

You can use either English or Chinese to answer these questions.

1. Please define “regional acceleration phenomenon” and how it may affect tooth movement? (10%)
2. Please draw a typical tooth movement graph in which the rate of movement is plotted against the number of days after application of a continuous force (125 g). According to this graph, tooth movement can be differentiated into three phases. Please describe these phases and explain what the underlining biological phenomenon is in each phase (15%). Explain the mechanism of how a mechanical force can initiate a biological response (10%).
3. What are the theory of using functional appliances and the scientific evidence for it (15%)? Please also define the stages of skeletal growth in cervical vertebral maturation, and hand-wrist-film and indicate which stage(s) is (are) good for using functional appliances (15%).
4. What is the relationship between upper airway and craniofacial morphology (5%)? What are the anatomical structural components around the upper airway (name the bones, muscles, nerves, and vessels. 15%)? How do you know if patient has obstructive sleep apnea (5%)? How the presence of OSA would affect orthodontic treatment plan (10%)?

試題隨卷繳回