HYPERTENSION

1) What is the definition for postural hypotension? (3)
2) What are some of the signs and symptoms for orthostatic hypotension? (5)
3) Describe the effects on systolic and diastolic blood pressure as the patient ages. Also, describe and explain the relationship between gender and blood pressure. (5)
4) What is the equation linking blood pressure, cardiac output and systemic resistance? (1)
5) What are the conditions under which blood pressure should be measured? (3)
6) Describe the blood pressure grading system for hypertension. (3)
7) What are some complications of hypertension? (3)
8) What proportion of the world’s population is believed to be hypertensive? (1)
9) What are the main controllers of blood pressure in the body? (3)
10) What is the difference between primary and secondary hypertension? (2)
11) Describe the renin-angiotensin system. (1)
12) What are some non-drug treatments for hypertension? (5)
ANATOMY 1

1) At what level is the transthoracic plane? (1)
2) On a CXR which part of the heart forms the right margin of the radio opaque area that represents the heart? (1)
3) Describe the course of the phrenic nerve (2)
4) Which coronary arteries supply the: SA node, AV node and the PDA (give as a percentage of population)? (3)
5) Which artery supplies the bundle branches of bundle of his? (1)
6) Where are the 2 anastomoses located on the heart muscle wall? (2)
7) What is the main cause of valvular disease and what are other causes? (5)
8) How do the coronary arteries fill even though the ostea are located behind the valves? (2)
9) What heart myopathy can mitral stenosis and aortic valve stenosis lead to? (2)
10) Which part of the brain regulates heart rate and contractility? Which area of the brain is this region found in? (2)
11) What pathway in the spinal cord do the sympathetic fibres travel down? (1)
12) Which dermatomes does cardiac pain usually refer to and why does this occur? (3)
13) How do cardiac pain fibres enter the spinal cord (through which structure)? (2)
14) Which dermatomes and thus which areas is referred pain felt if the infarct is on the inferior wall of the heart? (3)
1) What are the normal PR & QRS intervals? (2)
2) What is the general rule for calculating time intervals using squares on the ECG? (2)
3) Why does damaged heart tissue depolarize faster/more often? (1)
4) Which 4 places in the heart conducting system can be blocked in heart block? (2)
5) In AV block what can be seen on an ECG? (1)
6) What is the difference between type one and type two AV block? (2)
7) How does the ECG change post MI? (3)
1) What are the 4 types of tubercle bacilli? (2)
2) What is defined as fast growing bacilli? (1)
3) What is ghon focus and when does it occur? (2)
4) In which 3 areas can local erosion occur in the lungs? (2)
5) What is miliary tuberculosis? (2)
6) Which areas can TB metastasize to? (4)
7) Why is post primary infection likely to occur and in which area of the lung does it occur? (3)
8) What are some signs and symptoms of TB? (5)
9) What are diagnostic options for TB both slow and fast? (3)
10) Outline the TB treatment programme? (5)
11) How can TB be prevented? (6)
12) What is leprosy? (1)
13) What are some differences between lepromatous lepra and tuberculoid lepra? (6)
**LUNG FUNCTION TESTS**

1) When is peak flow reduced? (2)
2) How is total lung capacity measured? (3)
3) How is gas diffusion measured? (3)
4) What is the fick equation? (3)
5) What does the diffusion constant depend on? (3)
6) What things can affect the surface area, membrane thickness, oxygen concentration? (6)
7) What is airways resistance and conduction and how are they both measured? (3)
8) Most airways resistance is in which generation of airways? (1)
9) What is exercise de-saturation and why does it occur? (3)