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Diploma in Holistic Massage

Learning Outcomes

Learning Outcomes of the Qualification's Units:

- Unit 1: iUBT434 Professional Conduct & Business Awareness
- Unit 2: iUBT432 Holistic Massage
- Unit 3: Anatomy & Physiology

Purpose of this document:

This document outlines the learning outcomes for each unit within the Diploma in Holistic Massage. It provides learners, tutor, and assessors with a clear understanding of the knowledge, skills, and competencies to be achieved upon successful completion of the qualification.

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Unit 1 - iUBT434: Professional Conduct & Business Awareness

LO1 Know the principles of ethical practice:

Contra-indications related to the treatment; Impact of advertising whilst accepting the legal implications of the relevant laws; Professional indemnity insurance; Ensuring strict client confidentiality and compliance with current data protection regulations; The need of consent; The concept of 'Code of Ethics'; CPD, Continual Professional Development; Professionalism; The importance of maintaining professional working relationship with other learners/therapists; The necessity of building up a rapport with medical profession; The necessity of building up a rapport with other therapists.

LO2 Know the requirements for health, safety and hygiene:

The contents of a first aid box; The necessity of having an accident book and how to complete it; When and how to call for medical assistance in case of accidents; The supervision of evacuation of the salon/clinic in the case of a fire alarm; The types of fire-fighting equipment required in a salon; How to carry out basic safety checks for electrical equipment; The importance of professionally checking electrical equipment on an annual basis; Hygienic terms; The types of infections; The methods of sterilisation/sanitisation available and their uses relevant to the treatment including their advantages and disadvantages; Personal hygiene; Aspects of waste disposal for the salon/clinic; The importance of being aware of blood transmitted disease.

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LO3 Know the importance of communication:

The importance of a consultation card relevant to the treatment; Ethical and client-led conversations; Contra-indications relevant to each treatment; Client care; The importance of keeping accurate client records; The vitality of effective client communication; How to deal with negative feedback; Effective questioning techniques; The different types of body language; Completing each treatment in a commercially acceptable time; The importance of maintaining good working relationships.

LO4 Know the principles of finance and costing:

The basic business principles; The importance of stock control systems; How to cost a treatment; The benefits of offering a course of treatment.

LO5 Know the principles of retail:

How to plan the interior of a salon/clinic; The importance of providing a retail service; The role of the receptionist; Basic salon/clinic security implications.

LO6 Know effective sales and marketing techniques:

The basic principles of selling; The main forms of advertising; The development and planning of a talk/demonstration.

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Unit 2 – iUBT432: Holistic Massage

LO1 Know the history of massage:

Explain the history of the development of classical massage: China 3000BC; Japanese Shiatsu; Indian Ayurvedic medicine; The Greeks; The Romans; Per Henrik Ling; Physiotherapy; Present day.

Explain and demonstrate the holistic approach: Greek term 'holos'; The importance of the treatment of the whole person in relation to holistic health and the power of touch; Concept of balance and harmony in the body (homeostasis).

Explain the term 'integral biology': The way in which the physical environment affects us and social, economic and environmental factors affect health and social wellbeing to include - Computers, Mobile phones, Social media, Processed food, Lack of fresh air, Stress, Lack of sleep, Financial problems, Poor ventilation, Lack of exercise, Chemicals, Pollution, Repetitive strain injuries, Jet lag, Lack of natural light, Work life balance.

LO2 Know the legislation applicable to massage treatment:

Explain the appropriate legislation applicable to massage treatment: Any particular rights, restrictions and charters; Legal framework related to people and settings with which the practitioner is involved, e.g. Mental Health Act, Children Act; Moral rights which are not recognised in law; Organisational policies and how they may differ from other organisations (when working in care); Records which the practitioner is responsible for completing in relation to rights and responsibilities; Compliance with current data protection regulations; Any relevant complaints systems and methods of access (when working in care); Awareness of voluntary regulatory groups where they exist, e.g. General Council for Massage Therapists (UK only).

Explain the issues surrounding 'consent' to treatment: Importance of obtaining consent from the client; Importance of gaining consent from a person who is acting in the best interests of the client (when the client is unable or not of an age to make

the decision for themselves); Importance of obtaining signed parental or guardian consent for minors prior to any treatment; Current debate surrounding the issue of consent and the ways in which it may differ between various practitioners; Meaning of informed client consent and the guidance given by the practitioner's professional body, particularly where there is a need for written consent; Methods of obtaining consent and how to confirm that clients have been given sufficient information on which to base their own judgement; Ensure that agreements are in the client's best interest.

Explain the importance of massage for clients and families receiving palliative or social care1: Issue of consent; Age of consent and treating a minor; Any appropriate legislation; Confidentiality; Appropriate support; Using an appropriate manner of communication; Only giving information agreed within the care team; Knowing when to refer clients to people outside of the care team; Maintenance of accurate records; Managing one's own feelings; The importance of ongoing care; Personal beliefs and preferences; Grief and grieving process; Awareness of other support services.

LO3 Be able to carry out a consultation and recognise contra-indications to treatment

Explain and demonstrate methods of consultation: Students should demonstrate knowledge of the importance of the following: - Private comfortable area, Positive body language, Positioning of the client (no barriers between themselves and client), Good communication skills (asking open and/or closed questions where appropriate), Trust, Professionalism, confidence and enthusiasm; Professionally informing the client of restrictions of treatments, e.g. contra-indications; Ensuring client is not alarmed in any way; Confidentiality; Consent; Any contra-indications to treatment; Client lifestyle; Client profile; Importance of planning a treatment programme bearing in mind the client's diverse needs such as religious, cultural, moral and social beliefs, gender, age and disabilities; Determining the nature and extent of the client's needs; Agreement of treatment objectives and course of action; Confirm the client's consent to the treatment, including parental or guardian consent when treating minors; Where the client is not in a position

themselves, confirm agreement to the treatment from the appropriate companion; Explanation of any possible side effects to the treatment; Explanation how the programme will be evaluated and the review process; Where applicable clarify with the client information which may be available to others, e.g. relevant health care workers; Obtain the client's signature (or that of the companion/carer); Compliance with current data protection regulations.

Explain common ailments and contra-indications to massage:

With medical, GP or specialist permission. In circumstances where written medical permission cannot be obtained the client must sign an informed consent stating that the treatment and its effects have been fully explained to them and confirm that they are willing to proceed without permission from their GP or specialist: Pregnancy, Cardiovascular conditions, Thrombosis, Phlebitis, Hypertension, Hypotension, Heart conditions, Haemophilia, Any condition already being treated by a GP or another complementary practitioner, Medical oedema, Osteoporosis, Arthritis, Nervous/psychotic conditions, Epilepsy, Recent operations, Diabetes, Asthma, Any dysfunction of the nervous system (e.g. Muscular sclerosis, Parkinson's disease, Motor neurone disease), Bell's palsy, Trapped/pinched nerve (e.g. sciatica), Inflamed nerve, Cancer, Postural deformities, Conditions causing muscular spasticity (e.g. Cerebral palsy), Kidney infections, Whiplash, Slipped disc, Undiagnosed pain, When taking prescribed medication, Acute rheumatism, Work related injuries, Repetitive Strain injury (RSI).

Contra -indications that restrict treatment: Fever, Contagious or infectious diseases, Under the influence of recreational drugs or alcohol, Diarrhoea and vomiting, Skin diseases, Undiagnosed lumps and bumps, Localised swelling, Inflammation, Varicose veins, Pregnancy (abdomen), Cuts, Bruises, Abrasions, Scar tissues (2 years for major operation and 6 months for a small scar), Sunburn, Hormonal implants, Abdomen (first few days of menstruation depending how the client feels), Haematoma, Hernia, Recent fractures (minimum 3 months),

Cervical spondylitis, Gastric ulcers, After a heavy meal, Conditions affecting the neck, Metal pins/plates, Piercings.

Explain the importance of referral procedures: Only working within the realms of their own expertise as a massage therapist; Identifying when a client should be referred to either: - GP - Another Complementary Therapist, Member of the social care or nursing team.

LO4 Be able to carry out a holistic massage treatment

Explain and demonstrate appropriate client care: Checking consultation and contra-indications; Explaining the treatment procedure to the client; Assisting the client on and off the couch and protecting the client's modesty at all times; Ensuring that all parts of the client are covered except the area being massaged; Sanitising the client's feet before and after treatment; Sanitising or washing own hands; Ensuring that the client remains comfortable throughout the treatment; Using appropriate covered supports, e.g. under the ankles, chest and forehead, knees, head; Adapting the massage techniques to suit the needs of the client; Removing the massage medium at the end of the treatment if appropriate; Assisting the client off the couch protecting their modesty at all times; Standing onto tissue/couch roll ensuring that the client's bare feet do not touch the floor.

Explain and demonstrate the appropriate hygiene procedures: The most efficient form of sterilisation in the clinic; The most appropriate form of waste removal in the clinic (particularly when contaminated); Reasons for good personal hygiene; Washing own hands; Wiping the client's feet; Using clean towels for each client; Using couch roll to cover the towels; Wearing clean professional work clothes; Socks/tights and full flat shoes; Removing all jewellery from self and client (except wedding band on client and therapist and stud earrings on therapist); Taping jewellery/piercings that cannot be removed from the client; No nail enamel; Clean short nails; Hair tied back off collar and face.

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Explain and select the appropriate medium for the treatment and client's skin type: Mediums available should be: - Oil (not mineral oil), Cream, Powder (unperfumed), Emulsion, Gel - Effects and benefits of each should be known, N.B. Essential oils should not be used;

Demonstrate the classical massage movements and describe their physiological and psychological effects: Effleurage, Petrissage, Frictions, Percussion, Tapotement, Vibrations, Passive; Movements should be performed correctly and on areas appropriate for the movement; Movements should be adapted to produce a massage suitable for the client's needs; Identify the structures being worked over and explain the effect of massage; To include all the body systems in the anatomy section.

Explain the importance of giving appropriate homecare advice after treatment: Explain to the client and make sure they understand the importance of following homecare advice in order to maintain the effects of the treatment. Drinking plenty of water after treatment to flush out toxins; Avoid stimulants like caffeine, alcohol, cigarettes, sugary foods/drinks, heavy meals; Rest for rest of the day avoiding strenuous activity so that the energy system is focused on the healing process rather than being used; Sufficient post treatment recovery time; If you note any unhealthy habits that they mentioned to you/ written in the consultation, point them out. These may include: Healthy eating; Fluid/water intake; Exercise; Smoking habits; Sleep patterns; Hobbies; Interests; Rest; Relaxation; Stress levels.

General care and lifestyle advice and the beneficial effects thereof; Generally helping clients and families to identify options to improve their health and social wellbeing in terms of massage treatment; Helping clients and families to put their choices into action.

Explain the possible reactions to treatment: Increased micturition; Increased defecation; Healing crisis; Fatigue; Headache; Thirst; Heightened emotions.

Evaluate and review the massage treatment/programme: At the end of each treatment the client's feeling should be recorded and any skin or other reactions; The following areas should be monitored: Outcomes achieved, Effectiveness of the treatment, Adapting the treatment if appropriate, Any change in demands,

Whether the treatment met the needs of the client, Longer term needs of the client (particularly when working in a care environment).

Describe other complementary therapies and the ways in which they are performed: Homeopathy; Reflexology; Reiki/spiritual healing; Yoga/meditation; Acupuncture; Shiatsu; Bach flower remedies; Kinesiology; Bowen technique; Alexander technique; Herbalism; Chiropractic; Iridology; Acupressure; Ayurvedic medicine; Aromatherapy; Osteopathy; Indian head massage; Body work (massage therapies); Emotional Freedom Technique (EFT); Hypnotherapy; Lymphatic drainage massage; Naturopathy; Neurolinguistic Programming (NLP); Stone therapy massage; Subtle energy/vibrational medicine; Therapeutic touch; Traditional Chinese Medicine (TCM); Vertical reflexology.

Explain how to deal with first aid emergencies in the clinic (learners are advised to take a St John's Ambulance, Red Cross First Aid Certificate or equivalent dependent upon the country therein): General contents of a first aid box and its importance; Necessity for an accident book and its contents; Alerting the designated first aider in the salon where appropriate; Knowing how to call for medical assistance.

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Unit 3 - iUBT435: Anatomy & Physiology

LO1 Know the structure, function and pathology of the skeletal system:

The functions of the skeletal system; the structure of bone tissues (compact & cancellous); the types of bone and identify where they can be found in the body (long, short, flat, irregular, sesamoid,); the position of the bones of the skeleton (Cranium: Parietal, Frontal, Ethmoid, Sphenoid, Occipital, Temporal, Facial: Nasal, Zygomatic, Maxilla, Lacrimal, Turbinator, Palatine, Mandible, Vomer, Hyoid, Vertebrae: Cervical, Thoracic, Lumbar, Sacrum, Coccyx, Shoulder girdle: Scapula, Clavicle, Thoracic cage, Ribs, Sternum, Pelvic girdle: Innominate bones – Ischium, Ilium, Pubis, Upper limb: Humerus, Ulna, Radius, Carpals: Scaphoid, Lunate, Triquetral, Pisiform, Trapezium, Trapezoid, Capitate, Hamate, Metacarpals, Phalanges, Lower limb: Femur, Tibia, Fibula, Patella, Tarsals: Talus, Calcaneus, Navicular, Cuneiforms ,(medial, intermediate, lateral), Cuboid, Metatarsals, Phalanges); different types of joints (Fixed, Slightly moveable, Freely moveable: Ball and socket, Hinge, Pivot, Gliding, Saddle); identify possible causes of postural deformities (Kyphosis, Lordosis, Scoliosis), identify the symptoms, causes and effects of diseases and disorders of the skeletal system (Gout, Osteoporosis, Stress, Arthritis: Osteo, Rheumatoid).

LO2 Know the structure, function and pathology of the muscular system:

The structure and function of the different types of muscle (Voluntary, Involuntary, Cardiac); the structure function of the various attachments of muscles (Ligament, Tendon, Fascia); the terms used in relation to the muscular system (Origin, Insertion, Action, Tone, Tension, Fatigue, Flexion, Extension, Abduction, Adduction, Rotation, Supination, Pronation, Dorsiflexion, Plantarflexion, Eversion, Inversion, Circumduction); understand muscular contraction (How a muscle works, How it provides movement, How a muscle knows when to contract, The source of energy to create a contraction, Different stages of contraction i.e. tone and relaxation, Over contraction i.e. causes of muscle tension and muscle fatigue); the cause and effect of the formation of lactic acid; the position and action of the muscles of the

(Trunk/torso: Trapezius, Erector spinae, Splenius capitis, Latissimus dorsi, Serratus anterior, Gluteus maximus, Gluteus medius, Gluteus minimus, Psoas, Pectoralis major and minor, Rectus abdominus, Internal oblique, External oblique, Transversus abdominus, Rhomboid major and minor, Infraspinatis, Supraspinatis, Teres major, Teres minor, Subscapularis, Iliacus, Quadratus lumborum, Arm: Deltoid, Biceps, Triceps, Brachialis, Coracobrachialis, Brachioradialis, Pronator teres, Supinator radii brevis, Flexor carpi radialis, Extensor carpi radialis, Extensor Carpi ulnaris, Flexor carpi ulnaris, Flexor carpi digitorum, Extensor carpi digitorum, Muscles of Thenar eminence, Muscles of hypothenar eminence, Leg/thigh: Quadriceps - Rectus femoris, Vastus lateralis, Vastus medialis, Vastus intermedius, Hamstrings - Biceps femoris, Semimembranosus, Semitendinosus, - Adductor longus, Adductor magnus, Adductor brevis, Gracilis, Sartorius, Piriformis, Gluteus maximus, Gluteus medius, Gluteus minimus, Lower leg: Gastrocnemius, Tibialis anterior, Peroneus longus, Flexor digitorum longus, Extensor digitorum longus, Soleus, Extensor hallucis longus, Face, neck and scalp: Orbicularis oculi, Orbicularis oris, Masseter, Buccinator, Levator anguli oris, Levator labii superioris, Depressor angulioris, Depressor labii inferioris, Depressor labii oris, Mentalis, Zygomaticus, Temporalis, Nasalis, Procerous, Corrugator, Frontalis, Occipitalis, Pterygoids, Triangularis, Neck: Trapezius, Sternocleidomastoid, Platysma); the cause and effect of muscular conditions (Fibromyalgia (Fibrositis), Cramp, Muscle fatigue, Atony, Atrophy, Myositis, Rupture, Spasm, Spasticity, Sprain, Strain, Stress.

LO3 Know the structure, function and pathology of the skin:

The structure of the skin – Epidermis: Stratum corneum, Stratum lucidum, Stratum granulosum, Stratum spinosum/Malphigian layer, Stratum germinativum/Basal layer, Melanocytes, Dermis: Blood supply, Lymphatic supply, Hair follicle, Hair, Sebaceous glands, Sweat glands (Eccrine and apocrine), Sensory nerve endings, Dermal papilla, Collagen, Elastin, Histeocytes, Mast cells, Fibroblasts, Erector pili muscle, Subcutaneous layer; The functions of the skin – Secretion, Heat regulation, Absorption, Protection, Elimination, Sensation, Vitamin D formation (7-dehydro-cholesterol), Keratinisation, Melanin formation; Identify the different skin types – Dry, Oily, Dehydrated, Sensitive, Combination; The skin diseases and disorders and when they are contra-indicated to treatment including the recognition points –

whether congenital, bacterial, viral, fungal or an infestation and whether the condition is contra-indicated, Congenital (Eczema, Psoriasis, Dermatitis), Bacterial (Acne vulgaris, Impetigo, Acne rosacea, Folliculitis, Boils), Viral (Warts, Verrucas, Herpes simplex, Herpes zoster), Fungal (Tinea corporis, Tinea pedis), Pigmentation disorders (Vitiligo, Albinism, Chloasma, Ephelides, Lentigo, Moles, Naevae, Port wine stain), General disorders (Broken capillaries, UV damage, Urticaria, Allergic reaction, Comedones, Milia); The different skin cancers and their possible causes (Basal cell carcinoma, Squamous cell carcinoma, Malignant melanoma).

LO4 Know the structure and functions of cells and tissues in the body:

The structures of the cell and their functions (Cell membrane, Nuclear membrane, Nucleus, Nucleolus, Cytoplasm, Centrosome, Golgi apparatus, Mitochondria, Lysosome, Endoplasmic reticulum, Ribosome, Centrosome, Centromere, Vacuoles, Centrioles, Chromatids); The process of mitosis (Prophase, Metaphase, Anaphase, Telophase); The term histology and its definition; The structure and function of the main types of tissue in the body (Epithelial tissue – Simple, Squamous, Cuboidal, Ciliated, Columnar – Compound, Transitional, Stratified, Nervous tissue, Muscular tissue (Striated, Non-striated, Cardiac), Connective tissue (Areolar, Adipose, Cartilage {white fibrous, yellow elastic, hyaline}, Bone, Blood, Lymph); Membranes (Serous, Mucus, Synovial); How substances enter and leave the cell (Diffusion, Osmosis, Dissolution, Active transport, Filtration).

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LO5 Know the structure, function and pathology of the cardiovascular system:

The structure and function of blood and its components (Erythrocytes, Leucocytes, Thrombocytes, Plasma and plasma proteins, Platelets); The vessels in which blood is carried (Arteries, Arterioles, Veins, Venules, Capillaries); The position of the main arteries and veins of the body: Main arteries of the head and neck - Innominate, Common carotid, Internal carotid, External carotid, Facial, Occipital, Superficial temporal, Main veins of the head and neck - Posterior external jugular, Occipital, Superficial temporal, Maxillary, Anterior facial, Common facial, Internal jugular, External jugular, Main arteries of the body - Descending aorta, Left common carotid, Left subclavian, Right common carotid, Right subclavian, Pulmonary, Right hepatic, Splenic, Right renal, Superior mesenteric, Right iliac, Inferior mesenteric, Left iliac, Vertebral, Axillary, Brachial, Right ulnar, Left ulnar, Right radial, Left radial, Right deep palmar arch, Left deep palmar arch, Right superficial palmar arch, Left superficial palmar arch, External iliac, Left femoral, Right femoral, Left popliteal, Right popliteal, Left anterior tibial, Right anterior tibial, Plantar arch, Main veins of the body - Inferior vena cava, Pulmonary, Right hepatic, Splenic, Right renal, Right iliac, Left iliac, Right axillary, Left axillary, Right brachial, Left brachial, Right basilic, Left basilic, Right cephalic, Left cephalic, Right subclavian, Long saphenous, Left short saphenous, Right short saphenous, Dorsal venous arch, Left femoral, Right femoral, Left popliteal, Right popliteal, Right posterior tibial, Left posterior tibial, Right anterior tibial, Left anterior tibial; The structure and function of the heart and the vessels entering and leaving the heart (Superior vena cava, Aortic arch, Inferior vena cava, Aorta, Right atrium, Right ventricle, Left atrium, Left ventricle, Septum, Pulmonary valve, Pulmonary artery, Pulmonary veins, Mitral (bicuspid) valve, Tricuspid valve, Endocardium, Myocardium, Pericardium); The pulmonary circulation; The way in which the blood circulates from the heart to the lungs and back to the heart; Vessels in which the blood is carried - whether the blood is oxygenated or deoxygenated; Process of gaseous exchange; The structure and function of the systemic and coronary circulation (Systemic circulation – Heart, Body, Aorta, Inferior vena cava, Superior vena cava, Coronary circulation – Heart, Coronary arteries, Coronary veins); Blood pressure and pulse – Systolic, Diastolic,

Cardiac output, Resistance by the arterioles, Total blood volume, Viscosity of blood, Elasticity of artery walls, Heart rate; The conditions of high and low blood pressure and the causes and effects of hypo and hypertension; Way in which blood pressure is measured; Way in which blood pressure can be affected by massage; The diseases and disorders of the circulatory system including the cause and effects of the following: Anaemia, Varicose veins, Haemophilia, Arteriosclerosis, Atherosclerosis, HIV/AIDS, High blood pressure (hypertension), Low blood pressure (hypotension), High cholesterol, Hepatitis A, B & C, Coronary thrombosis, Septicaemia, Haemorrhoids, Thrombus, Leukaemia, Aneurism, Stress.

LO6 Know the structure, function and pathology of the lymphatic system:

The structure and function of the lymph; Formation and composition of lymph and its function to include: Leucocytes, Lymphocytes, Waste products; The structure and explain the function of the lymphatic system: Lymphatic capillaries, Lymphatic vessels, Lymphatic nodes, Lymphatic ducts; The way in which lymph is moved around the body; The structure and position of lymphatic tissue and its function: Spleen, Lymph nodes, Tonsils, Peyer's patches, Appendix; The position of the lymph nodes of the body: Superficial and deep cervical, Submandibular, Thoracic duct, Right lymphatic duct, Axillary, Supratrochlear, Inguinal, Popliteal, Superficial and deep cervical, Anterior auricular, Posterior auricular, Occipital; The interrelationship between the circulatory/lymphatic systems and the muscular, digestive and immune systems; Way in which blood becomes tissue fluid; Way in which excess tissue fluid is picked up by the lymphatic capillaries; Route which the lymph takes before it returns to the circulatory system; The diseases and disorders of the lymphatic system: Oedema/water retention, Hodgkin's disease, Lymphoedema.

LO7 Know the structure, function and pathology of the neurological system:

The structure and functions of the nervous system: Neurone, Motor neurone, Sensory neurone, Mixed nerve, Dendrite, Axon, Synapse, Neurilemma, Nodes of Ranvier, White matter, Grey matter, Myelin sheath, End feet/axon terminals, Ganglia, Reflex arc; The structure and functions of the Central Nervous System (CNS): Brain, Spinal cord, the Peripheral: 31 pairs of spinal nerves ,12 pairs of cranial nerves and

the Autonomic Nervous System (ANS): Sympathetic and Parasympathetic; The effect of stress on the nervous system; The way in which stress affects the fear, fight, flight syndrome; Effects of stress on the sympathetic and parasympathetic nervous systems; Possible diseases/disorders caused by stress; The structure and function of the brain and spinal cord: Brain, Meninges, Pia mater, Arachnoid mater, Dura mater, Cerebrospinal fluid, Cerebrum, Cerebellum, Pons Varolii, Medulla oblongata, Hypothalamus, Brain stem, Spinal cord, White matter, Grey matter; How a nerve impulse is created; Changes in temperature, pressure and chemicals; Potassium and sodium ions; The position and function of the spinal and cranial nerves: 8 cervical, 12 thoracic, 5 lumbar, 5 sacral, 1 coccygeal, 5th, 7th & 11th cranial nerves, Facial, Trigeminal, Accessory; The olfactory system: Nose, Olfactory membranes (contain smell-sense cells), Olfactory plexus; The causes and effects of diseases and disorders of the nervous system: Neuritis, Bell's palsy, Neuralgia, Parkinson's disease, Stress, Myalgic encephalomyelitis (ME), Cerebral palsy, Multiple sclerosis, Sciatica, Motor neurone disease.

LO8 Know the structure, function and pathology of the endocrine system:

The position of the main Endocrine glands and the hormones secreted and the hypo and hyper secretion of each: Pituitary (Posterior lobe - Oxytocin, Antidiuretic hormone/ADH/Vasopressin, Anterior lobe – Prolactin, Human growth hormone/HGH, Thyroid Stimulating hormone/TSH, Adrenocorticotropic hormone/ACTH, Luteinising hormone/LH, Follicle stimulating hormone/FSH, Interstitial cell stimulating hormone/ICSH, Melanin stimulating hormone/MSH), Thyroid gland (Thyroxin, Triiodothyronine, Calcitonin), Parathyroids (Parathormone), Thymus (Secretion of T lymphocytes), Pineal (Releases melatonin), Islets of Langerhans (Insulin, Glucagon, Glycogen), Adrenal medulla (Adrenalin, Noradrenalin). Adrenal cortex (Mineralocorticoids, Glucocorticoids, Sex hormones), Ovaries (Oestrogen, Progesterone), Testes (Testosterone); The effects of hormones on the body; The knowledge of the effects of specific hormones on the body at puberty, pregnancy, menopause and the menstrual cycle; The interrelationship of the endocrine system with other systems including the Nervous system with Circulatory system, Digestive system, Reproductive system, Skin; The causes and effects of various endocrine diseases and disorders: Addison's

syndrome, Amenorrhoea, Cushing's syndrome, Pre-menstrual syndrome, Polycystic ovarian syndrome, Stress, Diabetes mellitus, Diabetes insipidus, Endometriosis.

LO9 Know the structure, function and pathology of the respiratory system:

The structure of the respiratory system and function of each organ: Nose, Nasal cavity, Larynx, Pharynx, Trachea, Bronchi, Bronchioles, Alveoli, Lungs, Pleura (visceral, parietal, pleural cavity), Diaphragm, Intercostals; External respiration; Inhalation and the organs involved; Expiration and the organs involved; Process of diffusion in the alveoli; Internal respiration; The exchange of gases between the cells and the circulatory system; The chemical control of the respiration; Position, function and role of the chemo-receptors; Nervous control of respiration; Role of the brain, the pons Varolii and medulla oblongata in the process of respiration; The structure and function of the pulmonary circulation; Structure and function of the heart: Pulmonary artery, Pulmonary vein, Lungs, Pulmonary alveoli, Process of gaseous exchange; The interrelationship of the respiratory system with other systems of the body including Circulatory system, Nervous system, Muscular system; The causes and effects of diseases and disorders of the respiratory system: Bronchitis, Emphysema, Pleurisy, Pneumonia, Tuberculosis, Asthma, Rhinitis, Hay fever, Stress, Sinusitis.

LO10 Know the structure, function and pathology of the digestive system:

The structure and function of the organs and accessory organs of the digestive system: Alimentary canal, Salivary glands, Tongue, Teeth, Mouth, Epiglottis, Oesophagus, Stomach, Small intestine (jejunum, ileum, duodenum), Appendix, Large intestine, Rectum, Anus, Accessory organs, Liver, Gall bladder, Pancreas; The function of digestion: Peristalsis, Ingestion, Digestion, Absorption, Defecation; The process by which food stuffs are broken down as they pass through the alimentary canal during the digestive process; Action of Rennin, hydrochloric acid and pepsin in the stomach; Action of pancreatic juice, i.e. trypsin and trypsinogen, lipase, amylase on peptones, fats and polysaccharides; Action of bile on fat; Action of

intestinal juice – maltase, sucrase, lactase on disaccharides; The process of absorption of nutrients; Process of absorption of nutrients by the villi and lacteals contained in the small intestine; The structure and function of the digestive system: Enzyme, Proteins, Peptones, Polypeptides, Amino acids, Carbohydrates, Disaccharides, Monosaccharides, Fats, Fatty acids; The interrelationship of the digestive system with other systems of the body including Circulatory, Endocrine, Lymphatic, Muscular, Nervous; The causes and symptoms of diseases/disorders of the digestive system: Appendicitis, Cirrhosis of the liver, Jaundice, Heartburn, Irritable bowel syndrome (IBS), Ulcer, Hernia, Stress, Anorexia nervosa, Bulimia, Constipation, Gall stones, Diabetes mellitus, Coeliac's disease.

LO11 Know the structure, function and pathology of the urinary system:

The structure and function of the organs of the urinary system: Kidney (cortex and medulla), Pelvis, Ureter, Bladder, Urethra; The process of filtration: Functions of the Bowman's capsule, Filtration, Re-absorption, Secretion/micturition; Composition of urine: 2% urea, 96% water, 2% other substances, e.g. ammonia, sodium, potassium, phosphates, chlorides, sulphates, and excess vitamins; Colour is formed from bilirubin (bile pigment); Urine production; Cold/hot weather; Activity/inactivity; Stress; Interrelationship of the urinary system with other body systems like The Skin, Circulatory, Endocrine, Skeletal systems; Causes and effects of the disorders / diseases of the urinary system: Cystitis, Kidney stones, Nephritis, Diabetes insipidus.

LO12 Know the structure, function and pathology of the reproductive system:

The structure and function of the male reproductive system (Prostate, Testes, Testicular vessels, Penis, Scrotum); The structure and function of the female reproductive system (Uterus, Fallopian tubes, Cervix, Ovary, Vagina, Labia; The menstrual cycle - Three phases: Menstrual, Proliferative, Secretory; The formation of the graafian follicle; The formation of the corpus luteum; The structure and function of the breast (Fatty tissue, Ducts, Nipple, Areola, Lobules); The causes and effects of the diseases/disorders of the reproductive system: Ectopic pregnancy, Mastitis, Amenorrhoea, Dysmenorrhoea, Pre-menstrual syndrome, Polycystic ovarian syndrome, Endometriosis, Stress.