d. Recurrent laryngeal nerve  
e. Hyoglossal nerve

21. You are asked to examine a pt with increased alcohol intake. They have been diagnosed with a macrocytic anaemia, what sign do you expect to find?  
   a. Conjunctival pallor  
   b. Koilinchnyia  
   c. Atrophic glossitis  
   d. Glossitis  
   e. Dry nails

22. Mr Jones comes in feeling very unwell. His temperature is 39 degrees, he has raised CRP and have a BP of 88/57. What is this patient suffering from?  
   a. Septic Shock  
   b. SIRS  
   c. Cardiogenic shock  
   d. Hypovolaemic Shock  
   e. Neurogenic shock

23. A patient has a chronic granulomatous ulcer, that is refusing to heal, despite excellent clinical care. Which substance could be raised in the blood and is delaying healing?  
   a. Urea  
   b. Insulin  
   c. Glucagon  
   d. Neutrophils  
   e. Myoglobin
d. Neutrophils

e. Macrophages

35. A young man presents with worsening ataxia. He has a broad based gait and has nystagmus. He grandpa had similar symptoms. Which trinucleotide repeat is likely to be massively repeated?

a. GAA
b. CAG
c. GAG
d. CAA
e. GCA

36. A patient has recently had an X-ray showing loss of joint space, osteophyte, subchondral cysts and sclerosis. The patient has yet to receive any medication for their pain. Which analgesic should be given first line?

a. Ibuprofen
b. Aspirin
c. Naproxen
d. Paracetamol
e. Oramorh

37. Jocasta breaks his arm. He wants to know the stages of fracture healing. What happens at stage 3?

a. A bony callous of spongy bone forms
b. Haematoma formation
c. Internal fibrocartilaginous callous forms
d. External fibrocartilaginous callous forms
e. Nothing, the bone will have already healed
a. Pneumonia  
b. Lobectomy  
c. Heart failure  
d. Pneumothorax  
e. Pleural effusion

42. Steve has been waiting in A&E for 24 hours. He finally has been called through, when he gets up from the chair he notices that his right wrist has become very floppy and he is unable to extend it back. Which nerve is likely to have been damaged?
   a. Musculocutaneous nerve of the forearm  
b. Ulnar nerve  
c. Median nerve  
d. Radial nerve  
e. Axillary nerve

43. Matt has been sent to hospital with a severe headache, stiff neck, photophobia and a rash. What type of bacteria is N. Menigitides?
   a. Gram negative cocci  
b. Gram positive cocci  
c. Gram negative long rods  
d. Gram positive small rods  
e. Gram positive curved cocci
PaCO2 8.0 (high)

pH 7.35 (normal)

HCO3 31 (high)

a. Respiratory acidosis
b. Respiratory alkalosis
c. Metabolic acidosis
d. Metabolic alkalosis
e. Mixed

74. Which of the following is an example of autocrine function?
   a. Histamine causing an inflammatory response
   b. Glucagon
c. ADH release from the posterior pituitary gland, acting on the kidney
d. Oestrogen release from the follicle and stimulating the same follicle to produce more oestrogen
e. Adrenaline release

75. Which part of the adrenal gland produces sex hormones?
   a. Adrenal capsule
   b. Zona glomerulosa
c. Zona fasciculata
d. Zona reticularis
e. Adrenal medulla

76. Carol has recently started breastfeeding; which hormone is responsible for initiating milk secretions?
   a. Prolactin
   b. Oestrogen
80. Which type of hearing loss is most commonly caused by irreversible damage to the hair cells on the organ of Corti?
   a. Sensorineural
   b. Transient
   c. Congenital
   d. Presbyacusis
   e. Conductive

81. How many hydrogen bonds connect guanine and cytosine
   a. 1
   b. 2
   c. 3
   d. 4
   e. 5

82. Which type of ribosomes are in mitochondria?
   a. 55S
   b. 55s
   c. 80S
   d. 80s
   e. 30s
103. Cassandra has recently been on a long haul flight to New Zealand. She is also overweight and taking the COCP! She notices that her right leg is swollen compared to the left and is also hot and very painful. Given the likely diagnosis, which investigation is GOLD standard?
   a. D-Dimer
   b. Venometer
   c. Venography
   d. Arterial-brachial pressure index
   e. X-Ray

104. Patrick presents to A&E with a headache, you decide to perform a cranial nerve exam. You find that he has trouble abducting his eyes. Which nerve is affected?
   a. CNII
   b. CNIII
   c. CNIV
   d. CNV
   e. CNVI

105. The study of the movement of drugs in the body, including the processes of absorption, distribution, localization in tissues, biotransformation, and excretion, is known as:
   a. Pharmacodynamics
   b. Pharmacokinetics
   c. Bioavailability
   d. First pass metabolism
   e. Zero order kinetics

106. Which cells secrete pancreatic polypeptide, the hormone that reduces gallbladder secretions and reduces the absorptive capacity of the GI tract?