

# Level 3 Anatomy and Physiology

48 Mock  
Questions  
+ *Answers*



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# Welcome to Parallel Coaching

Thank you for downloading the L3 A&P Mock Questions.

**Can I ask you a question?** Do you have your L3 Anatomy exam coming up in the next 4 to 8 weeks?

Maybe you're training to become a personal trainer, Yoga or Pilates Instructor or an exercise referral coach?  
**Either way, I'm guessing,**

- ~ *You don't know what to expect in your exam*
- ~ *You're stuck in your revision*
- ~ *eye lids are heavy as you tackle your clunky online learning*
- ~ *Tired of re-reading the same paragraph in the manual and still not getting it*
- ~ *You feel like you don't know enough or can't book your exam yet*
- ~ *Not confident you're going to pass the exam*
- ~ *Overwhelmed by how much there is to learn and where to start?*

Ultimately you WANT MORE guidance, more clarity, and more confidence that you're on the right track. That you can walk into the exam room knowing and not guessing. That all this revising not only gets you TOP MARKS, yet it helps get awesome results with all future clients.

I've been there... *I understand and I want to help.*

So if you're ready and wanting to pass your Level 3 Anatomy & Physiology exam confidently with TOP MARKS, then our emails have the ability to change the game for you, in fact, I'll go **OUT OF MY WAY** to **GIVE YOU** all the support and guidance you want and need.

Next please *make sure you mark my emails as safe, don't let them land in your SPAM folder, promise me?*

I'm going to email you every damn day from now on and I promise they won't be boring - They'll make you laugh.... They might even make you cry. They'll also help you STEP UP and tackle your fitness exams with serious clarity and confidence.

Over the next 7 days I'll be emailing daily with more level 3 anatomy and physiology revision tips so you can

- *Ditch any revision overwhelm*
- *Stop replying on your course manual*
- *Slice your revision time in half*
- and **give you the opportunity to join the L3 A&P Revision Mastery bootcamp PLUS GET 7 EXCLUSIVE BONUSES** in the next 7 days ONLY.

If you have any questions about your studies, even if you're with another training provider please do reach out. We're here to help you pass first or next time with confidence and TOP MARKS

Dedicated to more

**Hayley 'Parallel Coaching' Bergman**

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# How To Use Your 48 L3 A&P Mock Questions

The following **48 Level 3 Anatomy & Physiology mock questions** are mapped to: *Active IQ, YMCA, CYQ, Focus Awards, Transcend Awards, VTCT, Future Fit and NASM.*

It's likely you'll have 40 Multiple Choice questions in 90 minutes for your real exam, you need 70% to pass. It's best to check this with your training provider as some do vary.

Regardless of how many questions you have, it will include 3-8 questions on each of the following 8 modules.

The questions will appear in a random order in your exam. However, the 48 mock questions below take 1 questions from each module. After every 8th question you can check your answer so you can cross reference them to the modules you need more revision on.

**Module 1:** *Heart and Circulatory*

**Module 2:** *Musculoskeletal System*

**Module 3:** *Major Muscles & Locations*

**Module 4:** *The Body In Motion*

**Module 5:** *Posture, Flexibility & Core*

**Module 6:** *Nervous System*

**Module 7:** *Endocrine System*

**Module 8:** *Energy Systems*



# COMPLETE THE 48 MOCK QUESTIONS BELOW

[NOTE: the 48 mock questions below takes 1 question from each of the 8 modules in your manual and then at the end of every 8th question you can check your answer.

**For each of the following questions choose one correct answer from A to D**

## SECTION 1

**Q1. What are the valves that prevent back flow of blood between the chambers of the heart called?**

- A. Atrioventricular
- B. Semilunar
- C. Arteriovenous
- D. Aortic

**Q2. According to sliding filament theory, what do the myosin heads bind onto?**

- A. Myoglobin
- B. Calcium
- C. Actin
- D. ADP

**Q3. What muscle attaches the iliac crest to the 12th rib and lumbar vertebrae?**

- A. Erector spinae
- B. Psoas major
- C. Multifidus
- D. Quadratus lumborum

**Q4. Which joint is capable of pronation and supination?**

- A. Ankle
- B. Sacroiliac
- C. Radio-ulna
- D. Atlanto-axial

**Q5. What is the sheet of connective tissue in the low back that stabilises the lumbar spine?**

- A. Abdominal aponeurosis
- B. Iliocostal fascia
- C. Anterior longitudinal ligament
- D. Thoracolumbar fascia

**Q6. What is required to generate a stronger contraction?**

- A. Stronger action potentials
- B. More motor neurons stimulated
- C. Fewer motor neurons stimulated
- D. More action potentials

**Q7. The ovaries release hormones which?**

- A. Activate milk production in women who are breast feeding
- B. Reduce bone growth and development
- C. Stimulate the breakdown of Glycogen to Glucose
- D. Decrease hair growth on the body



**Q8. Which of the following is NOT a by-product of the aerobic energy system?**

- A. Carbon dioxide
- B. Heat
- C. Water
- D. Lactic acid

**ANSWERS:**

QUESTION 1	ANSWER = A	Module 1: Heart and Circulatory
QUESTION 2	ANSWER = C	Module 2: Musculoskeletal
QUESTION 3	ANSWER = D	Module 3: Muscle attachments
QUESTION 4	ANSWER = C	Module 4: The body in motion
QUESTION 5	ANSWER = D	Module 5: Posture, flexibility and core
QUESTION 6	ANSWER = B	Module 6: Nervous system
QUESTION 7	ANSWER = D	Module 7: Endocrine system
QUESTION 8	ANSWER = D	Module 8: Energy systems

**Score for Section 1 =     /8**

**Need Help? Contact Hayley  
@Parallel here**

## SECTION 2

**Q9. Which branch of the circulatory system supplies blood to the heart muscle?**

- A. Systolic
- B. Pulmonary
- C. Coronary
- D. Systemic

**Q10. Which term is used to describe the outer layer of connective tissue around a muscle?**

- A. Endomysium
- B. Epimysium
- C. Periosteum
- D. Perimysium

**Q11. What muscle crosses the ankle and knee joints?**

- A. Tibialis anterior
- B. Peroneus longus
- C. Gastrocnemius
- D. Soleus



**Q12. During the downward phase of a squat which movement occurs at the hip?**

- A. Lateral flexion
- B. Horizontal flexion
- C. Flexion
- D. Plantar flexion

**Q13. Insufficient core muscle function can lead to?**

- A. Increased inner core unit recruitment
- B. Increased intra-abdominal pressure
- C. Reduced loading of spinal ligaments
- D. Increased postural abnormalities

**Q14. The section of the nervous system solely responsible for conscious control is the?**

- A. Peripheral nervous system
- B. Central nervous system
- C. Somatic nervous system
- D. Autonomic nervous system

**Q15. Which hormone regulates metabolism?**

- A. Insulin
- B. Noradrenaline
- C. Calcitonin
- D. Thyroxine

**Q16. Which muscle fibres have the largest diameter?**

- A. Type 1 muscle fibres
- B. Type 2 muscle fibres
- C. Red muscle fibres
- D. Brown muscle fibres

**ANSWERS:**

QUESTION 9	ANSWER = C	Module 1: Heart and Circulatory
QUESTION 10	ANSWER = B	Module 2: Musculoskeletal
QUESTION 11	ANSWER = C	Module 3: Muscle attachments
QUESTION 12	ANSWER = C	Module 4: The body in motion
QUESTION 13	ANSWER = D	Module 5: Posture, flexibility and core
QUESTION 14	ANSWER = C	Module 6: Nervous system
QUESTION 15	ANSWER = D	Module 7: Endocrine system
QUESTION 16	ANSWER = B	Module 8: Energy systems

**Score for Section 2 =     /8**

## SECTION 3

**Q17. Which of the following would reduce blood pressure in the short term?**

- A. Vasoconstriction
- B. Increased venous return
- C. Vasodilation
- D. Lower heart rate

**Q18. In the sliding filament theory which molecule provides the energy to enable myosin to pull on actin?**

- A. Creatine phosphate
- B. Adenosine triphosphate
- C. Adenosine diphosphate
- D. Sodium and calcium

**Q19. Which of the following is a quadricep muscle that crosses the hip joint?**

- A. Vastus lateralis
- B. Rectus femoris
- C. Biceps femoris
- D. Vastus medialis

**Q20. When performing a Pectoral Dumbbell Fly, in what plane does most movement occur?**

- A. Sagittal
- B. Transverse
- C. Frontal
- D. Medial

**Q21. Which posture type is most likely to reduce lung capacity?**

- A. Hyperkyphosis
- B. Hyperlordosis
- C. Pronation of the feet
- D. Valgus knees

**Q22. What proprioceptor detects change in muscle tension?**

- A. Golgi tendon organs
- B. Muscle spindles
- C. Motor neurons
- D. Motor units

**Q23. Which hormone is significant in the control of Diabetes?**

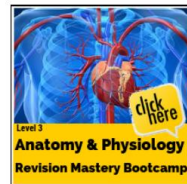
- A. Noradrenaline
- B. Oestrogen
- C. Calcitonin
- D. Insulin

**Q24. What is the role of mitochondria in type 1 muscle fibres?**

- A. Increased muscle size
- B. Energy production
- C. Calcium storage
- D. Contractile apparatus

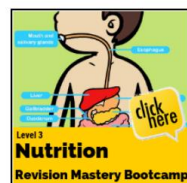
# Check Your Answers Below:

### Level 3 Anatomy & Physiology



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### Level 3 Nutrition For Physical Activity



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### Level 3 Muscle Memory Sprint



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### Level 3 Muscle Memory Flashcards



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## ANSWER for section 3:

QUESTION 17	ANSWER = C	Module 1: Heart and Circulatory
QUESTION 18	ANSWER = B	Module 2: Musculoskeletal
QUESTION 19	ANSWER = B	Module 3: Muscle attachments
QUESTION 20	ANSWER = B	Module 4: The body in motion
QUESTION 21	ANSWER = A	Module 5: Posture, flexibility and core
QUESTION 22	ANSWER = A	Module 6: Nervous system
QUESTION 23	ANSWER = D	Module 7: Endocrine system
QUESTION 24	ANSWER = B	Module 8: Energy systems

**Score for Section 3 =     /8**

**\*TIP:** Once you've read the question, **DON'T** jump straight into the 4 possible answers, take a second to think about what the answer could be - **DON'T** get sidetracked by the 3 wrong answers!!!

## SECTION 4



**Q25. What exercise would cause acute high blood pressure?**

- A. Holding plank for a long time
- B. Moderate intensity walking daily
- C. 6 weeks of regular power lifting
- D. Light gardening

**Q26. What happens to the antagonist muscle during reciprocal inhibition?**

- A. It contracts concentrically
- B. It contracts eccentrically
- C. It relaxes
- D. It flexes

**Q27. What muscle inserts onto the Femur?**

- A. Biceps brachii
- B. Iliopsoas Major
- C. Gastrocnemius
- D. Soleus

**Q28. Which joint action occurs in the medial-lateral axis?**

- A. Flexion
- B. Adduction
- C. Medial rotation
- D. Lateral flexion



**Q29. What does lumbar hyperlordosis increase the risk of?**

- A. Low back pain
- B. Frozen shoulder
- C. Rotator cuff tears
- D. Abdominal obesity

**Q30. What determines the number of motor neurons recruited?**

- A. Muscle
- B. Autonomic nervous system
- C. Central nervous system
- D. Tendon

**Q31. What is the main function of the endocrine system?**

- A. To aid digestion
- B. To maintain homeostasis
- C. To create energy
- D. To aid circulation

**Q32. What is a factor in determining which energy systems and fuels are used during exercise?**

- A. Intensity of exercise
- B. Frequency of training
- C. Indoor or outdoor training
- D. Weather and humidity

**ANSWERS:**

QUESTION 25	ANSWER = A	Module 1: Heart and Circulatory
QUESTION 26	ANSWER = C	Module 2: Musculoskeletal
QUESTION 27	ANSWER = B	Module 3: Muscle attachments
QUESTION 28	ANSWER = A	Module 4: The body in motion
QUESTION 29	ANSWER = A	Module 5: Posture, flexibility and core
QUESTION 30	ANSWER = C	Module 6: Nervous system
QUESTION 31	ANSWER = B	Module7: Endocrine system
QUESTION 32	ANSWER = A	Module 8: Energy systems

**Score for Section 4 =    /8**

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## SECTION 5

**Q33. What is a component of the plaques that form on artery walls in atherosclerosis?**

- A. Vasodilation
- B. Vasoconstriction
- C. High density lipoproteins
- D. Low density lipoproteins

**Q34. Which of the following is a myofilament protein?**

- A. Actin
- B. Perimysium
- C. Epimysium
- D. Tendon

**Q35. Which muscle helps to hold the head of humerus into the glenoid cavity of the scapula?**

- A. Supraspinatus
- B. Serratus anterior
- C. Pectoralis minor
- D. Levator scapulae

**Q36. Which joint action occurs when the sole of the foot faces outwards?**

- A. External rotation of the hip
- B. Internal rotation of the hip
- C. Eversion of the ankle
- D. Inversion of the ankle

**Q37. Which of the following is most likely to contribute towards an anterior pelvic tilt?**

- A. Daily walking
- B. Pregnancy
- C. Osteoarthritis
- D. Osteoporosis

**Q38. When is proprioceptive neuromuscular facilitation (PNF) stretching appropriate?**

- A. Warm-up
- B. Cool-down
- C. Cardiovascular component
- D. Resistance component

**Q39. Which of the following is an endocrine gland?**

- A. Liver
- B. Gall bladder
- C. Adrenal
- D. Stomach

**Q40. Power is a product of strength combined with what other component of fitness?**

- A. Balance
- B. Speed
- C. Agility
- D. Coordination

**Check Your Answers Below:**



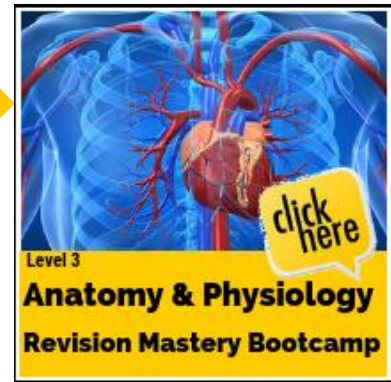


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## ANSWER for section 5:

QUESTION 33	ANSWER = D	Module 1: Heart and Circulatory
QUESTION 34	ANSWER = A	Module 2: Musculoskeletal
QUESTION 35	ANSWER = A	Module 3: Muscle attachments
QUESTION 36	ANSWER = C	Module 4: The body in motion
QUESTION 37	ANSWER = B	Module 5: Posture, flexibility and core
QUESTION 38	ANSWER = B	Module 6: Nervous system
QUESTION 39	ANSWER = C	Module 7: Endocrine system
QUESTION 40	ANSWER = B	Module 8: Energy systems

Score for Section 5 = /8

\*TIP: Once you've read the question... READ IT AGAIN! and try and find the key ACTION words. What is the VERB you are trying to answer for example release, generate or stabilise.



## SECTION 6

**Q41. What is the immediate effect of the Valsalva manoeuvre?**

- A. No change to blood pressure
- B. Decreases blood pressure
- C. Increases blood pressure
- D. Decreases heart rate

**Q42. Which muscle fibre type contains the greatest number of mitochondria?**

- A. Type 1
- B. Type 2a
- C. Type 2b
- D. Fast twitch

**Q43. Which describes the erector spinae most accurately?**

- A. Posterior deep muscle
- B. Posterior superficial muscle
- C. Anterior deep muscle
- D. Anterior superficial muscle

**Q44. Which muscle stabilises the pelvis in the frontal plane?**

- A. Serratus anterior
- B. Multifidus
- C. Quadratus lumborum
- D. Longissimus



**Q45. What is the reason that abdominal obesity can lead to a change in posture?**  
A. Backward migration of centre of gravity  
B. Forward migration of centre of gravity  
C. Tightness in upper trapezius  
D. Tightness in pectoralis major

**Q46. What type of stretching involves the relaxation of all muscles around a joint?**  
A. Ballistic  
B. Dynamic  
C. Passive  
D. Active

**Q47. Which hormone is released during times of stress?**  
A. Cortisol  
B. Cortisone  
C. Relaxin  
D. Oestrogen

**Q48. Which of the following is a by-product of anaerobic work that may cause local muscle fatigue?**  
A. Oxygen  
B. Lactic acid  
C. Creatine  
D. Carbon dioxide

**ANSWERS:**

QUESTION 41	ANSWER = C	Module 1: Heart and Circulatory
QUESTION 42	ANSWER = A	Module 2: Musculoskeletal
QUESTION 43	ANSWER = B	Module 3: Muscle attachments
QUESTION 44	ANSWER = C	Module 4: The body in motion
QUESTION 45	ANSWER = B	Module 5: Posture, flexibility and core
QUESTION 46	ANSWER = C	Module 6: Nervous system
QUESTION 47	ANSWER = A	Module7: Endocrine system
QUESTION 48	ANSWER = B	Module 8: Energy systems

**Score for Section 6 =     /10**  
**What was your final score out of 48 mock questions?     /48**

**You need 70% to pass in your final exam... 70% of 48 is 33 correct answer**

**YOUR NEXT STEP FROM HERE:**

**Step 1.** Review your answers and recognise any trends in the questions you got wrong?

**Step 2.** Focus your revision towards the modules that you got wrong using step 1.

**Step 3.** There is an invitation below for you...

# Here's Your Initiation:

Tomorrow I open up the doors to the **Level 3 A&P Revision Mastery Bootcamp** – however, as you've downloaded and used these mock question here's your invitation to enrol 24 hours earlier than anyone else.

Here's the link to learn more:

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Over the next 7 days I'll be emailing daily with more level 3 A&P revision tips so you can

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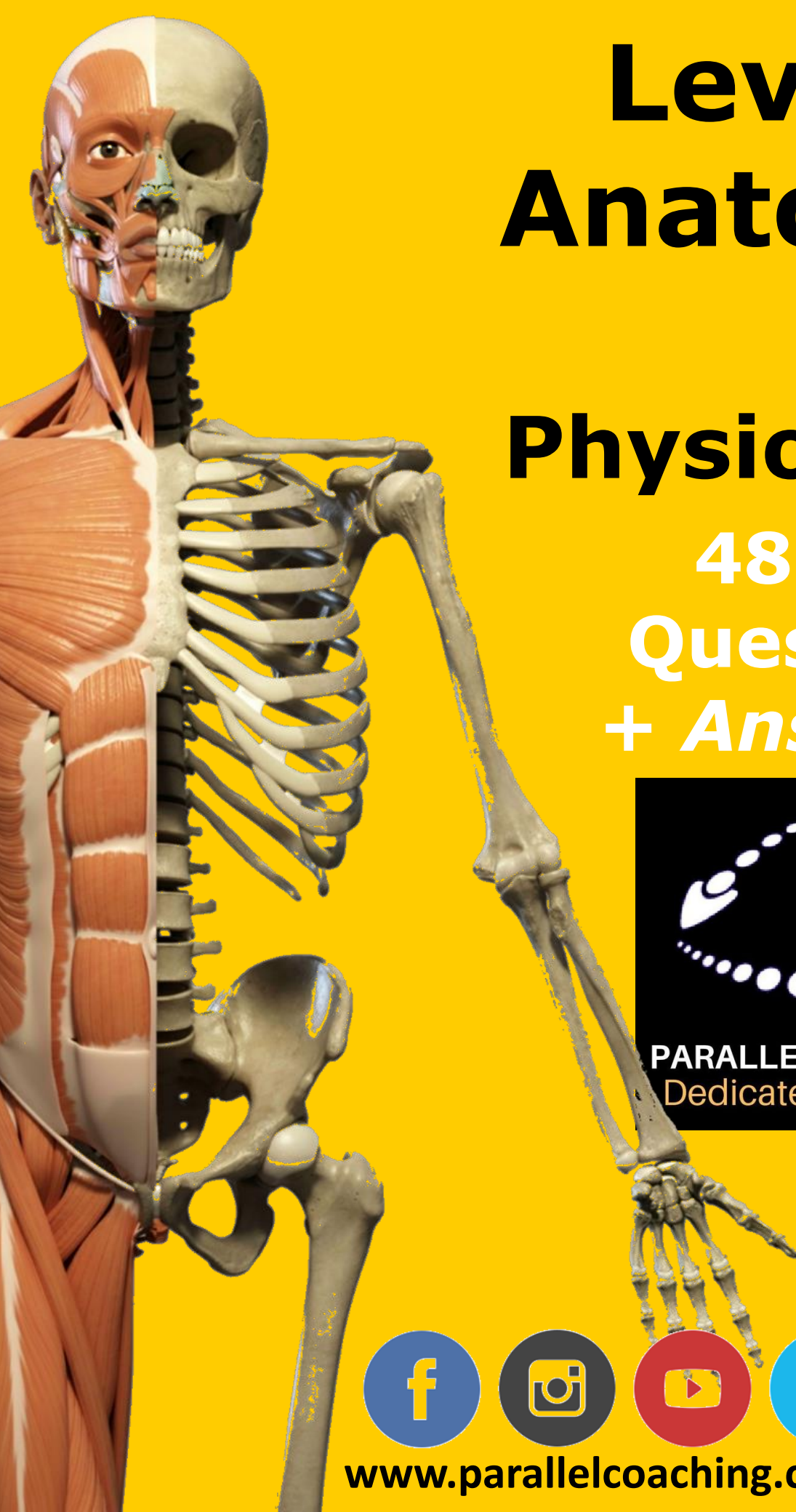
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