

BCMB MASSAGE MANUAL: WEEKEND NINE

Our Main focus this weekend is to support you in passing the theory exam next time

Section	Contents	Page
Massage Principles	Initial consultation – what do you observe?	9.2
Massage Techniques	Postural Observation Gentle Massage	9.3-9.5 9.6
Anatomy, Physiology & Pathology	Contra-Indications & Cautions Mock Exam Answers	9.7-9.8 9.9-9.17
Homework		9.19

MESSAGE PRINCIPLES: INITIAL CONSULTATION PRACTICE

In the weekend you will practice the Initial Consultation again, in a group of 3.

As Observer, jot down here what you see:

1. Consultation: look out for

- Mention of confidentiality & why asking questions
- Style of communication – open questions, warm and friendly
- Follow up comments – getting interested
- Checking contraindications e.g. systems / card method
- Relating information to body issues
- Suggesting clear treatment plan & reaching agreement
- Ease with practicalities – clear statement on undressing, how to lie on table etc.

What do you notice?

2. Aftercare advice: look out for

- Clarity and effectiveness
- Style of communication
- Does client practise it?

What do you notice?

MASSAGE TECHNIQUES: POSTURAL OBSERVATION

Introduction

1. This can be a valuable means of providing extra information, enabling us to check things mentioned in the initial consultation. E.g. exactly where is the pain in your back? Then having a look to see the effect this is having.
2. It provides another useful **benchmark**. **Also**, clients love things to be tangible and to see if the massage is proving effective.
3. BEWARE of becoming **judgmental** and of “**goal-setting**” where not appropriate.
4. AND what you see as a static image is not the same as moving, living body!

Method

Basically there are 2 sifts:

1. Asymmetries:

Examine differences between left & right; front & back; top and bottom

It is very important to be careful with language. Observe and say what you see but avoid judgments.

For example: “I see your left shoulder is higher than your right – maybe the muscles between your neck and left shoulder (traps) are tight”

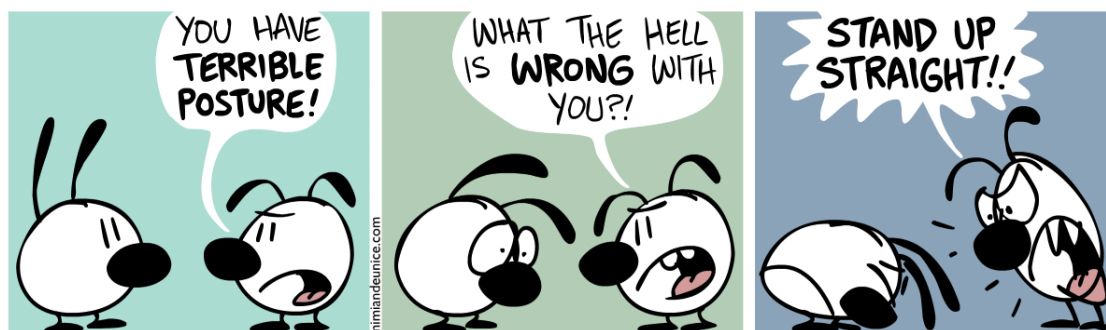
Rather than: “oh, your left shoulder is REALLY bad!”

2. What is short?

These give us information on:

- Distribution of energy. In shiatsu terms, “kyo” means empty or deficient, whilst “jitsu” means full. Vigorous massage to jitsu areas can loosen that energy and move it to kyo areas. Kyo areas need holding and support to allow energy to return.
- In muscular terms, look for which muscles are over/underdeveloped. Other terms include: hypertonic & hypotonic. Or just plain tight & loose? Get familiar with different terminologies for different clients!
- How and where might we massage? E.g. work to soften and loosen tight lower erectors, followed by stretching. Also supportive holding work for abdominals which are underdeveloped.
- Relate your observations to client's day to day body use and think about the aftercare implications e.g. would a simple core exercise like “The Plank” help the weak abdominals, or maybe joining a Pilates class.

Here are some images to think about:



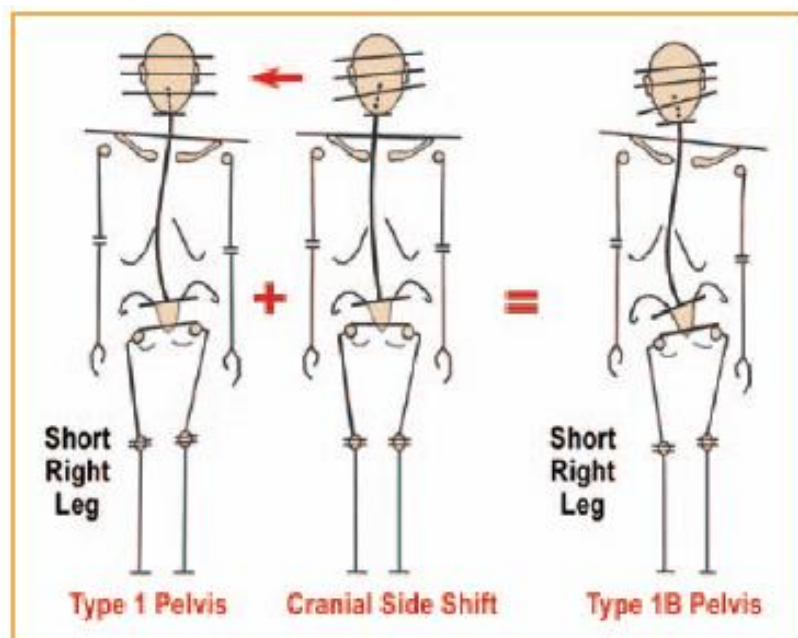
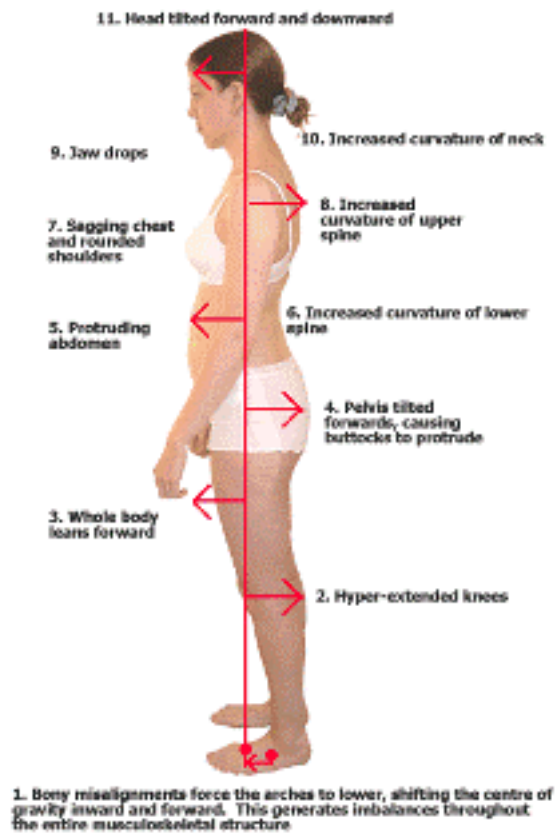


Figure 2. Notice in the Type I pelvis how the cranium has successfully compensated for the short right leg and sacral base unleveling. When cranial side shift is added, the entire structure decompensates leading to pain syndromes. Reprinted from Ross Pope with permission, 2005.

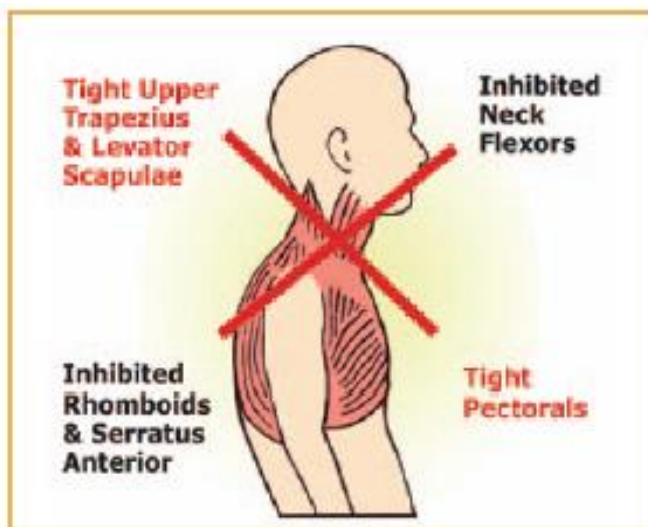
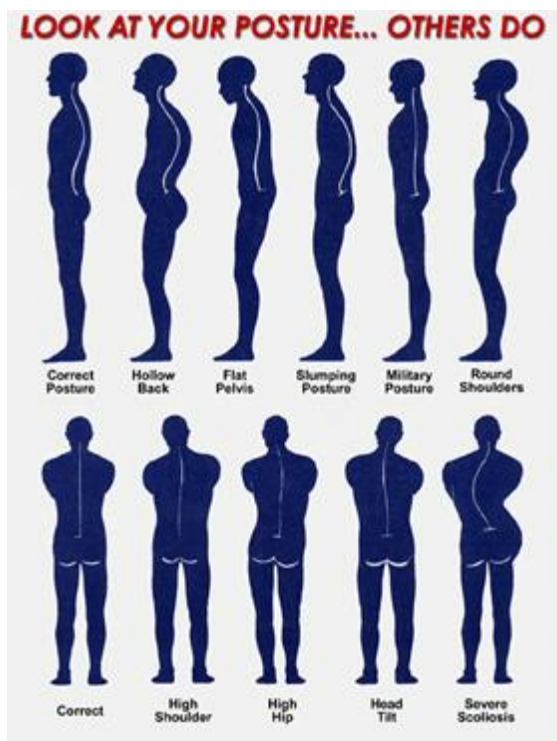
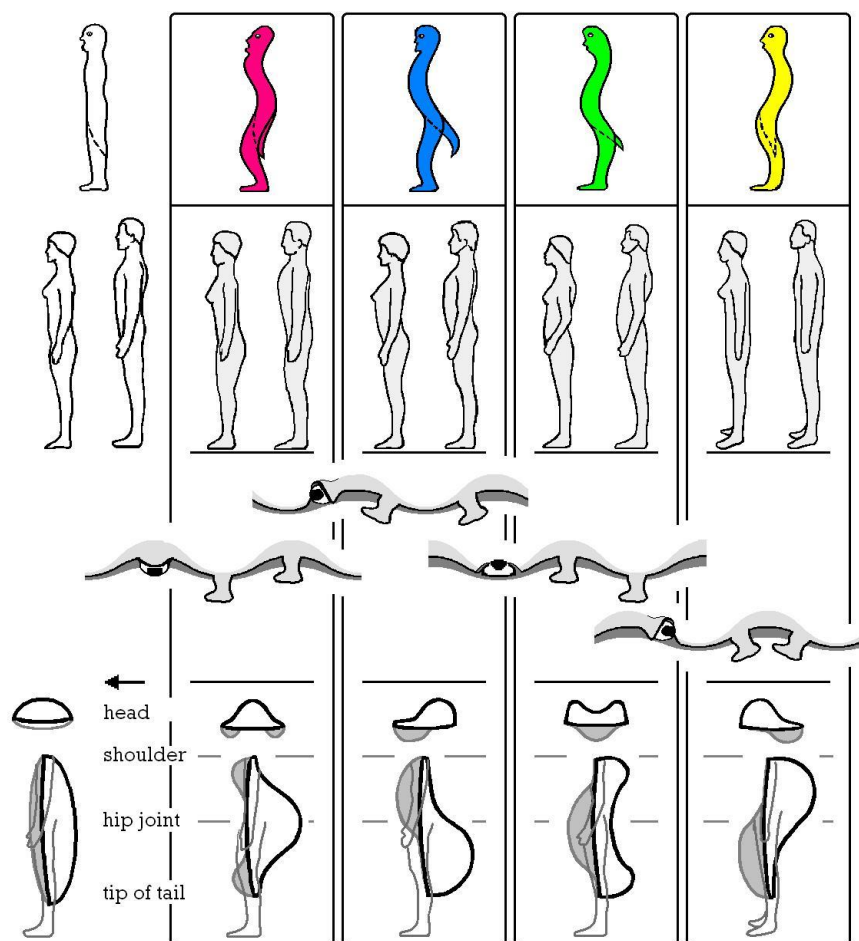


Figure 6. Vladimir Janda's upper crossed syndrome. Reprinted from Ross Pope with permission, 2003.



GENTLE MASSAGE

The Wesley Chapel Chiropractor (<http://northtampachiropractor.com/deep-tissue-massage-gentle-massage/>) compares deep tissue massage with gentle massage. See what you think of these points:

“Deep Tissue Massage

- *is an active and engaging type of massage that involves targeting the deeper muscles and fascia of the body. In general, it is not relaxing as the strokes are harder and deeper.*
- *Deep tissue massage relieves knots or tension in the muscles and the fascia which restrain deeper tissues. Muscle knots usually make the body feel heavier and tensed.*
- *Deep massage can also remove scar tissues from previous injuries by improving circulation. An important action of deep tissue massage is freeing the body from toxins that build-up in muscle tissues. Poor circulation around knots in muscles leads to local inflammation that allows toxins to build up. Deep tissue massage releases these toxins to be eliminated from the body. To do this, you must be well hydrated before and after the massage.*
- *Side-effects of deep tissue massage may include feelings of soreness which usually go away after a few hours or a day.*

Gentle Massage

- *As the term implies, gentle massage is a lighter form of massage. Gentle massage should not provide any discomforts while the strokes are being applied.*
- *An example of a gentle massage is a Swedish massage, which employs long and soft strokes on the surface of the body, gentle kneading and tapping.*
- *Gentle massage is more rhythmic in nature than deep tissue massage and only engages the topmost layers of the muscles.*
- *Gentle massage is more relaxing and energizing. If you had a long day, a gentle massage is best. Gentle massage also improves circulation and heat in the body to allow for better relaxation. Gentle massage is also best for people with arthritis as it provides pain relief and soreness.*

Implications of Deep Tissue Massage and Gentle Massage

As discussed, deep tissue massage is more therapeutic, but gentle massage is more relaxing. If you feel like your muscles are too tight, you may benefit more from a deep tissue massage. If you need some forms of relaxation, you may benefit more from a gentle massage. Nevertheless, some practitioners employ both approaches on different body areas, depending on the client's needs.”

The BCMB view

These points all chime with most people's perceptions of “gentle massage” and “deep tissue massage”. However, at BCMB we feel that in terms of “working with” clients rather than “doing to” them, one could argue that ALL massage should be gentle. We work with our clients' bodies, persuading tissues to release in an encouraging way. Deeper work may be challenging at times but we are careful not to be sudden or shocking in the way we apply pressure.

Perhaps the key point here is the role of intention. Once we are clear on the purpose of the session – be that general relaxation or the need to focus on specific aches and pains – then our techniques will follow accordingly. The deepest massage could be experienced as gentle and relaxing and the lightest stroking as irritating and wrong. It all comes back to tailoring our work to the individual client concerned.

Nevertheless in terms of the APP exam, you will sometimes give the answer “gentle massage” eg active arthritis, elderly or very anxious clients and so on.

WHAT IS YOUR VIEW?!

APP: CONTRA-INDICATIONS AND CAUTIONS

We have started this revision exercise for you – now finish it off!

Condition	Local	Total	Notes
Stroke		For 1 month after; Dr's advice a good idea up to 6 months	Practitioner protection
Cancer	Tumour site R/therapy entry/exit L/dema		Client discomfort Need further training
HIV	Broken skin		Gentle massage
Fracture	Up to 6 months		Ease surrounding muscles
Osteoporosis	Known OP areas		Gentle - no stretches, joint manipulations, percussion
Osteoarthritis	In acute phase - due to inflammation		Gentle mobilisation in chronic state can help
Rheumatoid arthritis		In acute stages	Gentle - no stretches or manipulations
Slipped disc	In acute phase avoid area		Gentle - no stretches - work other areas of body
Varicose veins	No pressure over area or below - use firmer pressure above to draw blood away from damaged veins		
Deep vein thrombosis		Risk of pulmonary embolism	NB - genuine medical risk!!
Haemophilia			Gentle massage
Angina			
Diabetes			

RSI			
Ulcer			
Warts			
Impetigo			
Scabies			
Athlete's foot			
Eczema			
Frozen shoulder			
Phlebitis			
Neuralgia			
Muscular Sclerosis			

BCMB MOCK EXAM 2022: ANSWERS

NB. The long question answers are provided by MTI and represent the marking scheme for a typical exam paper. They provide the essential points required and show exactly where marks are allocated. So read carefully!

1a) Describe the structure of a typical long bone. (5 marks) Explain the function of each of the parts (2.5 marks)

(½ mark for each label on an accurate diagram if no other information given).

Head & shaft – 1/2 mark

Periosteum - connective tissue wrapping around bone, (1/2 mark); where ligaments and tendons attach (1/2 mark); holds in place nutrient blood vessels, lymphatics and nerves, osteoblasts found here (1/2 mark)

Hyaline cartilage – dense connective tissue (1/2 mark) smooth, glassy covering of articular surfaces of bones, (1/2 mark) aids movement and protects ends of bones (1/2 mark)

Spongy bone - inner bone material, honeycomb structure (½ mark) , provides strength + lightness (1/2 mark) May contain red bone marrow which produces blood cells (1/2 mark)

Medullary cavity - Space within hollow shafts of long bones (1/2 mark) which contains yellow marrow in adults, fat store (1/2 mark) Red marrow in children (1/2 mark)

Compact bone - Outer bone material, dense material (1/2) providing strength (1/2 mark)

Describe how you would massage someone, with reasons, if they had the following conditions

a. osteoporosis b. fracture c. kyphosis (2.5 marks each)

osteoporosis – Gentle massage with no stretches, joint work or percussion. (1/2 mark) Help on and off couch, use of supports and alternative positions such as chair massage. (1/2 mark). Local contraindication on known sites, (1/2 mark) Reason - bone density reduces with age therefore more susceptible to fracture. More common in elderly, particularly post- menopausal women. (1 mark)

fracture - Local contraindication until healed- can take up to 9 months. Reason- massage over fracture may prevent healing. (1 mark) Help with getting on and off couch, use of supports avoid oil on plaster (1/2 mark) Work on compensating and surrounding areas. Reason – muscles surrounding broken bone may be stiff through lack of use, other muscles will compensate for restricted mobility and may be overused. (1 mark)

kyphosis – thoracic curvature may make lying down uncomfortable -use supports, particularly head and neck cushion, may have to offer chair massage (1 mark). Work on muscular tension, particularly in neck and shoulders, and on pectorals to open chest. (1 mark) Beware of deep work as kyphosis could be indicative of osteoporosis particularly in elderly (1/2 mark)

1b) Explain how skeletal muscle functions in each of the following conditions using as much detail as possible.

a. aerobic conditions (6 marks)

b. anaerobic conditions (3 marks)

What happens in a muscle during muscle fatigue? (3 marks)

How could massage help speed recovery time when muscle fatigue has happened? (3 marks)

Aerobic - 6 marks

Muscle receives oxygen transported from lungs via bloodstream. (1 mark)

Muscle receives glucose transported from digestive tract or liver via bloodstream. (1 mark for this or below)

Alternatively, muscle receives fatty acids released from body fat stores via bloodstream. Glucose or fatty acids + oxygen used by muscle cells/fibres to create ATP. (1 mark)
 ATP used as energy for muscle contraction. (1 mark)
 Carbon dioxide and water produced as waste products and removed by bloodstream (1 mark)
 Red fibres best designed for aerobic functioning (1 mark)
 Anaerobic - 3 marks
 Muscle cells/fibres use small store of glucose to create limited ATP for contraction without oxygen present. (1 mark)
 Lactic acid produced as by-product and transported to liver via bloodstream (1 mark)
 White fibres best designed for anaerobic functioning (1 mark)
 Muscle fatigue - 3 marks
 Demand for ATP outstrips ability to produce it (1 mark)
 Insufficient oxygen to function aerobically (1 mark)
 Anaerobic functioning produces lactic acid and muscle unable to contract further (1 mark)
Massage - 3 marks
 Speeds removal of lactic acid and aids supply of oxygen and glucose/fatty acids by increasing local circulation (1 mark)
 Petrissage/kneading pumps out wastes (1 mark)
 Effleurage towards heart drains wastes. (1 mark)

2a) Explain the functions of the following in the stress response (A diagram of the stress response with no attempt to connect information to the question- ½ mark for relevant facts)

pituitary (1.5) - releases ACTH which triggers release of cortisol (1/2) from the adrenal cortex (1/2) Cortisol helps release glucose into the body for energy (1/2)

hypothalamus (1.5) - receives information from cerebrum about stressor (1/2) activates SNS branch of ANS (1/2), tells pituitary gland to produce ACTH(1/2)

sympathetic nervous system (3) –Branch of ANS that mobilises energy in the body ready for action – increasing heart rate, faster breathing, dilation of muscle capillaries, contraction of superficial capillaries, increased muscle innervation, release of glucose & slowing digestive system, stimulation of adrenal medulla to release adrenaline, pupil dilation (3 marks for most of these)

adrenal glands (2) - adrenal cortex releases cortisol which increases blood sugar and fat levels as fuel for skeletal muscle (1/2). Cortisol is anti-inflammatory which may be beneficial in actual fight or flight situation if injury sustained. (1/2). Adrenal medulla releases adrenalin (1/2) which reinforces SNS changes such as increased heart rate.(1/2)

Describe the possible effects of long-term stress on the following systems (1.5 marks each) and explain how massage might reduce these effects (1 mark each)

cardiovascular - SNS > increased heart rate, blood pressure, diversion blood from surface of body to muscles, dilation of some blood vessels (1/2) Continued demand on system may lead to pathologies (1/2) high blood pressure, stroke, angina, atherosclerosis and heart attack. (1/2 mark for at least 2 named pathologies) Activating PNS by massage > normal circulation stimulated, (heart rate slows/ returns to normal, blood vessels back to normal; reduced heart rate and BP(1/2). Hold and light effleurage stimulate increased circulation in skin/superficial capillaries (1/2)

muscular - SNS => muscles keep firing => anaerobic respiration and lactic acid build up (1/2) continued activation => muscle tension and fatigued (1/2) muscles forget how to relax movement and flexibility are impaired (1/2).

Kneading & stretching (or manipulation of muscle fibres) relieve chronic muscular tension and return muscles to normal length (1/2) Effleurage and draining and improve circulation to muscles bringing nutrients / removing lactic acid (1/2)

Explain how massage stimulates the PNS (2 marks)

Touch >> sensory receptors in skin>>CNS, which compares them to past experiences and if perceived as pleasurable >>hypothalamus>>switch SNS to PNS (2)

2b) Explain the role of the nervous system in the stress response. (8 marks)

STRESS RESPONSE (diagram acceptable if all parts clearly labelled and relations between parts correct)

Stressor perceived by sensory nerves, internal or external, and message sent to the cerebrum/cerebral cortex in brain. (1 mark)

Cerebrum alerts hypothalamus, which stimulates sympathetic branch of ANS. Sympathetic nerves activate changes in many organs as part of fight and flight response. These changes are designed to bring more blood with increased oxygen and glucose to the skeletal muscles for action (1mark)

Increase heart rate and blood pressure, increase breathing rate, blood vessels in muscles dilate, in skin constrict, glucose released from liver, pupils dilate, erector pili muscles contract, digestive and urinary functions slow down. (3 marks for most of these)

Sympathetic nerves stimulate the adrenal medulla to secrete adrenalin and noradrenalin. (1 mark) These reinforce SNS changes, particularly increasing heart rate, dilating blood vessels to skeletal muscles and stimulating release of glucose from liver. (1 mark)

Motor nerves to muscles fire to stimulate muscle contraction. (1mark)

Explain how massage might promote relaxation (4 marks).

Massage

Slow rhythmical strokes perceived as calming, relaxing massage stimulates PNS activity. PNS is branch of ANS responsible for rest relaxation and repair. (1 mark)

Touch registered by sensory nerves in skin, joints and muscles, (1/2 mark) message sent to brain via CNS, cerebrum matches information about touch to past experience,(1/2 mark) if perceived as pleasurable, balance of ANS switches,(½ mark) hypothalamus tells SNS nerves to stop firing, stress hormones no longer produced, (1 mark) PNS nerves are activated (1/2 mark)

How do the following affect the relaxation response (1 mark each)

- a) Holds and light effleurage: Holds, light effleurage, stroking stimulates sensory nerves in skin, decrease pain, increase circulation in skin capillaries. (1 mark)
- b) **Deep effleurage and kneading:** Deep effleurage kneading and stretching relieve stiffness and tension in muscles and increase local circulation (1 mark)
- c) **Abdominal massage:** Abdominal massage activates vagus nerve and stimulates PNS directly, and stimulates digestion, part of the PNS response (1 mark)

3a) Describe what happens to the nutrients in food on a plate as that food travels to cells and tissues. Refer to the digestive (5 marks) and cardio vascular systems (5 marks) in your answer.

Food > mouth for mastication ,saliva moistens food > swallowed (bolus)> oesophagus rhythmic muscular movements/ peristalsis moves food along> stomach, (1 mark for most of that information) mixes with hydrochloric acid to neutralise bacteria and gastric juices which begin to break down food and turn it into chyme (1 mark for most of that information) which is squirted into duodenum mixes with and further broken down by digestive enzymes from pancreas /fats neutralised by bile made in gall bladder and stored in the liver (1 mark for most of that information) moves into small intestine where nutrients from food absorbed through the walls into plentiful supply of thin walled capillaries (1 mark for most of that information)
Nutrients then taken by hepatic portal vein to liver where some food stored / toxins removed (1 mark for most of that information).

Rest of nutrients taken from liver in venous system to heart (1/2 mark) to right atrium which contracts forcing blood into right ventricle which contracts forcing blood into pulmonary artery which takes blood to the lungs (1 mark for most of that information)It then returns to the heart via the pulmonary vein enters left atrium which contracts and forces blood into left ventricle (1 mark for most of that information) which contracts and forces blood out into the aorta the main thick walled artery of the body (1/2 mark) which branches into finer and finer blood vessels until they become capillaries - the vessels that bring blood to all the cells of the body. (1 mark for most of that). Their walls are single cell thick so nutrients can diffuse out into the cells. (1 mark)

Describe how you would massage someone with the following conditions and give your reasons (2.5 marks each)

- a) **Constipation:** clockwise massage on the abdomen may assist movement of faeces (1 mark) with particular attention to inside ileum / lower part of large intestine/most likely area of blockage (1/2 mark)
- b) **IBS:** a form of colitis therefore inflammation may be present>local contraindication on abdomen if painful (1 mark) If no pain, gentle clockwise abdominal stroking may assist peristalsis (1/2 mark)

Both conditions: stroke clockwise on abdomen because this is the direction of flow in large intestine (1 mark)

Condition may be linked to stress so general relaxation massage on rest of body may help (1 mark)

3b) List the structures found within the dermis of the skin (3 marks) and explain the functions of each (6 marks)

(Diagram with label only 1/2 mark each label)

sebaceous gland (1/2)– produces sebum which lubricates hair and skin (1/2) and together with sweat forms acid mantle on the skin surface, provides a chemical barrier against bacteria and viruses (1/2)

sweat glands – produce sweat onto skin surface(1/2), evaporates to cool body part of skin's homeostatic function (1/2) and remove waste (1/2)

hair follicle – produces hair (1/2) which has protective and temperature regulating function (1)

erector pili muscle – attaches to hair follicle and contracts (1/2) to make hair stand on end for temperature regulation (1)

capillaries and lymphatics – bring nutrient rich blood to epidermis and structures in dermis and remove waste (1) also dilate and constrict for temperature regulation (1/2)

sensory nerves – detect touch, pressure, pain, temperature, vibration, itch (1 for 4 or more functions) for skin's function as body's largest sensory organ (1/2)

Describe how you would massage someone with the following conditions and give your reasons (2 marks each)

- a) Ringworm –is a fungal infection (1/2) if large areas affected, treat as total contraindication, because of risk of infection (1/2) if only a small area affected, treat as a local contraindication (1/2) and practise good hygiene, washing hands, washing couch linen at higher temperature (1/2)
- b) Psoriasis - is not locally contraindicated unless the skin is broken or weeping. (1) Be sensitive to clients wishes, they may want to avoid massage over the area. (1/2) If steroid creams are being used, there may be thin skin, gentle massage (1/2)
- c) impetigo–a highly contagious bacterial infection condition causing sores usually around the mouth, and more common in children(1/2) Take particular care with hygiene (1) Total contraindication if weeping and/or unmedicated (1/2). Otherwise a local contraindication (1/2) some may prefer not to massage at all till completely cleared.

* * * * *

SECTION 2

Please attempt to answer each question, writing your answers in the spaces provided.

1. Fill in the missing words:

anterior - posterior

superior - ...inferior....

medial - ...lateral.....

2. What is the function of osteoclasts?.....They are cells that eat / sculpt the bone to shape it..

Responsible for resorption of bone

3. What is the main difference in structure between a cartilaginous joint and a fibrous joint?

...A fibrous joint is where the periosteum of different bones have knit together with fibrous connective tissue to join them (making them 'immoveable'), whereas cartilaginous joints have cartilage to connect bones. Cartilage is a less fibrous connective tissue that allows a degree of movement due to its compressive nature. (Making these joints 'slightly moveable').....

4. What is a function of hyaline cartilage?It is a compressive tissue found at the articular surfaces of bones and has a smooth, glassy surface. As such it provides protection from impact and ease of movement for the bones to slide past each other in the joint.....

5. The function of synovial fluid is to ...protect.. andnourish / lubricate... the joint.
(Fill in the missing words.)

6. Which of these are conditions that affect the skeletal system (underline)

Kyphosis, dementia, rickets, osteoporosis, cystitis, fibrositis, Crohn's disease.

7. Name one difference between skeletal and cardiac muscle.....Skeletal muscle is under voluntary control in order to move the skeleton, cardiac muscle action is involuntary / automatic to pump blood around the body.....

8. Why do muscle cells have more mitochondria than other cells ?Muscle cells consume more energy than other cells so require more mitochondria to meet this demand.....

9. What are the names of the two protein myofilaments found in muscle cells?

a).....actin.....

b).....myosin.....

10. What is the difference between motor and sensory nerves?Sensory nerves send signals to the central nervous system / brain about the body and motor nerves are signals sent from the central nervous system to the body to instigate action.....

11. What is the main function of the cerebellum?....Learnt movement. Balance & coordination.....

12. What is a nerve cell called?.....a neuron.....

13. Which of the following are disorders of the nervous system (underline)

Epilepsy, sciatica, psoriasis, multiple sclerosis, tuberculosis, neuralgia, piles.

14. What is the name of the membrane(s) lining the thoracic cavity?pleura.....

15. Why is the left lung smaller than the right one?to allow space for the heart.....

16. Across which structure in the lungs does gaseous exchange take place?.....alveoli....

17. Name the main muscles involved in respiration:

a).....diaphragm.....

b).....intercostals.....

18. Which branch of the autonomic nervous system is active when breathing slows down?.....the parasympathetic branch.....

19. Which of the following are disorders of the respiratory system (underline)

Oedema, bronchitis, thrush, emphysema, asthma, eczema, pharyngitis, lice.

20. What is the function of antibodies?.....Proteins that protect the body from foreign substances (antigens).....

21. List the four signs of inflammation

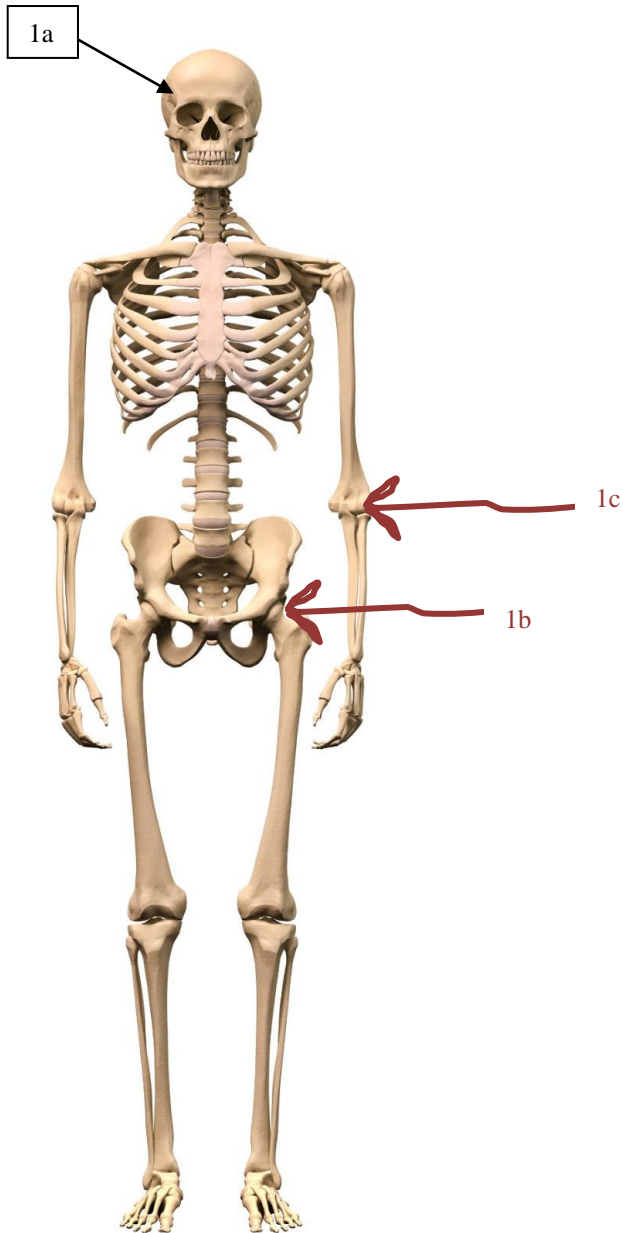
a).....swelling.....

b).....heat.....

c).....redness.....

d).....pain.....

22. What are your massage recommendations for inflammation and why?If caused by an infection then total contraindication until the infection is treated / in sub acute stage. If not caused by infection then a local contraindication in acute stage but work to aid circulation away from area could be useful to help remove waste products, and work to ease muscles that may be impacting the inflamed area may be useful. In sub acute stage sensitive massage can help ease tension in muscles caused by compensation or holding.....
23. Name a condition that adversely affects the lymphatic system.....lymphoedema.....
24. What is the function of the sinoatrial node?.....specialised muscle fibres in the heart (right atrium) that instigate regular heartbeat.....
25. What is the function of the ureters?.....tubes that carry urine from the kidneys to the bladder.....
26. Name three functions of the kidneys?
- a).....removal of toxins.....
- b).....regulation of blood pressure & acidity.....
- c).....keep a balance of minerals such as sodium & potassium.....
27. Which of the following are disorders of the urinary system (underline)
- Colitis, gout, cystitis, hepatitis, indigestion, neuralgia, incontinence, renal failure
28. Where is testosterone produced?.....in testes (male) and ovaries (female).....
29. Which of the following are disorders of the female reproductive system? (underline)
- Fibroids, prostate cancer, period pain, meningitis, gallstones.
30. Name two structures made of dense connective tissue:
- a).....tendons.....
- b).....ligaments.....
31. Where in a cell would you find the genes/DNA?nucleus.....
32. What is homeostasis?.....It is the equilibrium the human body needs to maintain; temperature, vitamin & mineral balance, fluid balance, heart rate, breathing rate and so on.....
33. Which system provides the body with defence mechanisms against attack and disease?.....the immune system.....
34. Name two locations of lymph nodes
- a).....armpit (axilla).....
- b).....groin (Inguinal).....
35. What is an effect of oxytocin?
- ...Hormone that promotes bonding and feeling good. Also initiates contractions for birth.....
(Also: Initiates lactation / assists sperm transport in men / assists production of testosterone in men)



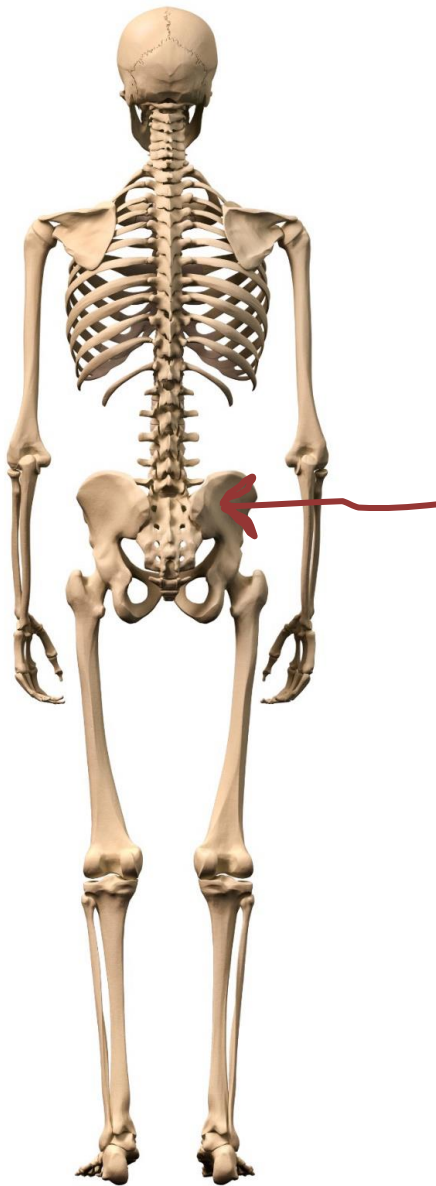
SECTION 3

Using the diagrams given, answer the following questions.

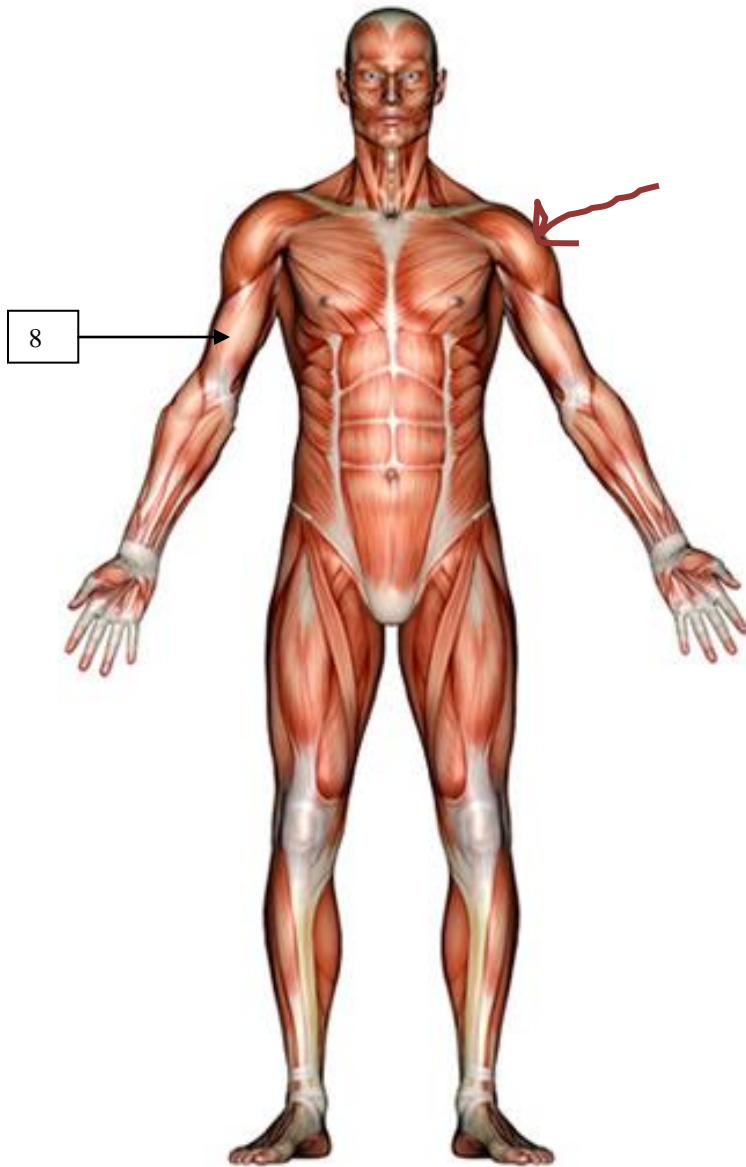
(2 marks for each question)

Draw an arrow to indicate/identify the structure and number your arrows where needed.

1. Identify with an arrow and number
 - a. a fibrous joint (example)
 - b. a ball and socket joint
 - c. a hinge joint
2. Name two bones that are irregular bones.
 - a.vertebra.....
 - b.mandible.....
3. What bone does the clavicle articulate with at a) the medial end and b) the lateral end?
 - a. Medial.....sternum (manubrium).....
 - b. Lateral.....scapula (acromion).....



4.
 - a. Identify a flat bone
 - b. What is the name of this bone?.....ilium.....
5. Name two bones that make up a pivot joint.
 - a.atlas....(radius).. - b.axis.....(ulna).. -



6. Name two muscles of mastication

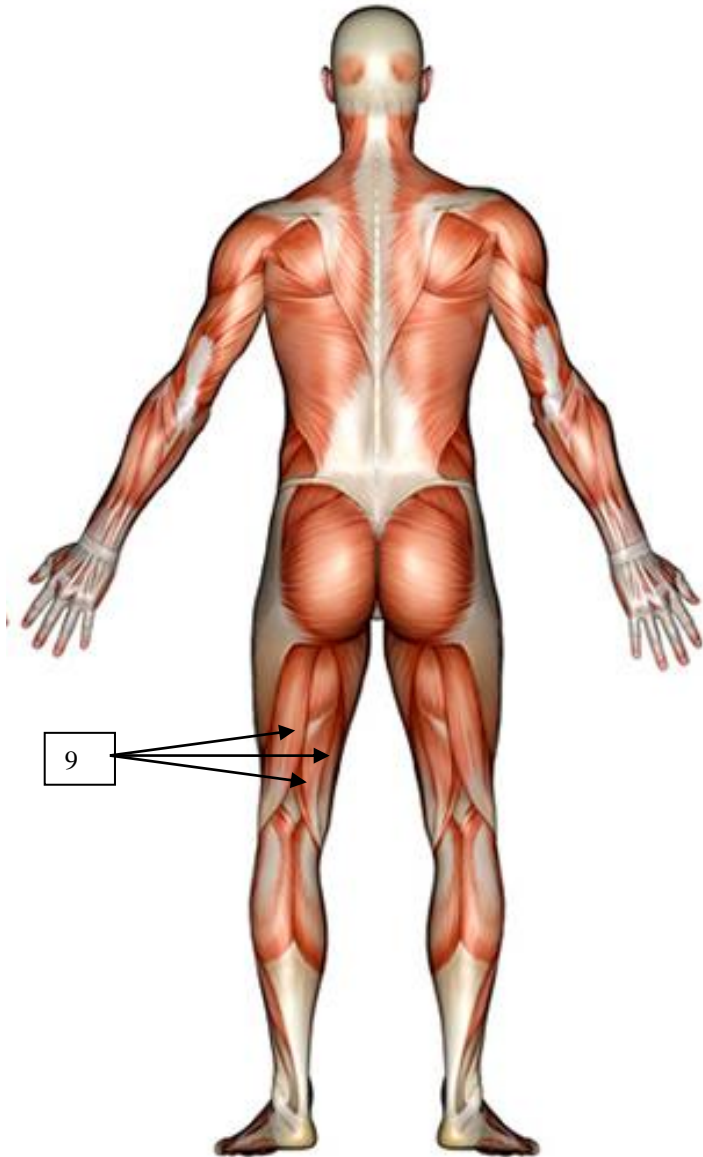
- a.**masseter**.....
- b.**temporalis**.....

7.

- a. Identify a muscle that abducts the arm.
- b. What is the name of this muscle?....**Deltoid**.....

8.

- a. Name the muscle numbered.....**biceps brachii**.....
- b. Name the antagonist of this muscle.....**triceps**.....



9. Describe two of the actions of this muscle group

- a.flex the leg at the knee.....
- b.extend the leg at the hip.....

10. Name two muscles that attach to the illiotibial band

- a.tensor fascia latae.....
- b.gluteus maximus.....

WORKSHOP NINE: HOMEWORK

1. MASSAGE PRACTICE

- Keep your hand in with a few massages between now and Workshop 10.
- Review the clinic this weekend, especially the initial consultation; what, if any, issues need attention now to make your work more professional?
- In particular, practise your after-care with clients. Bear in mind the need to keep it simple and relevant!
- Use the skills of postural observation to enhance your massage – see Manual p. 9.3-9.5.

2. ANATOMY, PHYSIOLOGY AND PATHOLOGY

Final preparations for the theory exam

- APP Revision Workbook in Manual pages 8.28-8.39.
- **THE BEST REVISION NOW IS TO TACKLE PAST PAPERS!** Work with open books until the last week, then try one or 2 under exam conditions.
- We will give feedback on any scripts you drop in to the office, post or email to us. But the ball is in your court now – we won't be chasing you. There are more papers on the MTI website.
- Look at the sheet of **contra-indications and cautions** on page 9.7-9.8 of the Manual. Complete the gaps. This summarises information that is very useful for the exam. Pay particular attention to which are for physiological reasons and which are for "practitioner protection". The list covers most of the syllabus - do add others if you wish.

Practical Details

- The theory exam starts at **10 am prompt** - you may arrive from 9.30 am onwards.
- The exam is 3 hours long, although you may leave before the end if you wish.
- Bring your own pens, pencils and crayons. If English is not your first language, you may use an English language dictionary.
- We will email a reminder of the venue & date!

The Human Body Book: All of it!!

APP for Massage textbook: Section 13 (p. 88-97) – the physiology of massage.

3. BUSINESS PLANNING

- (a) Read the **Code of Ethics** for MTI Practitioners on pages 90-91 of your Course Handbook. Consider what this might mean in practice - continuing the theme of "becoming a professional".
- (b) Start noticing examples of **publicity** you like; websites, social media accounts, leaflets from clinics, practitioners etc. Consider what style might work for what you plan to offer.