium is obtained from Papavia from incisions of *bark and trunk*."

"The Poppy is spliced and Opium removed a mass."

"Opium comes from the *seed of Popa* heads."

"Rhamnus Purshiana should be kept one year to make sure that the *Amygdalin* is not reacted."

"The concrete milk juice of Lactuea Virosa is the milk of a cow."

"The prepared milk juice of several species of Hevea is *Saccharum Lactis*."

The following covered a full sheet of legal cap paper and was given by the candidate in answer to a question as to the proper base to be recommended to a physician for use in Ichthyol Ointment under certain conditions:

"The physician should know these things himself and he should not ask the Pharmacist. He went to college and he ought to know. But however I would advise him to use for a base Lanoline Hydrosis and Petrolatum because Lanoline Hydrosis contains water and that would be the maximum absorption according to my experience being in the drug business for over 11 years and I have compounded some Prescriptions and some Preparations.

M — D — (Name of candidate).

"Not a registered Pharmacist in any state but I hope to God I get registered in New Jersey as I am a married man with 2 children.

"This is the 2nd time I am taking the J. B. and I studied very hard."

No doubt the ludicrous side of these will appeal to you first. But, as the seriousness of it presents itself, you will find it hard to believe the answers *bona fide*.

Very many of those taking the examinations are graduates of a college of pharmacy or have had some college training. Yet, nearly 70 percent of the candidates fail, despite the fact that the examiners endeavor to make their examinations fair and of a practical character. The more I look into the matter, the more I am convinced that the system and the character of the instruction given in the college is largely to blame for these failures. Most of the answers show a tendency to memorize a miscellaneous collection of more or less unrelated facts. Candidates come to examiners time after time, saying they have taken this or that course, calculated to enable them to pass the State examinations, and want to know what text-books they shall study to be able to pass.

Many college professors seem content with "parrot" teaching and "parrot" learning from the text-books. Why is this so? In many cases the professors are selected, not with a view of their ability to teach, but because they are more or less successful in some work related to pharmacy or because they are willing to do the work cheaply for the sake of the prestige pertaining thereto.

How many teachers in our colleges of pharmacy have studied the rudiments of psychology, or possess even the rough psychology that enables many men to

rightly judge the mental processes of their associates. How many of these teachers have had any training or even done reading in pedagogics? I doubt if one or two in a hundred could answer, yes.

The result is, that the average teacher loses sight of the fact that the students under him are only children of a larger growth, mentally as well as physically; that in them, to a certain extent, there still exists the natural inquisitiveness of the child, which makes him acquire knowledge so readily when guided in the proper manner.

The student of to-day has, in his early school training, a much better and broader foundation upon which to build his later technical training than had his predecessors. It is the duty of the technical instructor to establish points of contact with this earlier knowledge and upon it, with the aid of the student's natural inclinations, build a solid structure of knowledge, or rather, assist the *student* to build such a structure.

He cannot do this by "cramming" *dead* facts into his students. He must, rather, stimulate them by such a *live* presentation of his subject that the student will acquire the facts for themselves in the manner best suited to their individual mentality.

If this is done we shall have candidates who can *reason* answers for themselves, and can explain their text-book definitions when they use them. In other words, their knowledge will have become part of them, to be used as a means for further advancement, to what heights, who can tell?

#### MENTAL BLINDNESS.

Everybody values his eyesight as one of his most precious possessions. Loss of vision is rightly considered to be among the direst of afflictions.

But not everybody appreciates that there is such a thing as mental blindness as well as physical blindness; and that, to be really successful in life, it is as important to see facts clearly as it is to see objects clearly.

Many people, for that matter, unconsciously allow their mental vision to be clouded, perhaps almost destroyed, by cataracts of prejudice. They see facts darkly, because they refuse to think in a logical, unprejudiced manner.

Such people somewhat resemble the unfortunate man who had to be sent to a hospital for the insane because he insisted that he was dead. Being dead, he argued it was useless for him to take food. Accordingly, he was in a fair way to make himself dead in reality.

His relatives could not persuade him to eat, and the hospital doctors were equally unsuccessful. Finally, in a desperate effort to convince him that he was not dead, one of the doctors asked him:

"Can dead men bleed?"

"No," replied the insane man.

"Very well," said the doctor. "Now, look at this."

He took hold of the man's arm and cut it slightly with a sharp instrument, causing the blood to flow.

"There," he said, "you see you are bleeding. Consequently you cannot be dead."

"Ah, but I am dead. You have only proved that, after all, dead men can bleed."

Decidedly we must see facts as well as objects clearly. It is not enough to take pains to preserve our physical vision. Our mental vision must be safeguarded likewise.—H. ADDINGTON BRUCE.