

PTS 3a Mock SBA Series 2020

Paper 3- [Questions]- Version 1



Examination instructions

- Time allocated for examination: **2 hours 30 minutes**.
- You are **not permitted** to leave the examination hall in the first **90 minutes**.
- Please write your **student number** at the top of the answers page.
- You are permitted to use a Sheffield University approved **calculator** should you wish.
- The use of mobile phones or other **electronic devices is strictly prohibited** in this exam and should be handed in or switched off for the duration of the exam.
- This examination is **not negatively marked**.
- Please complete all **100 questions** provided.
- The paper consists of **100 marks** in total.

Disclaimer:

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Please **do not share** this document on **google drives** or **directly to future 3a students**, this takes away from their opportunity to complete the mock SBA in the run up to their exams when it has maximal impact as a revision resource. **This mock paper will be edited and repeated in future years**. Thank you.

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[Question paper begins on the following page]

1. You go to see a 3 year-old boy in A&E who has been brought in by his mum because of swelling of his face, legs and ankles. On examination, there is evidence of periorbital oedema, scrotal, leg and ankle oedema. You start him on steroid therapy. Which of the following is not a complication of this condition?

- A. Frequent relapses
- B. Hypocholesterolaemia
- C. Hypovolaemia
- D. Infection
- E. Thrombosis

2. What is the commonest cause of nephrotic syndrome in children?

- A. Allergens
- B. Henoch-Schonlein purpura
- C. Infections
- D. Minimal change disease
- E. Systemic lupus erythematosus

3. Which of these is not a common feature of Henoch-Schonlein purpura?

- A. Abdominal pain
- B. Arthralgia
- C. Fever
- D. Glomerulonephritis
- E. Skin rash on trunk

4. Priya is 4 months old and her parents are concerned as she is still bringing up her feeds despite having been trialled on a feed thickener and Gaviscon. She is continuing to put on weight normally and is not bringing up any blood. Her GP decides to start her on ranitidine. How does this drug work?

- A. Alginate therapy
- B. H1 receptor agonist
- C. H2 receptor antagonist
- D. D2 receptor antagonist
- E. Proton pump inhibitor

5. Jay, a 12 year old boy, goes to see his GP because of a sore throat and cough. You use the FeverPAIN score to assess him. His symptoms came on two days ago. On examination, he is afebrile (and has not had a fever whilst at home) and has purulent tonsils. He is still managing to eat and drink. What is the best management step?

- A. Admit him to hospital
- B. Consider a delayed prescription for antibiotics
- C. Prescribe amoxicillin today
- D. Prescribe phenoxymethylpenicillin today
- E. Start him on antibiotics tomorrow

6. You see a 3 year old child who is tugging at their right ear. They are crying more than usual and have a fever. On examination using an otoscope, there is a red, bulging and tender tympanic membrane. You cannot see any discharge. What is the most likely diagnosis?

- A. Acute mastoiditis
- B. Acute otitis media
- C. Acute suppurative otitis media
- D. Intracranial abscess
- E. Otitis media with effusion

7. You see a one day old baby with a birth mark on their face. You are asked by your consultant what the cause of the mark is and you correctly recall that it is due to a vascular malformation of the capillaries in the dermis. Laser therapy can be used as a treatment. What is the name of the lesion?

- A. Cavernous haemangioma
- B. Erythema toxicum
- C. Milia
- D. Mongolian blue spots
- E. Naevus flammeus

8. A neonate failed to pass meconium within the first 24 hours of life. Their abdomen is distended and they are vomiting up bile-stained vomiting. You are worried about Hirschsprung's disease. How would you diagnose them?

- A. Abdominal ultrasound scan
- B. Abdominal x-ray
- C. Clinical diagnosis
- D. GI contrast study
- E. Suction rectal biopsy

9. What is the first line treatment for faecal impaction?

- A. Bulk-forming laxatives
- B. Diet alone
- C. Macrogol laxative
- D. Osmotic laxative
- E. Stimulant laxative

10. Which of the following is not associated with GORD?

- A. Bilious vomiting
- B. Cerebral palsy
- C. Down syndrome
- D. Recurrent pulmonary aspiration
- E. Sandifer syndrome

11. Which of these is not typically a feature of Autism Spectrum Disorder?

- A. Adherence to routine or rituals
- B. Failure to form and maintain relationships with peers
- C. Failure to regulate social interaction with non-verbal cues
- D. Persistent hyperactivity when inappropriate
- E. Repetitive behaviours and motor mannerisms

12. Ann, a 6-year-old girl, presents to the GP with petechiae following a viral illness. The child is otherwise well. Upon investigation her FBC shows low platelets. Given the diagnosis, what advice would you give to her parents about this condition?

- A. Advise her to take aspirin and NSAIDs
- B. Advise that contact sports should not be avoided
- C. Prescribe a course of Prednisolone
- D. Safety net and explain it typically runs a benign course and the majority of cases will have resolved spontaneously after 6-8 weeks
- E. Schedule the child for a splenectomy

13. A 1-year old patient presents with a 2 day history of irritability and fever, with the parents reporting a change in behaviour and reduced eating. After examination of the child you diagnose them with bilateral acute otitis media. How would you manage this patient?

- A. Prescribe a 5 days course of amoxicillin after 4 days if infection has not resolved
- B. Prescribe a 5 days course of amoxicillin immediately
- C. Prescribe a 5 days course of clarithromycin immediately
- D. Refer to ENT
- E. Watch and wait to see if symptoms resolve

14. What is the most common cause of bronchiolitis?

- A. Adenovirus
- B. Mycoplasma
- C. Parainfluenza
- D. Respiratory Syncytial virus
- E. Rhinovirus

15. A 2-day old neonate has failed to pass meconium. Upon examination the abdomen is distended, and rectal biopsy shows absence of ganglion cells in the myenteric plexus. What is the diagnosis?

- A. Cystic Fibrosis
- B. Hirschsprung's disease
- C. Intussusception
- D. Meckel's Diverticulum
- E. Pyloric stenosis

16. What is the name of the surgical procedure used to treat Hirschsprung's Disease?

- A. Laparotomy
- B. Orchidopexy
- C. Ramstedt pyloromyotomy
- D. Swenson procedure
- E. Wedge excision

17. Which of these congenital cardiac conditions is cyanotic?

- A. Atrial septal defect
- B. Coarctation of the aorta
- C. Patent ductus arteriosus
- D. Tetralogy of fallot
- E. Ventricular septal defect

18. Which of these is not a feature of Tetralogy of Fallot?

- A. Large VSD
- B. Narrowing proximal to the ductus arteriosus
- C. Overriding of the aorta
- D. Right ventricular hypertrophy
- E. Right ventricular outflow obstruction

19. What type of murmur is characteristically heard with ventricular septal defects?

- A. Continuous machinery murmur typically heard at the upper-left sternal border
- B. Ejection systolic murmur heard loudest at the upper-left sternal border
- C. Harsh ejection systolic murmur heard loudest over the upper-left sternal angle
- D. Murmur heard on the back between the scapula
- E. Pansystolic murmur heard loudest at the lower left sternal border

20. Which of these features is associated with Patau syndrome?

- A. Hypotonia
- B. Macrocephaly
- C. Micrognathia
- D. Pectus excavatum
- E. Polydactyly

21. You see Mr Henry in A&E after he was found by police collapsed in the centre of town. Witnesses said that they observed Mr Henry “shaking uncontrollably on the floor” for about a minute. Mr Henry is known to the local team for alcohol misuse and was admitted three months previously following a similar episode. You are unable to take a reliable history from him as he keeps falling asleep. Given the most likely diagnosis, you decide to start chlordiazepoxide. What is the most appropriate next step in management?

- A. Try to contact family/friends of Mr Henry to take a collateral history.
- B. Refer Mr Henry to support services for alcohol misuse.
- C. Send to radiology for urgent CT head.
- D. Give intravenous thiamine immediately.
- E. Watch and wait.

22. Mrs Stevens, an 82-year-old woman, presents to your general practice surgery accompanied by her daughter. Mrs Stevens’ daughter reports that her mother has been forgetful over the last two months, before this she was fine with no concerns. Mrs Stevens admits she did not want to attend today as she is worried about her memory and didn’t want to be diagnosed with dementia. Mrs Stevens scores 6 points on the 10-point Cognitive Screener (10-CS) and you note global memory impairment. Her daughter also reports that her mother has been struggling with sleep and her appetite has reduced significantly although Mrs Stevens disagrees. What is the most likely diagnosis?

- A. Acute delirium.
- B. Alzheimer’s disease.
- C. Depression.
- D. Lewy-body dementia.
- E. Vascular dementia.

23. Mr Mitchel is a 76-year-old gentleman with newly diagnosed Alzheimer’s disease. You decide to start pharmacological treatment for his cognitive decline. What is the first-line treatment in the management of Alzheimer’s disease?

- A. Diazepam.
- B. Donepezil.
- C. Haloperidol.
- D. Hydroxychloroquine
- E. Memantine.

24. A 17-year-old with a two-year psychiatric history of major depressive disorder treated with 20 mg daily of fluoxetine presented to the emergency department with altered mental status, seizure, tremors and emesis. Approximately two-hours prior the patient took 45-60 pills of fluoxetine after an argument with her boyfriend. She was found by her father actively seizing and lying next to vomit containing 10 partially digested pills. On examination the patient had a heart rate of 160 beats per minute and no significant fever. What is this patient suffering from?

- A. Akathisia.
- B. Antidepressant discontinuation syndrome.
- C. Neuroleptic malignant syndrome.
- D. Serotonin syndrome.
- E. Tardive dyskinesia.

25. Mr Jones is a 23-year-old male that presents to your general practice surgery as a follow-up. You recently diagnosed Mr Jones with generalised anxiety disorder and referred him to a psychoeducational group. Mr Jones says that his symptoms have not gotten any better and you are now considering cognitive behaviour therapy for Mr Jones. Which of the following is not a typical feature of generalised anxiety disorder?

- A. Chest pain.
- B. Constant nervousness.
- C. Dry mouth.
- D. Flashbacks.
- E. Heart palpitations.

26. Which of the following is both a risk factor for the development of generalised anxiety disorder?

- A. Aged 35-54.
- B. Being divorced or separated.
- C. Being a lone parent.
- D. Past Medical History of hyperthyroidism.
- E. Living alone.

27. You see Mrs Smith, a 77-year-old lady, on ward round. She was admitted three days previously after sustaining a fractured neck of femur following a fall at home. The previous times you have seen her she has been friendly and well orientated. She has no past medical history other than hypertension, which is well controlled. Today she is rambling and keeps shouting about the rabbits she has seen on the ward. You cannot take a history from her as she is distracted. You perform a urine dip which suggests infection. What is the most likely diagnosis?

- A. Acute delirium.
- B. Bipolar disorder.
- C. Non-convulsive status epilepticus.
- D. Schizophrenia.
- E. Vascular dementia.

28. Sophie, a 17-year-old girl, is brought to A&E by paramedics after she was found by her mother collapsed on the bathroom floor surrounded by empty paracetamol packets. It is estimated that she took the paracetamol at least three hours ago. You are unable to take a history from her as she has a reduced level of consciousness. Plasma paracetamol concentration is measured, plotted on a treatment graph and is above the treatment line. What is the most appropriate management for the patient?

- A. Acetylcysteine infusion over 15 minutes.
- B. Acetylcysteine infusion over 1 hour.
- C. Activated charcoal.
- D. Adrenaline infusion over 15 minutes.
- E. Adrenaline infusion over 1 hour.

29. An unnamed man is brought to A&E by paramedics after being found unconscious in a bus shelter. When you see him he appears confused. On examination he has a fever and a coarse tremor. You diagnose him with delirium tremens secondary to alcohol withdrawal. When does peak incidence of delirium tremens occur?

- A. 3 hours following alcohol withdrawal.
- B. 6 hours following alcohol withdrawal.
- C. 6-12 hours following alcohol withdrawal.
- D. 36 hours following alcohol withdrawal.
- E. 48-72 hours following alcohol withdrawal.

30. A 64-year-old woman presents with her husband to the GP. Her husband describes how she has become more irritable and impulsive over the last year, gambling without telling him. He also mentions that she eats more than she used to. During the consultation the patient starts crying without warning. There is no previous psychiatric history. What is the most likely diagnosis?

- A. Bipolar disorder.
- B. Borderline personality disorder.
- C. Frontotemporal dementia.
- D. Lewy-body dementia.
- E. Schizophrenia.

31. A 40 year old man is seen in A&E with shortness of breath, racing heart rate, and anxiety. He is confused and repeatedly pulls his legs onto his chair saying "there are beetles all over the floor". Looking through his notes you see that his GP has referred him to specialist alcohol services last month but he did not attend. What is the first line treatment for his condition?

- A. Acetylcysteine
- B. Chlordiazepoxide
- C. Citalopram
- D. Haloperidol
- E. Naloxone

32. A 25 year old woman presents to her GP with problems sleeping. She reveals that she is having difficulty with her relationship with her boyfriend and feels her boyfriend doesn't actually like her or is just tolerating her. She says she has been unlucky in past relationships and ex-boyfriends have also disliked her. She says even her friends don't like her and often ignore her. She is struggling in her job as her boss says she keeps getting angry at customers. Her notes reveal she has been diagnosed with depression and has self-harmed in the past but doesn't currently feel suicidal. The GP refers her to a psychiatrist. What is the GP suspicious the diagnosis is?

- A. Bipolar affective disorder
- B. Borderline personality disorder
- C. Paranoid personality disorder
- D. Schizoaffective disorder
- E. Schizotypal personality disorder

33. A 65 year old man sees his GP saying he has been forgetful in the past month; he says he has "good" days and "bad" days. He says he forgets if he has turned the oven off or if he replied to an email. He also says he has lost his appetite. He is stressed as he is going through a divorce and his job is demanding. You complete the mini mental state examination and he scores 28/30. He answers "I don't know" to some questions. He has hypertension and T2DM. What is the most likely diagnosis?

- A. Alzheimer's disease
- B. Depression
- C. Fronto-temporal dementia
- D. Lewy body dementia
- E. Vascular dementia

34. A 25 year old woman sees her GP to discuss her low energy which has been affecting her for 3 weeks now. She says she hasn't been eating well as she has lost her appetite. She is stressed as she has exams coming up and she keeps waking up early in the morning without meaning to. The GP diagnoses her with mild depression after completing a PHQ-9 and a FBC which comes back normal. What is the first line management in this case?

- A. Amitriptyline
- B. Low-intensity psychosocial intervention
- C. Sertraline
- D. Venlafaxine
- E. Zopiclone

35. A 28 year old man is seen in A&E who is unresponsive, limp, and cyanotic. His airway appears to be clear of obstruction and his respiratory rate is 4 breaths/minute. Pulse oximetry reads 67% on room air. On examination he has pinpoint pupils and scratch marks on his arms. You begin emergency management of this patient. What drug do you need to give this patient within the emergency management?

- A. Activated charcoal
- B. Aspirin
- C. Methadone
- D. Morphine
- E. Naloxone

36. A 40 year old female sees her GP saying she is extremely worried because she has gained 3kg in the past weeks. She wants the GP to start her on laxatives to help her lose weight by next week as she is wanting to surprise her new boyfriend of 2 weeks at his mum's birthday party. She explains that her new boyfriend looks like a celebrity which is just what she deserves. She keeps attempting to touch the GPs thigh with her hand and leans into his personal space while flirting with him. Which diagnosis is the GP most suspicious of?

- A. Anorexia nervosa
- B. Bipolar affective disorder
- C. Borderline personality disorder
- D. Histrionic personality disorder
- E. Narcissistic personality disorder

37. Which is the first line treatment for borderline personality disorder?

- A. Amitriptyline
- B. Cognitive behavioural therapy
- C. Dialectical behavioural therapy
- D. Sertraline
- E. Family therapy

38. Which of the following are not symptoms of gender dysphoria in a patient?

- A. Desire to hide physical signs of their birth-assigned gender
- B. Distressed by their own genitals
- C. Prefer dressing in clothes usually worn by the opposite gender than their birth-assigned gender
- D. Rejection of toy, games, other things that are typically associated with their birth-assigned gender
- E. Sexual orientation is homosexual

39. A 30 year old woman with a history of depression asks her GP if she can stop her Fluoxetine as she has been taking it for 2 months and is feeling much better now. What would the GP recommend?

- A. Gradually reduce the medication over 4 weeks
- B. It should be continued for at least 3 more months
- C. It should be continued for at least 6 more months
- D. Stop the medication straight away
- E. This is a lifelong medication

40. Which of these are not examples of withdrawal symptoms seen within 24 hours after a period of high-intensity cocaine use?

- A. Anxiety
- B. Decreased hunger
- C. Fatigue
- D. Irritability
- E. Lack of motivation

41. Which of these clinical features is not present in Pre-Eclampsia?

- A. Epigastric pain
- B. Facial Oedema
- C. Hypertension
- D. Hyporeflexia
- E. Papilloedema

42. Women are offered screening for anaemia at which of the following appointments?

- A. Booking Visit and 18-20 week appointment
- B. Booking Visit and 28 week appointment
- C. Booking Visit and 32 week appointment
- D. 16 weeks and 28 weeks
- E. 28 weeks only

43. Which of these investigations is used to detect feto-maternal haemorrhage in a suspected sensitising event to ensure enough anti-D immunoglobulin has been given to the mother?

- A. Direct Coombs Test
- B. Full Blood Count
- C. Guthrie Test
- D. Kleinhauer Test
- E. Nuchal Translucency measurement

44. Which of these would be a concerning feature on CTG fetal monitoring?

- A. Accelerations of 25bpm for 30s during contractions
- B. Baseline fetal heart rate of 145
- C. Baseline Variability of 15bpm
- D. Decelerations of 15bpm beginning during contractions and returning to normal 60s after a contraction has ended
- E. 5 contractions in 10 minutes during established labour

45. You are an F2 working in an antenatal clinic, you see Sarah who is a 27 year old G1P0 woman who has come in for her routine 28 week appointment. During the appointment you perform the routine tests and you take her blood pressure- it was 158/92. You plot SFH which is normal for gestation. You take bloods to screen for anaemia, and perform a urine dip which shows 3+ protein. Sarah says she has only experienced mild morning sickness, which has now stopped, and mildly swollen ankles, which she puts down to pregnancy. You examine Sarah and everything else is normal. Sarah's PMH includes – Eczema, Mild rheumatoid arthritis, Asthma, and IBS. What would your first line management be for Sarah?

- A. Labetalol
- B. Magnesium Sulphate
- C. Nifedipine
- D. Propranolol
- E. Ramipril

46. Which of these statements regarding HRT is true?

- A. A transdermal patch containing unopposed oestrogen is the first line HRT used in most women
- B. Contraception is still required when taking HRT
- C. Taking HRT if you have osteoporosis is contraindicated
- D. Women who use HRT are at decreased risk of a venous thromboembolism
- E. Your risk of colorectal cancer is increased if you take HRT

47. You are an F2 working at a GP practice. Chloe, a 27-year-old female, comes to see you. She has felt worried since she felt a lump in her right breast 1 month ago. She first noticed it in the shower, but did not come in as she thought it had disappeared a week later, however 2 days ago she felt it again so decided to book an appointment. She mentions it is tender when she touches it, but doesn't experience pain in the area normally. She denies any changes to her breast symmetry, or skin and nipple changes. She denies any recent traumatic event, and has not experienced anything like this before. She has not noticed any recent weight loss. She has no significant past medical history and takes no regular medications, or oral contraceptives. She has no family history of breast cancer, and her parents are fit and well. Her LMP was nearly 25 days ago, and she has a regular 28 day cycle, which has not altered recently.

You examine Chloe and palpate a firm, mobile, oval shaped 1.5cm mass in her right breast, at the upper 2 o'clock position. You see no obvious skin or nipple changes to either breast. You felt nothing abnormal in the left breast. No lymph nodes were palpable in the axilla. Chloe's basic observations are: RR= 18, Sats = 98% on air, BP = 126/72, HR = 62, Temp = 36.5. What is the most likely diagnosis?

- A. Ductal Papilloma
- B. Fat Necrosis of the breast
- C. Fibroadenoma
- D. Invasive ductal Carcinoma
- E. Nipple Abscess

48. Which of these is not a cause of non-immune hydrops fetalis?

- A. Beta Thalassaemia
- B. Chorioangioma
- C. Congenital parvovirus B19 infection
- D. Turners Syndrome
- E. Twin- Twin transfusion syndrome

49. Which of the following is the most common cause of anaemia In pregnancy?

- A. B12 deficiency
- B. Folate deficiency
- C. Haemolytic anaemia
- D. Iron deficiency
- E. Sickle cell anaemia

50. Which of the following is not a risk factor for developing Pre-eclampsia?

- A. BMI of 31
- B. Maternal antiphospholipid syndrome
- C. Multiple Pregnancy
- D. Pre-eclampsia in a previous pregnancy
- E. Previous vaginal delivery only 12 months ago

51. A 33-year-old woman, Mary, presents to her GP with increasingly heavy and prolonged periods. She feels she has to change her sanitary products more frequently and worries about flooding. She is more anxious about leaving the house when on her period. She suffers from migraines with aura but has no other past medical history. Mary has had two previous normal vaginal deliveries and states she is considering having another child in a few more years.

Based on Mary's history, what is the first-line treatment?

- A. Combined Oral Contraceptive Pill
- B. Endometrial Ablation
- C. Levonorgestrel-releasing intrauterine system
- D. Progesterone-only pill
- E. Tranexamic acid

52. A 23-year-old nulliparous lady, Kelly, is admitted to the ward for induction of labour due to prolonged pregnancy. She is now 41+5 weeks. Kelly had a membrane sweeping the previous week but labour has failed to occur spontaneously. Which pharmacological treatment is given first-line for induction of labour?

- A. IV Oxytocin
- B. Mifepristone
- C. Misoprostol
- D. Oral PGE₂
- E. Vaginal PGE₂

53. Linda, a 35-year-old G2P1, presents to the antenatal clinic and states she has had a 4 day history of itching, especially on the palms of her hands and soles of her feet, which is worse at night. Results of relevant blood tests are as follows:

ALT 73 IU/L (3-40 IU/L)

Serum bile acids 28 µmol/L (0-10µmol/L)

GGT 60 (8-60 u/L)

AST 35 IU/L (3-30 IU/L)

ALP 65 µmol/L (30-100µmol/L)

Bilirubin 4 µmol/L (3-17µmol/L)

You suspect Linda has developed obstetric cholestasis, which of the following is not a risk factor for this condition?

- A. Gilbert's Syndrome
- B. Hepatitis C
- C. Multiple Pregnancy
- D. Obstetric cholestasis in a previous pregnancy
- E. Presence of gallstones

- 55. Elaine, a 36-year-old, has a history of hypertension and asthma. Elaine has recently found out that she is 5 weeks pregnant and has presented to her GP to inquire about her medications and whether they are safe to take in pregnancy. Elaine currently takes Ramipril 10mg OD for her hypertension as well as Salbutamol and Budesonide for her asthma. She has no known drug allergies. Her most recent BP was 138/93. Based on this information, what would be the most appropriate course of action with regard to her medications?**
- A. Leave the medication as it is
 - B. Reduce the dose of Ramipril
 - C. Switch Ramipril to Labetalol
 - D. Switch Ramipril to Nifedipine
 - E. Switch Ramipril to Losartan
- 55. Brenda, a 35-year old G3P2, is 36+1 weeks pregnant. She was referred by her midwife for an ultrasound scan as they were worried about a breech presentation. The ultrasound scan confirms the baby is in an extended breech position. Brenda has had no complications during the course of her pregnancy so far. Based on this information, which of the following is the best management option?**
- A. Admit to the ward and start induction of labour
 - B. Offer external cephalic version now
 - C. Offer external cephalic version from 37 weeks
 - D. Plan for an emergency caesarean section
 - E. Send home and wait for spontaneous labour at term
- 56. Helen, a 28-year-old G1P0, who is 38+5 weeks pregnant, was brought to the emergency department after her husband found her having a generalised seizure. She had been diagnosed with pre-eclampsia at 36 weeks and was started on labetalol. On examination you notice her hands, feet and face are very oedematous. As you are assessing her, she starts to have another generalised seizure. What is the first-line management to control the seizure?**
- A. Dexamethasone
 - B. Diazepam
 - C. Magnesium Sulphate
 - D. Midazolam
 - E. Phenytoin
- 57. Freya, a 42-year-old woman, presents to the GP complaining of increasingly frequent, prolonged and heavy periods. She states she has been passing more clots than usual. Freya also complains of some constipation which has developed recently, as well as some discomfort in her lower abdomen. On abdominal examination, there is a palpable, non-tender mass arising from the pelvis. What is the most likely cause of Freya's heavy menstrual bleeding?**
- A. Adenomyosis
 - B. Dysfunctional uterine bleeding
 - C. Endometrial carcinoma
 - D. Endometriosis

E. Uterine leiomyoma

58. Holly is a 24-year-old woman who is 34+1 weeks pregnant. She presented to her local emergency department with a heavy but painless bleed. Holly had an ultrasound scan which showed a low-lying placenta and an MRI was subsequently organised to assess for placenta accreta. The results of the MRI indicate a strong suspicion for placenta accreta. Which of the following is not a risk factor for the development of placenta accreta?

- A. In vitro fertilisation
- B. Maternal age over 35 years
- C. Previous caesarean section
- D. Previous multiple pregnancy
- E. Previous uterine surgery

59. Fatima is a 32-year-old who presents to clinic complaining of an intense itching of the palms of her hands. The itching is worse at night and Fatima has been finding it difficult to sleep. On examination she has no rash, but there are multiple scratch marks on her palms and arms. You decide to run some routine blood tests, the results of which are as follows:

ALT 73 IU/L (3-40 IU/L)

Serum bile acids 28 $\mu\text{mol/L}$ (0-10 $\mu\text{mol/L}$)

AST 45 IU/L (3-30 IU/L)

ALP 121 $\mu\text{mol/L}$ (30-100 $\mu\text{mol/L}$)

GGT 72 (8-60 u/L)

Bilirubin 18 $\mu\text{mol/L}$ (3-17 $\mu\text{mol/L}$)

Which of the following medications would be given first-line for this condition?

- A. Cetirizine
- B. Dexamethasone
- C. Loratadine
- D. Prednisolone
- E. Ursodeoxycholic acid

60. Anika is a 26-year-old G2P1 and 35+5 weeks pregnant. She presented to the antenatal clinic as part of routine follow-up due to her gestational diabetes. On examination of Anika's abdomen you palpate the foetal head in the left iliac fossa and suspect oblique lie. Which of the following is not a risk factor for abnormal foetal lie?

- A. Multiple pregnancy
- B. Placenta Praevia
- C. Prematurity
- D. Previous caesarean section
- E. Uterine leiomyoma

61. You are a GP attending to Mrs Smith, a 50-year-old Jamaican lady who has attended your clinic in the past with concerns about her blood pressure. Her blood pressure measurements in clinic two weeks ago were 145/95 and 139/88. To confirm whether Mrs Smith has hypertension or not you commenced ambulatory blood pressure monitoring for 24 hours and she has just returned to your clinic now, so you review the results. Her ambulatory blood pressure result averages at 137/87, what management if any does Mrs Smith require?

- A. None
- B. Reassurance and advice on lifestyle changes
- C. Advice on lifestyle changes and start her on ramipril
- D. Advice on lifestyle changes and start her on amlodipine
- E. Continue monitoring Mrs Smith until a total of 7 days have passed to see if her average blood pressure changes

62. You are a nurse on the vascular ward at Doncaster hospital and have been concerned about Mr Baker for a few days now as you believe his mental health is deteriorating and he has begun displaying some psychotic symptoms. Suddenly Mr Baker pulls out his cannula and announces he needs to leave the hospital. At this point you detain him under section 5(4) of the MHA until you can get an appropriate specialist to assess him. Under this section how long can you detain Mr Baker?

- A. 6 hours
- B. 24 hours
- C. 48 hours
- D. 72 hours
- E. 12 hours

63. Miss Lewis a 19-year-old woman attends the termination of pregnancy clinic asking to have an abortion. Her pregnancy is subsequently terminated at 9 weeks gestation. When is the administration of anti-D prophylaxis indicated in women undergoing a TOP?

- A. Rhesus -ve and after 20 weeks
- B. Rhesus +ve and after 20 weeks
- C. Rhesus -ve and after 10 weeks
- D. Rhesus +ve and after 10 weeks
- E. To all women undergoing a TOP

64. Which of the following is not a static risk factor for suicide?

- A. Race
- B. History of childhood abuse
- C. Previous attempt of self-harm
- D. Use of illicit substances
- E. Existing medical diagnoses

65. Which of the following sentences best describes the role of the QRISK tool

- A. Risk of dying from a cardiac complication in the next 10 years
- B. Risk of dying from a stroke in the next 5 years
- C. Risk of developing a heart attack or stroke in next 10 years
- D. Risk of hospitalisation due to cardiac problems in the next 5 years
- E. Risk of death of all causes in next 10 years

66. You are a SHO on AMU during a night shift and Mr Clark is a new patient that you are being briefed on at the handover. The twilight shift SHO has not had the time to fully examine Mr Clark but he believes he heard one of the staff say that Mr Clark has appendicitis. Taking your colleague at his word you act on this presumed diagnosis. What type of error could this lead to?

- A. Error of over attachment
- B. Error due to failure to consider the alternative
- C. Error of bravado
- D. Error of inheriting thinking
- E. Error of ignorance

67. Which of these is not a component of Seedhouse's ethical grid?

- A. Core rationale
- B. Deontological layer
- C. Consequential layer
- D. External considerations
- E. Virtue layer

68. You are an F2 working in O&G in Barnsley and one of the nurses comes to talk to you about Miss Jackson, a 22-year-old lady who would like to undergo a TOP. The nurse is happy for her to go ahead and asks you to sign the relevant form. You have a conscientious objection against abortion. How should you respond?

- A. Sign it anyway as it is your job and you have a duty of care to this lady
- B. Speak to Miss Jackson and try to persuade her not to get an abortion
- C. Ask the nurse how she can feel comfortable with this and try to convince her this is wrong for her to be a part in
- D. Explain your conscientious objection and say you are happy to find another doctor on the team who is happy to sign the form
- E. Explain your objection and state that unfortunately this means she does not qualify for a TOP

- 69. Mr Bacon attend clinic for an appointment regarding his blood pressure. You measure his blood pressure twice on each arm during the appointment and each reading is > 180/120mmHg. You decide to follow this up by a series of other routine examinations, including fundoscopy which reveals swelling of his optic discs bilaterally. Mr Bacon is otherwise well and there are no other abnormalities noted. What is the most appropriate course of action?**
- A. Refer him immediately for specialist same day assessment
 - B. Call an ambulance immediately
 - C. Initiate the next appropriate medication on the hypertensive pathway in addition to his current medications
 - D. Refer for a 2-week wait cardiology appointment
 - E. Suggest that he undergo ABPM to confirm this reading
- 70. You are a police officer on duty when you are directed to Endcliffe park by control who have heard reports of a 23-year-old man in the park with a knife. You arrive at the scene to find a very agitated man wandering about in the park with a knife. You try to de-escalate the situation and ask him to put the knife down but he refuses and shouts at you saying how he is being chased by the CIA and they have told him he needs to kill at least 2 people before they will leave him alone. Further questioning reveals additional psychotic symptoms, and you decide that the gentleman would benefit from psychiatric assessment. However, he is not willing to come peacefully so you manage to disarm him and section him under the MHA. What section of the MHA do you invoke?**
- A. S135
 - B. S136
 - C. S137
 - D. S138
 - E. S134
- 71. 46 year old Charles presents to GP with his wife who says over months he has had a change in character and is not himself. Normally a placid individual Charles moves around excessively and laughs more often. His father had a milder change in his actions when he was a similar age but did not get it investigated. What is the most likely diagnosis?**
- A. Frontotemporal dementia
 - B. Huntington's disease
 - C. Lewy body dementia
 - D. Progressive supranuclear palsy
 - E. Wilsons' disease

72. Deena develops left sided facial weakness including the forehead and eyelid. She has a normal pupillary response bilaterally. Sensation is retained. This came on over a few days and lasted 2-3 weeks. Where can you localise the lesion to?

- A. Left 7th Cranial nerve LMN lesion
- B. Left 7th Cranial nerve UMN lesion
- C. Right 7th cranial nerve LMN lesion
- D. Right 7th cranial nerve UMN lesion
- E. Superior cervical ganglion lesion

73. A 70 year old gentleman called Jack presents to the GP complaining of headaches. They are right sided and typically occur after he brushes his hair very specifically the right hand side of his forehead. They are sharp pain and his forehead is delicate to touch. He recently had visual loss briefly describing it like a curtain blocked his right eye vision. What first line treatment would you initiate?

- A. Carbamazepine
- B. Methotrexate
- C. NSAIDs
- D. Prednisolone
- E. Sumatriptan

74. Which vitamin is deficient in Wernicke Korsakoff syndrome?

- A. Folate
- B. Vitamin B1
- C. Vitamin B7
- D. Vitamin D
- E. Vitamin k

75. Which of these features would not be commonly associated with Wernicke Korsakoff syndrome?

- A. Anterograde memory loss
- B. Ataxia
- C. Confabulation
- D. Ophthalmoplegia
- E. Tactile hallucinations

76. Jessica, 30 years old, develops a progressing weakness and sensory loss rising for a week from her toes upwards till she has weakness of both legs. She recently had upset bowels a week or two ago. What is the most likely causative agent of the previous gastroenteritis?

- A. Campylobacter jejuni
- B. E.coli
- C. Group B streptococcus
- D. Salmonella
- E. Staph aureus

77. What is first line treatment of Guillain Barre syndrome?

- A. Aspirin
- B. Corticosteroids
- C. IV Immunoglobulins
- D. Plasma exchange
- E. Supportive treatment and FVC observation

78. Which trinucleotide repeat is expanded in Huntington's disease?

- A. ACG
- B. CAG
- C. CGG
- D. GAA
- E. TAG

79. Temporal arteritis has a strong association to which of these conditions?

- A. Down's syndrome
- B. Polymyalgia rheumatica
- C. Psoriasis
- D. Migraine with aura
- E. SLE

80. Which of these visual abnormalities is the commonest cause of a convergent squint?

- A. Cataracts
- B. Glaucoma
- C. Hypermetropia
- D. Myopia
- E. Presbyopia

81. A 62 year old man presents to A & E with a sudden onset central chest pain and tightness. This pain radiates to the left side of his jaw and down his left shoulder. He is sweaty and nauseous but has no signs of respiratory distress. Which 3 investigations would you immediately undertake?

- A. Urinalysis, Cardiac enzymes, Blood cultures
- B. Blood cultures, Blood gases, ECG
- C. CT Chest, Echocardiogram, Blood gases
- D. ECG, Cardiac enzymes, Chest X Ray
- E. MRI, Echocardiogram, Blood cultures

82. A 42 year old woman presents with shortness of breath, a throaty productive cough and wheeze. She has presented multiple times in the past with recurrent respiratory infections, particularly over the colder months. She smokes 20 cigarettes a day and has done so since she was a teenager. Which medications are used in the first line treatment of COPD?

- A. Salbutamol + Ipratropium Bromide
- B. Beclomethasone + Tiotropium
- C. Oral Theophylline
- D. Azithromycin
- E. IV Aminophylline

83. An 82 year old man is recovering from a fractured neck of femur after a fall at home. You prescribe Adcal (Calcium and vitamin D) supplementation to reduce the risk of any more fractures. In which cases would you NOT prescribe Adcal?

- A. Patient is a resident at a care home
- B. Patient has constipation
- C. Patient has primary hyperparathyroidism
- D. Patient has osteopenia
- E. Patient with coeliac

84. What medication would you give after a patient presents with an attempted suicide by paracetamol overdose 3 hours ago?

- A. Activated charcoal
- B. N-Acetylcysteine
- C. Sodium Nitrate
- D. Idarucizumab
- E. Dicobalt edetate

85. In which case would the prescription of Heparin NOT be indicated?

- A. Patient with angina
- B. Patient with pulmonary embolism
- C. Patient with a deep vein thrombosis
- D. Patient with acute bacterial endocarditis
- E. Patient with acute peripheral artery occlusion

86. Swan- Neck deformity is a sign in-keeping with a diagnosis of what?

- A. Septic Arthritis
- B. Rheumatoid Arthritis
- C. Osteoarthritis
- D. Juvenile Idiopathic Arthritis
- E. Osteomyelitis

87. Which of the following is not a cause for clubbing of the hands?

- A. Endocarditis
- B. Inflammatory Bowel Disease
- C. Cystic Fibrosis
- D. Bronchial carcinoma
- E. Peptic ulcer

88. What is not included in the immediate management for someone having a cardiac episode?

- A. Analgesia/Morphine
- B. Nitrates
- C. Oxygen therapy
- D. Naproxen
- E. Aspirin

89. A 2 year old child presents to paediatric A & E very upset and crying, with a barking cough, harsh stridor, and a temperature. What would you do in this situation?

- A. Examine the child's throat
- B. Do blood tests
- C. Do an ABCDE assessment
- D. Take a urine sample
- E. Check their blood glucose

90. A 75 year old woman presents with increased bruising over the past 7 weeks. She notices this happens with minor bumps and knocks. She is currently taking Simvastatin, Lisinopril and Aspirin. Considering the patient's presentation and blood results below what is the most likely diagnosis?

Hb	126	120-155g/L
WCC	8.2	4-11*10⁹/L
Plt	250	150-450*10⁹/L
MCV	90	76-100 fL

- A. Thrombocytopenia
- B. Vitamin C deficiency
- C. Drug Induced
- D. Leukaemia
- E. Cushing's Syndrome

91. A 12-year-old boy recently diagnosed with asthma is attending an asthma nurse-specialist clinic for a review of his inhaler technique. One of the boy's inhalers is Salmeterol, which of the following best describes the method of action of this drug?

- A. Competitive inhibitor of acetylcholine
- B. Inhibition of osteoclasts
- C. Irreversible inhibition of COX enzyme
- D. Stimulation of G protein-coupled receptors
- E. Upregulation of anti-inflammatory genes

92. A 52-year-old man visits his GP because he noticed he has had a cough for a while and it has been getting worse over the last few days, and he has occasionally coughed up some blood. The GP notices he has lost a lot of weight and looks more frail than the last time he saw him. He has been smoking 10 cigarettes a day since he was 18 but has no family history of any respiratory conditions. What is the most likely diagnosis?

- A. Bronchiectasis
- B. Goodpasture's syndrome
- C. Lung cancer
- D. Pleural effusion
- E. Tuberculosis

93. A 67-year-old woman visits her GP because her heart 'has been racing' and she was worried there was something wrong. An ECG was performed, and the GP diagnosed atrial fibrillation. The GP was worried that the patient may be at risk of stroke because she was also hypertensive, and so used a risk score to estimate this patient's risk so that he could put appropriate preventive measures in place if necessary. Which risk score will the GP have used?

- A. CHAD₂VASc
- B. CURB65
- C. FRAX
- D. Qrisk3
- E. Wells' criteria

94. A 33-year-old African woman is diagnosed with hypertension at her GP practice. What is the first line medication that the GP prescribes?

- A. ACE inhibitor
- B. Angiotensin receptor blocker
- C. Amiodarone
- D. Beta blocker
- E. Calcium channel blocker

95. A 50 year-old man visits his GP because he is suffering with heartburn. He has a BMI of 31 and has type 2 diabetes mellitus. The GP makes a clinical diagnosis of gastro-oesophageal reflux disease (GORD) and suggests that the patient purchases some Gaviscon and prescribes him lansoprazole. Which of the following is not a risk factor for GORD?

- A. Hiatus hernia
- B. Increased abdominal pressure
- C. Male sex
- D. NSAID use
- E. Smoking

96. What blood test is related to the diagnosis of prostate cancer?

- A. Hb levels
- B. HCG levels
- C. pANCA
- D. PSA levels
- E. Troponin levels

97. What test is useful for diagnosing coeliac disease?

- A. Anti-transglutaminase
- B. C.difficile
- C. Colonoscopy
- D. Faecal calprotectin
- E. pANCA

98. A 68-year-old man visits his GP because he sometimes finds it painful to swallow and has noticed some significant weight loss. The GP notices his skin has a slight yellow tinge, and on examination there is ascites and an irregular mass upon palpation of the abdomen. The GP sends him for a CT scan at the hospital. What is the most likely diagnosis?

- A. Bowel cancer
- B. Colorectal cancer
- C. Gastric cancer
- D. Liver cancer
- E. Oesophageal cancer

99. A 46-year-old woman goes to A&E because of chest pain, severe shortness of breath and she had been coughing up blood. She has been on the oral contraceptive pill for 25 years and recently had a surgery on her ankle. What is the most likely diagnosis?

- A. Angina
- B. Oesophageal cancer
- C. Pulmonary embolism
- D. Transient ischaemic attack
- E. Tuberculosis

100. A 72-year-old woman is rushed into A&E from her care home after the staff noticed she was having difficulty speaking and could not raise her left arm. She was given a CT scan where the medical team diagnosed an ischaemic stroke. This needs to be managed as soon as possible to prevent further complications. What is the first line of management for this patient?

- A. Aspirin
- B. Beriplex
- C. Beta blocker
- D. IV alteplase
- E. Surgery for clot evasion

[END OF PAPER 3]

Important note- this mock SBA is meant to be used as a learning tool, it intentionally covers a broad range of topics and asks challenging questions in order to enable you to set future goals for learning and most importantly to learn from the answers and explanations, adding these to your notes. This is a revision resource and not a reflection of the true exam.

Answers- see separate document: PTS 3a Mock SBA Series- Paper 3- ANSWERS

Scores/Feedback- When you have marked your paper please complete the Google form to record your scores and feedback on questions. This is found here and on the answer document.

Paper 3 Google Form- <https://forms.gle/6VSwXHAUJ1PC8if7>

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