OUR PRIZE COMPETITION.

DEFINE (a) SIMPLE TUMOUR, (b) MALIGNANT TUMOUR (c) CYST, (d) HÆMATOMA, (e) ABSCESS. GIVE EXAMPLES OF EACH.

We have pleasure in awarding the prize this week to Miss E. A. Noblett, London Homeopathic Hospital, Great Ormond Street, W.C.1.

PRIZE PAPER.

A tumour is a localised swelling composed of newly formed tissue which fulfils no physiological function. It increases in size quite independently of the growth of the body, and there is no natural termination to its growth.

(a) A simple tumour presents a close structural resemblance to the normal tissues of the body. They grow slowly, and are usually definitely circumscribed by a fibrous capsule, from which they are easily enucleated, and they do not tend to recur after their removal. In this growth they merely push aside and compress adjacent parts, and they present no tendency to ulcerate and bleed unless the overlying skin or mucous membrane is injured. there are many varieties of tumours; for example, fatty, fibrous, and bony tumours, warts and fibroid tumours of the uterus :—

(1) A lipoma is composed of fat resembling that normally present in the body.

(2) An osteoma is composed of bony tissue, and originates from the skeleton.

(3) A chondroma is mainly composed of cartilage.

(4) A fibroma is a tumour composed of fibrous connective tissue.

(5) A myoma is composed of non-striped muscle fibres.

(6) An adenoma is a tumour constructed on the type of, and growing in connection with, a secreting gland.

(b) Malignant tumours usually show a marked departure from the structure and arrangement of the normal tissues of the body. Although the cells of which they are composed are derived from the normal tissue cells, in this development they tend to take on a lower and a more vegetative form. They grow rapidly, and tend to infiltrate their surroundings by sending out prolongations or offshoots; they tend to invade and destroy the overlying skin or mucous membrane, and thus give rise to bleeding ulcers. In course of time they give rise to a condition of ill-health, the patient becoming pale, sallow, feverish, and emaciated, probably as a result of chronic poisoning from the absorption of toxic products from the tumour. Examples :-

(1) The term sarcoma is applied to any con-

nective-tissue tumour which exhibits malignant characters.

(2) Epithelioma, or epithelial cancer, is an abnormal development of the epithelium. It is prone to ulceration, and affects the lymphatics near it.

(3) A dermoid is a tumour containing skin or mucous membrane, occurring in a situation where these tissues are not met with under normal conditions.

(c) Cysts are rounded sacs, the walls being composed of fibrous tissue lined by epithelium; the contents are fluid or semi-solid, and vary in character according to the tissue in which the cyst has originated. Examples :—

(1) Parasitic cysts are produced by the growth within the tissues of cyst-forming parasites, the best known being the tænia echinococcus, giving rise to the hydatid cyst.

(2) Retention cysts develop when the duct of a secreting gland is partly obstructed; the secretion accumulates, and the gland and its duct become distended into a cyst.

(d) A hæmatoma results from the encapsulation of extravasated blood in the tissues, from hæmorrhage into a preformed cyst, or from the saccular pouching of a varicose vein.

(e) An abscess may be defined as a cavity with a definite wall, in which there is a collection of pus. Any tissue of the body may be the seat of an acute abscess, and there are many routes by which the bacteria may gain access to the affected area. For example, an abscess in the subcutaneous cellular tissue usually results from the infection by organisms which have entered through a wound or abrasion of the surface, or along the ducts of the skin; an abscess in the breast from organisms which have passed along the milk ducts, opening on the nipple, or along the lymphatics which accompany these. An abscess in a lymph gland is usually due to infection passing by way of the lymph channels from the area of skin or mucous membrane drained by them. Abscesses in internal organs, such as the kidney, liver, or brain, usually result from organisms carried in the blood-stream from some focus of infection elsewhere in the body.

HONOURABLE MENTION.

The following competitors receive honourable mention :---Miss H. Ballard, Miss S. A. Cross, Miss M. Robinson, Miss P. Thomson.

QUESTION FOR NEXT WEEK.

What are Vitamines Why are Vitamines necessary? What conditions are likely to supervene when Vitamines are absent or deficient?



