

**Qualification: 6004-30-030/530 Level 3 Complementary Therapies (540) –
Theory Exam
June 2018**

1	Describe the role of leukotrienes in the repair of tissues.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for one of the following, to a maximum of two marks</p> <p>Chemical mediators located in the dermis (1) play a key role in allergic reactions/ inflammation (1) have the effect of vasoconstriction of the blood vessels (1)</p>		2
2a	Explain the role of the skin in each of the following.		
	Excretion.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of three marks</p> <ul style="list-style-type: none"> The eccrine/ apocrine glands play a role in excretion (1) of excess water, salts (sodium chloride) (1). Waste products are removed from the blood (1) and excreted in the form of sweat (1) through the sweat glands (eccrine/apocrine) and pores (1). 		3
2b	Explain the role of the skin in each of the following.		
	Secretion.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of three marks</p> <ul style="list-style-type: none"> Sebaceous glands secrete the lipid sebum (1) through sebaceous glands (1) Sebum has a role of 		3

	waterproofing, (1) and lubricating the skin (1) keeping it supple (1) and providing a protective barrier against bacteria (1)		
3	State three bacterial infections relating to the skin.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of three marks <ul style="list-style-type: none"> • Impetigo • Hordeolum / sty. • Furuncles /boils. • Carbuncles • Folliculitis. • Paronychia. 		3
4a	State the type of joint that forms the wrist.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for the following, to a maximum of one mark <ul style="list-style-type: none"> • Ellipsoid - synovial 		1
4b	State three movements that occur at the wrist joint.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of three marks <ul style="list-style-type: none"> • Flexion. • Extension. • Adduction. • Abduction. 		3
5	Explain the physiological causes of osteoarthritis.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of three marks <ul style="list-style-type: none"> • Chronic degeneration of the joint cartilage (1) / subchondral (below the cartilage) areas of the joint (1) The fibro cartilage becomes worn away (1) and the subchondral plate exposed (1) becoming hard/dense/ 		3

	rough/thickened (1) interfering with joint movement (1). The joints space becomes narrow (1). The joint may become enlarged (1) as bone changes (osteophytes) occur (1).		
6	Explain the functions of the muscular system.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for the identification of functions to a maximum of two marks, one mark for the linked explanation of the affect to a maximum of four.</p> <p>Muscle contraction (1) which provides movement (1), aids circulatory system (1) by assisting blood flow (1) Muscle attachments around the joints(1) stabilises the joint structure (1) Muscle tone is maintained (1) to give the body posture /shape (1), Peristalsis (1)aids movement of substances/ through the digestive tract/system (1) Cellular activity within the muscle fibres (1) generates heat (1).</p>		4
7a	State the action of the following muscles: Iliopsoas.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of four marks</p> <p>Hip flexion.</p>		1
7b	State the action of the following muscles: Tibialis anterior.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of four marks:</p> <p>Dorsi flexion/ inversion.</p>		1

7c	State the action of the following muscles. Corrugator.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of four marks Draws the eyebrows together e.g frowning.		1
7d	State the action of the following muscles. Biceps brachii.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of four marks Flexion of the elbow / abduction/internal rotation of the humerus.		1
8	Explain how the volume of blood affects blood pressure.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for the identification of factors to a maximum of three marks, one mark for the linked explanation of the affect to a maximum of five . <ul style="list-style-type: none"> • Exercise increases the demand for oxygen (1) and increases the heart rate to meet the demand (1). • Massage techniques lowers blood pressure (1) by inducing relaxation (1). • Blood pressure is the pressure of blood within the circulatory system (1), closely related to the force/rate of the heart beat (1) and the diameter/elasticity of the arterial walls (1). • Decreased volume of blood causes the blood pressure to lower (1) as less force is exerted on the blood vessel walls (1), increased volumes/fluid causes blood pressure to raise (1) as force on the blood vessels and heart is increased (1). • Thickness / viscosity of blood (1), healthy blood vessels expand (1), unhealthy blood vessels do not absorb the pressure of the blood flow (1) the greater the viscosity the less easily blood can move within the 	5	

	<p>blood vessels (1) making it harder to pump and circulate (1).</p> <ul style="list-style-type: none"> • Reduced elasticity in the walls of the arteries (1) reduces the area within the arteries (1) increasing resistance and blood pressure (1). • Heat causes vasodilation of the blood vessels (1) and increases the pressure within the circulation (1). Cold causes vasoconstriction of the blood vessels (1) and lowers the blood pressure (1). 		
9a	State the meaning of each the following:		
	Tachycardia.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for the following:		1
	Increased heart rate.		
9b	State the meaning of each the following:		
	Bradycardia.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for the following:		1
	Slow heart rate.		
9c	State the meaning of each the following.		
	Epitaxis.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for the following:		1
	Acute nose bleeds.		
10	State three lymphatic organs.		
	Acceptable answer(s)	Guidance	Max mks

	<p>One mark for each of the following, to a maximum of three marks</p> <ul style="list-style-type: none"> • Thymus gland • Spleen • Tonsils 		3
11	Describe the role of the cerebellum.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of two marks:</p> <ul style="list-style-type: none"> • coordinates voluntary muscle (1) • con-ordinates posture and balance (1) • controls and coordinates smooth movement (1), • Processes even movement to maintain posture/ balance/equilibrium (1) 		2
12	State three pathologies that affect the lungs.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of three marks</p> <p>Hay- fever, pneumonia, tuberculosis (TB), asbestosis, whooping cough, chronic obstructive pulmonary disease (COPD), bronchitis, emphysema, pulmonary fibrosis, sarcoidosis, pleurisy, lung cancer, asthma.</p>		3
13	Explain the role of the autonomic nervous system.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for the identification of role to a maximum of three marks, one mark for the linked explanation of the affect to a maximum of five.</p> <ul style="list-style-type: none"> • It is divided into two sections (1) sympathetic and parasympathetic (1). • Sympathetic will prepare the body for fight or flight (1), vasodilation of the blood vessels (1), increases heart rate (1), the release of adrenaline (1) , prepares muscles for activity (1), increase breathing to meet additional demand for oxygen (1), pupils dilate (1), digestion slows down (1), blood is diverted to areas of demand (1). • Parasympathetic will prepare the body for rest and digest (1), vasoconstriction of the blood vessels (1), 		5

	decreases heart rate (1), slows down breathing (1) digestion returns to normal function (1).		
14	State two functions of the digestive system.		
	Acceptable answer(s)	Guidance	Max mks
	One mark for each of the following, to a maximum of two marks <ul style="list-style-type: none"> • Break down complex chemicals to simple ones • Absorb simple chemicals • Assimilate products of digestion Eliminate indigestible materials.		2
15a	State the location of the following endocrine glands. Pineal		
	Acceptable answer(s)	Guidance	Max mks
	One mark for of the following, Brain.	Marker will accept Neck.	1
15b	State the location of the following endocrine glands. Thyroid.		
	Acceptable answer(s)	Guidance	Max mks
	1 mark for of the following, Front of the neck.	Marker will accept Neck.	1
16	Explain the movement of substances through the lower gastrointestinal tract.		
	Acceptable answer(s)	Guidance	Max mks

	<p>One mark for each of the following, to a maximum of four marks</p> <p>Food moves into the stomach (1), Mechanical/chemical breakdown of food into smaller components (1), Movement of gastric contents into duodenum/small intestine (1) Peristalsis/wave like muscular contraction (1) within the digestive tract (1) move the food through the gut (1). This alters the diameter of the gut when they contracts (1) – squeezing substances through (1). Nutrients are then moved into the large intestine (1) for either reabsorption (1) or elimination/defecation (1)</p>		4
17	State two components of urine.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of two marks</p> <ul style="list-style-type: none"> • Water. • Urea. • Uric acid/ ammonia. • Salts. 		2
18	Explain the endometriosis pathology.		
	Acceptable answer(s)	Guidance	Max mks
	<p>One mark for each of the following, to a maximum of three marks:</p> <p>The lining of the uterus migrates(1)to other parts of the body e.g fallopian tubes/bowel/ ovaries/bladder (1), and it attaches to other tissues (1)and responds to the hormones of the reproductive cycle (1) causes internal bleeding during menstruation (1) causing immense pelvic pain (1) and can lead to infertility (1).</p>		3