Question No.	Question Please choose the best answer to each question, in your opinion.	Answers Key **Correct** , **Biomedical**
1.	Changing her painkillers	
	a) Really helpful because strong medication is important in chronic pain	The analgesic ladder is helpful in cancer pain & acute pain due to tissue damage, but not usually beneficial in chronic widespread pain.
	b) Quite helpful. Medications sometimes help but only part of a wider pain management plan with pain management strategies	Correct; Medication can be helpful for some patients. We should always combine a trial of medication with education & a rehabilitation approach though.
	c) Not very helpful as medication often doesn't help chronic pain and there are sometimes side effects	Medications are not always effective for chronic pain and 30% reduction is a realistic goal. Opioids should be cut down and stopped if they have not been effective in managing pain and improving quality of life. Patients need to build up their confidence before they can reduce medication & take any reduction gradually.
	d) Not helpful at all as patients build up tolerance to medication	Patients may initially respond to medication, but then report less benefit after several weeks. This is probably due to loss of placebo effect, rather than development of tolerance.
	e) Don't know	
2.	Starting medication for neuropathic pain	
	a) Really helpful as there are clear indicators of neuropathic pain in the case study	This lady has developed widespread pain. Neuropathic pain is defined as pain due to damage or disease of the nervous system.
	b) Quite helpful as medication for neuropathic pain can sometimes help widespread pain and improve sleep	Correct; Antidepressants & anti-epileptic medication can help reduce widespread pain as well as neuropathic pain.
	c) Not very helpful as neuropathic medication often has side effects	Side effects, such as drowsiness & dizziness are quite common, but can be minimised by starting at a low dose & increasing gradually.
	d) Not helpful at all as there are no indicators of neuropathic pain	See b) The DN4 and LANSS are useful in diagnosing nociceptive pain.

	e) Don't know	
3.	Making an objective measure of her pain by seeing how much damage there is on MRI	
	a) Really helpful as having an objective measure can help evaluate treatment	Changes on MRI are often seen in people with no symptoms. Disc bulging is present in more than 50% of people in their 40's
	b) Quite helpful as an objective measure can help decide whether she needs stronger analgesics.	There isn't a direct link between tissue damage & pain experience.
	c) Not very helpful as only the patient can rate their pain and this is a subjective measure.	Correct – although a pain rating on a 0 – 10 scale, Visual analogue scale or mild / moderate / severe rating is only an indication of how bad the patient feels the pain is. Having a baseline pain score is most useful in assessing whether there is any effect of pain management.
	d) Not helpful at all as I will know what treatments are needed without an objective measure	Health Care Professionals have been found to underestimate the severity of pain compared to the patient's rating.
	e) Don't know	
4.	Encouraging her to do more exercise	
	a) Really helpful as pacing and increasing activity has good evidence for improving function	Correct – exercise has been found to be one of the most effective treatments to improve function & reduce pain.
	b) Quite helpful but she needs to watch out in case she worsens her condition	Giving the patient a mixed message can reduce confidence & lead to fear avoidance.
	c) Not very helpful as exercise only causes flare ups	Pain will often increase after exercise, but this is usually a result of increased signalling rather than tissue damage. She should aim to gradually increase the amount she can do, keeping the pain at tolerable levels.
	d) Not helpful at all as she could cause herself more harm	Avoiding activity increases the risk of persistent pain & disability.
	e) Don't know	
5.	Checking for yellow flags	
	a) Really helpful they are indicators of prognosis and can be targets for treatment	Correct – Yellow Flags are the psychosocial risk factors which predict increased risk of chronicity.

	b) Quite helpful but patients will not understand or change their risk factors	Improving patient understanding & health literacy has evidence for reducing pain & disability.
	c) Not very helpful as I can't do anything about them	Some Yellow Flags may not be modifiable, but most are.
	d) Not helpful at all as yellow flags mean it is 'all in their head'	It is important to understand & be able to explain to the patient that psychosocial factors interact with biological mechanisms.
	e) Don't know	
6.	Checking for red flags	
	a) Really helpful as there are clear signs in the history of serious pathology	She doesn't have any indicators that there might be any underlying serious pathology.
	b) Quite helpful as just because somebody has chronic pain it doesn't mean they don't have sinister pathology	Correct – HCP's have to be aware of confirmation bias. This is a cognitive bias that leads the HCP to seek confirmation of their preferred diagnosis – it is essential to be aware of this by looking for red flags & examining or further investigating the patient as appropriate.
	c) Not very helpful as there are no indicators in the case history	As above
	d) Not helpful at all as the person clearly has chronic pain	As Above
	e) Don't know	
7.	Asking the patient to rate the severity of their pain	
	a) Really helpful as it is necessary to understand how severe the pain is to track response to treatment.	Correct - Pain is an experience with physical, emotional and social components – a biopsychosocial approach.
	b) Quite helpful as it tells you about the amount of damage there is	There are many diseases, such as breast, ovarian or pancreatic cancer where pain is only felt in the very late stages. It is important to keep in mind the possibility of there being an underlying disease and to carry out investigations or to refer to an appropriate clinician if necessary. If pain has been present for a long time and especially if it is variable, with times when it is less severe, then it is less likely that there is something sinister underlying the symptoms.

	c) Not very helpful as the amount of pain doesn't tell us how much damage there is.	This is true, but if we don't have a pain rating from the patient we won't have any way of tracking whether they are responding to pain management.
	d) Not helpful as they may exaggerate their pain.	There is remarkably little difference in pain thresholds in experimental studies, with women generally able to tolerate more than men.
	e) Don't know	
8.	Starting an anti-depressant	
	a) Really helpful as everybody with chronic pain has depression	It is very rare for psychological problems to cause pain, although psychological distress may contribute to the experience of pain and its impact on the person.
	b) Quite helpful as some anti-depressants can reduce pain & help sleep which is often affected by pain	Correct; The number needed to treat to reduce pain by 30% is thought to be 3.5. Tricyclics & SNRI's are helpful, while there is not good evidence for SSRI's helping. Some SSRI's can cause muscle & joint pain.
	c) Not very helpful as anti-depressants are for mood not pain	Antidepressants are thought to modulate pain processing at the brain & spinal cord level.
	d) Not helpful at all, as the pain cannot be real if they need to take an anti-depressant	One of the commonest complaints of people with chronic pain is that they feel that they are being judged as not really having as much pain as they say, being weak or it "all being in their head".
	e) Don't know	
9.	Helping her understand her pain	
	a) Really helpful as having a greater understanding can reduce fear and help people manage their pain better	Correct – reducing the threat of pain & taking an informed approach to rehabilitation has been shown to improve ability & reduce pain.
	b) Quite helpful as people with chronic pain need to be told there is no damage – otherwise they may have more unnecessary medical appointments, investigations and medication	Being told that there is no damage can be confusing for patients – especially if there is nothing to see on scans, but they still have symptoms. If patients have a deeper understanding of pain neurophysiology, they can appreciate that the way that the nervous system is working is not necessarily going to show up on investigations, but that they are experiencing real pain.
	c) Not very helpful as it takes too much time	Chronic pain can be explained in simple terms in less than 5 minutes. This is especially useful if the neurophysiology

		can be related to the patients' experience – eg wind up after activity.
	d) Not helpful at all as it means it is 'all in their head'	It is very important to stress that pain is an experience in the nervous system, which is a biological part of the body – it's in the brain, the nervous system & the body.
	e) Don't know	

10.	Referring to a Psychologist	
	a) Really helpful as there are clearly high levels of anxiety and depression in the case study	Anxiety & depression commonly co-exist with chronic pain & should be taken into account. However, there are often long waits to see a psychologist & patients can benefit from simple non specialist advice on managing emotional issues contributing to pain & distress.
	b) It is very helpful to address obstacles to coping and to suggest management strategies. Referral to a psychologist may be needed for patients with more complex problems.	Correct– the healthcare professional should aim to provide appropriate advice on the management of psychosocial factors in chronic pain. Referral to a psychologist should be considered if the HCP is out of their depth & if they have been able to explain the rationale for psychology referral to the patient.
	c) Not very helpful as it isn't a physical treatment	Psychological therapy & activity have good evidence for helping patients with chronic pain.
	d) Not helpful at all as all efforts should be aimed at a biomedical treatment.	As above.
	e) Don't know	
11.	Doing further investigations	
	a) Really helpful there are indicators in the case study for further diagnostic tests to be done.	The pain is quite longstanding & there aren't any worrying symptoms to indicate red flags or neurological problems.
	b) Quite helpful as you cannot treat somebody until you know what is wrong with them	Through history & examination, you should have a good idea of the nature of her chronic pain, without the need for further investigation. Doing investigations to reassure the patient or for defensive medical reasons actually increases the likelihood of persistent pain & disability.
	c) Not very helpful as further investigations can lead to an increase in worry and anxiety.	Correct – if you are able to give her an explanation which relates to her continuing symptoms, this is much more reassuring.
	d) Not helpful at all as there are clear red flags in her history.	If there were red flags then investigations might be indicated.

	e) Don't know	
12.	Supporting her to use self-management techniques to manage her pain.	
	a) Really helpful as self-management will engage her in a rehabilitation approach to improve her health.	Correct – supported self-management has good evidence for improving quality of life and reducing use of medical resources.
	b) Quite helpful but she might feel that she is being told that treatments won't help and she has to put up with it.	The idea that self-management means that the healthcare practitioner has given up is a common misconception. Patiemts should be reassured that supported sel-management has good evidence for effectiveness.
	c) Not very helpful as it's not my job to get somebody to self-manage	One of the main barriers to patient self-management is healthcare professionals' lack of knowledge of or lack of confidence in self-management resources.
	d) Not helpful at all as she needs to stick to medical treatments	Paternalistic or dogmatic treatment is not helpful.
	e) Don't know	