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PLAB one examination questions

1. Theme Headaches: selection of Diagnostic tests

Select the SINGLE most suitable investigative procedure from the list of options below.

Options:

- A. Skull x-ray
- B. Toxoplasma serology
- C. Intraocular pressure
- D. Lumbar Puncture
- E. Mental state examination
- F. Electroencephalogram
- G. Nasendoscopy
- H. Fundoscope
- I. Magnetic resonance imaging of Cervical spine
- J. Computed tomography scan of brain
- K. Visual fields
- L. Erythrocyte sedimentation rate
- M. Carotid arteriography
- N. Temporal artery biopsy

1. A 33-year-old woman reports a generalized headache to be like a tight band around her head. The headache is not relieved by paracetamol. She has had difficulty in sleeping and has recently lost weight
2. A 74-year-old woman complains of a right-sided headache that is worsened when she brushes her hair. She's been unwell for a number of months with aching muscles.
3. A 34-year-old man looks pale and complains of a headache, photophobia and a sudden reduction in visual acuity
4. A 15 year-old boy, who is recovering from a bilateral parotitis, complains of drowsiness and a generalised headache. On examination his CT scan is normal.
5. A 57-year-old man complains of severe headaches that become worse when he lay down. On examination you find bilateral papilloedema.

2. Theme Diagnosis of acute vomiting in children

Select the SINGLE diagnosis for each child's symptoms from the list of diagnosis below.

Options:

- A. Overfeeding
- B. Acute appendicitis
- C. Cyclical vomiting
- D. Meningitis
- E. Duodenal atresia
- F. Gastroenteritis
- G. Pyloric stenosis
- H. Whooping cough

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- I. Urinary tract infection
- J. Gastro-oesophageal reflux
- K. Pancreatitis
- L. Mesenteric adenitis
- M. Psychogenic vomiting
- N. Meconium ileus

6. An eight-year-old girl has vomited all fluids for the last 24 hours. The vomit is not bile stained and her abdomen is now soft and non-tender. She shows signs of moderate dehydration and has had two similar attacks of vomiting this year.
7. A six-week-old male infant has suffered projectile vomiting, after each feed, for the last 2 weeks. He is now lethargic, dehydrated and tachypnoeic
8. A 12-week-old developmentally normal, thriving baby boy vomits after every feed. A is bottle fed at 260 ml/kg/day.
9. A breast fed, three day-old baby boy vomits after each feed. An Abdominal x-ray showed a “double-bubble”
10. A four-month-old baby has persistent vomiting, that on occasions is bloody. The baby is thriving but cries during the incidents of vomiting.

3. Theme Drug Prescription in Pregnancy

Select the SINGLE most appropriate Rx for each patient from the list of drugs below.

Options:

- A. Aspirin
- B. Insulin
- C. Reduce Glibenclamide
- D. Warfarin and Aspirin
- E. Lisinopril
- F. Glicazide
- G. Continue Carbamazepine
- H. Bendrofluazide
- I. Acamprosate
- J. Paracetamol
- K. Heparin and Aspirin
- L. Prednisone
- M. Methyldopa
- N. Increase Glibenclamide
- O. Carbamazepine with 5mg/day Folate

11. A 27-year-old woman is undergoing treatment with Carbamazepine with very good results. She has missed two periods and has a pregnancy test that is positive.
12. A 39-year-old diabetic, being treated with Glibenclamide (10mg/day) and whose blood glucose control is good, has missed a period and asks for a pregnancy test. She tests positive
13. The blood pressure of a 34-year-old woman in her 31-week of pregnancy reads 150/100mmHg. She has not complained.

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14. A pregnant 41-year-old woman has stiffness and chronic pain in her left knee. On examination she's found to have Osteoarthritis
15. The tests of a pregnant 34-year-old woman, who has previously had two-second trimester miscarriages, show positive for anti-cardiolipin antibodies and Lupus anticoagulant at 11 weeks of pregnancy.
16. A pregnant 41-year-old woman has stiffness and chronic pain in her left knee. On examination she's found to have Osteoarthritis.

4. Theme Diagnosis of sudden visual loss

Options:

- A Cataract
- B Central retinal artery occlusion
- C Acute glaucoma
- D Cerebral embolism
- E Cerebral haemorrhage
- F Chronic (simple) glaucoma
- G Hypertensive encephalopathy
- H Polymyalgia rheumatica
- I Retinal detachment
- J Temporal arteritis
- K Uveitis

Choose the single most likely diagnosis from the above list of options.

17. A 40 year-old lady has recurrent episodes of an acutely painful red eye with reduced vision.
18. A 70-year-old smoker suddenly notices markedly reduced vision in one eye. He cannot read any letter on the visual acuity chart, but can count fingers. The fundus looks pale.
19. An 90-year-old woman notices sudden increased visual impairment. She is found to have homonymous hemianopia
20. A 45-year-old lady complains of sudden loss of vision in one eye. She describes the incident like a curtain coming down
21. A 80-year-old lady has had a painful scalp and headache for three weeks and is generally unwell. She presents with an acute onset of blindness in the left eye.

5. Theme Causes of pneumonia

Options:

- A Chlamydia psittaci
- B Staphylococcus aureus
- C Streptococcus pneumoniae
- D Mycoplasma pneumoniae
- E Legionella pneumoniae
- F Mycoplasma tuberculosis
- G Haemophilus influenzae
- H Chlamydia trachomatis
- I Pneumocystis carinii

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Choose the single, most likely causative agent, from the list of options above.

22. A young male homosexual with kaposi's sarcoma complains of a dry cough associated with increasing breathlessness.
23. A 22-year-old girl who works in a pet shop complains of fever, a dry cough associated with increasing breathlessness
24. A 30-year-old woman, has just returned from a holiday in Cyprus. She complains of dry cough, fever and general malaise. A chest x-ray shows patchy consolidation.
25. A 56-year-old smoker with chronic obstructive airway disease develops a fever. He reports bringing up green phlegm.
26. A 40-year-old homeless alcoholic presents with a chronic productive cough. He reports 3 episodes of seeing red streaks in the sputum. Chest x-ray shows a cavitating lesion in the right lower zone

7. Theme Diagnosis of weight loss

Options:

- A Starvation
- B Malabsorption
- C Anorexia nervosa
- D Depression
- E Hyperthyroidism
- F Atrophic gastritis
- G Dementia

Choose the single most likely diagnosis from the above list of options.

27. An elderly man with alcoholic liver disease is found to be wasted.
28. A 50-year-old man presents to A&E with a 4 month history of diarrhoea, weight loss and palpitations. On examination, there are no significant findings.
29. A 37-year-old company executive has just had a company merger. She now complains of weight loss, and early morning wakeness.
30. A 21-year-old girl presents to her GP before her forthcoming A-level exams, complaining of amenorrhoea. She has lost 10kg over the last 3 months.

7. Theme Diagnosis of Infections

Options:

- A Pseudomonas Aeruginosa
- B E.Coli
- C Staphylococcus aureus
- D Proteus mirabilis
- E Streptococcus viridans
- F Chlamydia trachomatis
- G Chlamydia psittaci
- H Trichomonas vaginalis
- I Neisseria Gonorrhoea
- J Neisseria Meningitidis

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K Haemophilus Influenzae

Choose the most likely causative organism, from the list of options above.

31. A 25-year-old man presents with a swelling in his right axilla. Aspiration yields yellowish-green pus.
32. A 32-year-old man presents with a fever, dyspnoea and palpitations. On auscultation, a pansystolic murmur is heard in the tricuspid area. He was previously healthy.
33. A 5-year-old boy who has started school presents with a high fever, vomiting, headache and a stiff neck.
34. A 10-year-old Nigerian boy presents with a 3-month history of a purulent eye discharge and increased lacrimation. His 16-year-old brother has a similar condition.
35. A 20-year old woman presents with a subacute onset of lower abdominal pain associated with frequency and dysuria.

8. Theme: Hormonal disease

Options:

- A Cortisol
- B Adrenocorticotrophic hormone(ACTH)
- C Growth hormone
- D Calcitonin
- E Somatostatin
- F Thyroxine
- G Parathyroid hormone
- H Insulin
- I Adrenaline
- J Thyroid stimulating hormone(TSH)
- K Serotonin
- L Glucagon
- M Aldosterone

Choose the single most likely hormone involved from the list of options above.

36. A 20 year old known diabetic is brought to A&E unconscious. He has up-going plantar reflexes.
37. A 38-year-old man with an enlarged right adrenal gland and normal left gland presents with weakness. $\text{Na}^+=140\text{mmol/L}$ $\text{K}^+=2.5\text{mmol/L}$.
38. A 35 year old man complains of polyuria, excessive drinking of water, associated with excessive thirst.
39. A 35-year-old woman with polyuria presents with a one month history of palpitations and diarrhoea.
40. An obese 34 year old woman is found to have a 'moon face', a blood pressure of 145/95mmHg and raised blood glucose. (Cortisol)

9. Theme Principles of the duties of a doctor registered with the General Medical Council

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Options:

- A Make the care of your patient your first concern
 - B Treat every patient politely and considerately
 - C Respect patients dignity and privacy
 - D Listen to patients and respect their views
 - E Give patients information in a way they can understand
 - F Respect the right of patients to be fully involved in decisions about their care
 - G Keep your professional knowledge and skills up to date
 - H Recognise the limits of your professional competence
 - I Be honest and trustworthy
 - J Respect and protect confidential information
 - K Make sure that your personal beliefs do not prejudice your patients' care
 - L Act quickly to protect patients from risk if you have good reason to believe that your colleague may not be fit to practise
 - M Avoid abusing your position as a doctor
 - N Work with colleagues in the ways that best serve patients' interests
- Choose the single most appropriate principle from the list of options.

41. A 23-year-old Indian woman requests a female doctor to perform a pelvic exam.
42. A 55-year-old man who is being admitted for a total knee replacement states that he is a Jehovah's witness and therefore refuses any blood products.
43. A 16-year-old girl informs you that she may be pregnant, and her parents are unaware.
44. A 28-year-old man is offered the choice of whether he would like to receive interferon injections for multiple sclerosis
45. A 65-year-old diabetic sees you for a neurological option and asks if you would renew his insulin prescription as a favour
46. There is a lunch-time teaching session, but a patient on the ward is experiencing chest pain.
47. Your patient reports feeling of depression. You seek a psychiatric opinion.
48. You asked a patient to undress to examine the abdomen. You remember to cover the patient's groin
49. You are asked to examine a patient at his bedside. You remember to pull the curtain around the bed to ensure privacy.
50. You see an overworked colleague struggle with his duties. You intervene and offer assistance

10. Theme Diagnosis of abdominal pain

Options:

- A Acute appendicitis
- B Diverticular disease
- C Abdominal aortic aneurysm
- D Perforated peptic ulcer
- E Crohn's disease
- F Ulcerative colitis
- G Acute pancreatitis

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- H Chronic active hepatitis
- I Acute viral hepatitis
- J Pseudo-obstruction
- K Acute cholecystitis
- L Acute diverticulitis

Choose the single most likely diagnosis from the above list of options.

51. An 80-year old lady with stable angina presents with massive abdominal distension 10 days following a total hip replacement.
52. A 55-year-old man presents with left-sided colicky iliac fossa pain, change in bowel habits and, rectal bleeding. A thickened mass is palpated in the region of the sigmoid colon. His full blood count is normal.
53. A 50-year-old man presents with severe epigastric pain radiating to the back. He is noted to have some bruising in the flanks
54. A 40 year old lady presents with anorexia, abdominal pain, and increasing jaundice. She is asthmatic and takes methylodopa for hypertension.
55. A 25-year-old man presents with colicky periumbilical pain, which shifts th the right iliac fossa, fever, and loss of appetite.

11. Theme Diagnosis of Joint pain

Options:

- A Gout
- B Pseudogout
- C Osteoarthritis
- D Infective arthritis
- E Psoriatic arthropathy
- F Ankylosing spondylitis
- G Juvenile chronic arthritis
- H Rheumatoid arthritis
- I Reiter's syndrome
- J Felty's syndrome
- K Osteogenesis imperfecta

Choose the single most likely diagnosis from the list of options above.

56. A 30 year old homosexual male is found to have a markedly swollen knee of one month duration and a temperature of 38 C. He says the knee has only recently become painful and also admitted to losing weight. He had no other complains apart from a 2-month history of cough, which he attributed to his heavy smoking.
57. A 36-year-old lady presents with swollen knee joint. She says they feel stiff, especially in the morning. On examination, she is found to be pyrexia with ulcers on both her legs and marked hyperpigmentation. Hb 9g/dl, WBC, platelets are decreased and with a serum albumin of 20g/L.
58. A 45 year old obese man presented with a painful and swollen ankle. The symptoms had started gradually in the previous month. Joint fluid aspiration was done and positively birefringent crystals were found. The patient drinks alcohol but doesn't smoke.

59. A 15-year-old boy complains of temporal-mandibular joint pain for three months. On examination, he has micrognathia, loss neck extension and unequal lengths of the lower limbs. He is rheumatoid factor negative.

12. Theme Diagnosis of Arrhythmias

Options:

- A Atrial flutter
- B Atrial fibrillation
- C Ventricular tachycardia
- D Ventricular extrasystoles (ectopics)
- E Heart block
- F Sinus tachycardia
- G Sinus bradycardia
- H Supraventricular tachycardia
- I Blood loss
- J Wenckebach's phenomenon

Choose the single most likely diagnosis from the list of options above.

60. A 65-year-old man, post myocardial infarction is found to have a regular pulse, with a rate of 50 beats/min.
61. A 50-year-old man with palpitations is treated with a carotid massage. He now has no other complaints
62. Following a road traffic accident, a 25 year old man is brought to the A&E. He is found to have a pulse rate of 120 beats/min and Blood pressure of 90/50 mmHg
63. A 65-year old man is found to have an irregular pulse, with a rate of 110 beats/min
64. A 23 year old footballer is examined by his GP and found to have a pulse rate of 50 beats/min. He is otherwise well.
65. A 50 year old man, post myocardial infarction in ITU is found to have a pounding heart beat which then disappeared spontaneously. The patient remains conscious.

13. Theme Immediate investigations of the unconscious patient.

Options:

- A Arterial blood gases
- B Blood carbondioxide
- C Blood culture
- D Blood glucose
- E Blood paracetamol
- F Blood salicylate level
- G Chest x-ray
- H Computed tomography scan
- I Electrocardiogram (ECG)
- J Lumbar puncture
- K Serum osmolality
- L Skull x-ray
- M Temperature

Choose the single most discriminating investigation from the above list of options.

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66. A 28 year old woman is brought to the A&E unconscious (GCS=7) On initial examination, her pulse rate is 110 beats/min, SaO₂ 95% on air, BM(glucose) 4.5. A purpuric rash is noted on both her arms.
67. A 47 year old female is brought to the A&E unconscious (GCS=7). On initial examination, her pulse rate is 110 beats/min. SaO₂ 100% on air, BM(glucose) 4.3.
68. A 45 year old man is brought to the A&E unconscious (GCS=7). On initial examination his pulse rate is 90beats/min, BM(glucose)5.3, SaO₂ 97% on air. He smells of alcohol and there are no external signs of injury.
69. A 45 year old woman is brought to the A&E unconscious (GCS=7). On initial examination, her pulse rate is 80 beats/min, she is sweating and has a SaO₂ of 98% on air.
70. A 45-year-old woman is brought to the A&E unconscious (GCS=7). On examination her pulse rate is 110 beats/min, temperature normal, BM(glucose) 4.6. She was found with an empty bottle of antidepressant (Dothiepin)

13. Theme Management of heart failure.

Options:

- A ACE inhibitors
- B Digoxin
- C Aortic valve replacement
- D Thiazide diuretics
- E Heart transplant
- F IV furosemide
- G Nitrates (oral)
- H Nitrates (IV)
- I Thiamine (IV)
- J Pericardiocentesis

Choose the single most appropriate management strategy from the list of options above.

71. A 15-year-old boy is examined and found to have severe congestive cardiac failure.
72. A 40-year-old man with cardiac failure is found to have a palpable thrill in the right second intercostal space, which radiates to the neck.
73. A 50-year-old man with suspected heart failure has a blood pressure of 90/60 mmHg and pulse rate of 110 beats/min. Chest x-ray shows globular heart.
74. A 50-year-old suspected alcoholic has biventricular cardiac failure. He has deranged liver function tests.
75. A 60-year-old female in cardiac failure wants long term treatment for her conditions. Echocardiography shows global hypokinesia and loss of contractility

14. Theme Investigation and management of scrotal swellings

Options:

- A Ultrasound scan of scrotum
- B Surgical exploration

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- C Reassurance
- D Aspiration
- E Mid stream urine for microscopy and/or culture
- F Biopsy
- G Analgesia
- H Doppler ultrasound of scrotum
- I Computed tomography (CT) scan of scrotum
- J Clotting studies
- K Urethral swab
- L Antibiotics
- M Urine cytology
- N Herniotomy

Choose the single most appropriate management strategy from the above list of options.

- 76. A 12-year-old boy presents with a tender, red swollen scrotum. He has already been given analgesia by his general practitioner.
- 77. A young boy with acute lymphoblastic leukaemia is given chemotherapy. He now develops a right testicular swelling.
- 78. A 70-year-old man comes in to have his right testicular hydrocele aspirated. A day after the procedure, he develops a scrotal swelling on the right.
- 79. A baby girl born at 28 weeks gestation is found to have a right swollen scrotum
- 80. A 16-year-old boy presents with unilateral scrotal swelling. On examination a bluish, soft and non-tender compressible mass is found. The child is otherwise well.
- 81. A 6-year-old boy presents with bilateral scrotal swelling. He had suffered from mumps two weeks prior to presentation
- 82. A 13-year-old boy presents with bilateral pain and testicular swelling, after cycling

15. Options:

- A Angiography
- B Bronchoscopy
- C Colle's fracture
- D Dental treatment of a cardiac patient
- E Dislocated shoulder
- F Emergency appendicectomy
- G Heart valve replacement
- H Sigmoid colectomy
- I Splenectomy
- J Thyroidectomy

Choose the single most likely indication from the above list of options.

- 83. One dose of metronidazole at induction of anaesthesia.
- 84. Long term oral penicillin and immunisation against pneumococcal infection.
- 85. Clear fluids by mouth and two sachets of sodium picosulphate on the day before the operation plus broad-spectrum intravenous antibiotics at induction

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86. Clear fluids by mouth and two sachets of sodium picosulphate on the day before the operation plus broad-spectrum intravenous antibiotics at induction
87. A 3g sachet of amoxicillin one hour before the procedure.

16. Theme: Causes of headache

Options:

- A Meningitis
- B Migraine headache
- C Cluster headache
- D Tension headache
- E Subarachnoid haemorrhage
- F Sinusitis
- G Benign intracranial hypertension
- H Cervical spondylosis
- I Giant-cell arteritis
- J Otitis media
- K-Transient ischaemic attack

Choose the single most likely cause from the above list of options.

88. A 35-year-old obese female presents with headache and diplopia. On examination, she has papilloedema. She is alert with no focal symptoms and signs.)
89. A 65-year-old female presents with bitemporal headache, unilateral blurry vision, and pain on combing her hair. Her ESR is elevated
90. A 10-year-old boy presents with fever, headache, left eye pain, and swelling. He described his vision as blurry. He has recently recovered from a cold.
91. A 45-year-old man presents with severe pain around his right eye, with eyelid swelling lasting 20 minutes. He has had several attacks during the past weeks. The attacks are worse at night.
92. A 25-year-old female presents with episodes of unilateral throbbing headache, nausea, and vomiting. She states that it is aggravated by light. The episodes seem to occur prior to her menstruation.

Options:

- A Ruptured bronchus
- B Ruptured aorta
- C Ruptured oesophagus
- D Tension pneumothorax
- E Cardiac tamponade
- F Blood transfusion
- G Oral analgesia
- H Morphine(IV)
- I Strap chest
- J Ruptured sleep
- K Immobilisation

Choose the most likely diagnosis/management strategy from the list of options above.

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93. A 17-year-old boy with multiple fractures is taken for open reduction. His pulse rate = 120 beats/min BP=100/60 mmHg.
94. A 47-year-old man is involved in a road traffic accident. Chest x-ray shows a transverse fracture of the sternum. He is otherwise well.
95. A 47-year-old man is involved in a road traffic accident. Chest x-ray shows a transverse fracture of the sternum. He is otherwise well.
96. A 35-year-old man is brought to the A&E with a haemothorax. Bilateral chest drainage is done, but his condition fails to improve.
97. A 12-year-old boy was involved in a fight in which he received a kick to his chest. He presents the following day with chest pain and is found to have 3 fractured ribs.
98. A 45-year-old man who has a seat belt is involved in a high-speed car accident. On x-ray, a 'widened' mediastinum is seen

Answers

1. Mental state examination
2. ESR
3. Carotid arteriography
4. Lumbar Puncture
5. CT Scan Brain
6. Cyclical vomiting
7. Pyloric stenosis
8. Overfeeding
9. Duodenal atresia
10. GE Reflux
11. Carbamazepine with 5mg/day Folate
12. INSULIN
13. Methyldopa
14. Paracetamol
15. Aspirin
16. Paracetamol
17. Uveitis
18. Central Retinal Artery Occlusion
19. Cerebral embolism
20. Retinal detachment
21. Temporal arteritis
22. Pneumocystis carinii
23. Chlamydia psittaci
24. Legionella pneumonia
25. Streptococcus pneumonia
26. Mycoplasma tuberculosis
27. Malabsorption
28. Hyperthyroidism

29. Depression
30. Depression
31. Staphylococcus aureus
32. Staphylococcus aureus
33. Neisseria meningitides
34. Staphylococcus aureus
35. Chlamydia trachomatis
36. Insulin
37. Aldosterone
38. Parathyroid hormone
39. Thyroxine
40. Cortisol
41. listen to patients and respect their views
42. Make sure that your personal beliefs do not prejudice your patient's care
43. Respect and protect confidential information
44. Respect the right of patients to be fully involved in decisions about their care
45. Recognise the limits of your professional competence
46. Make the care of your patient your first concern
47. Work with colleagues in the ways that best serve patient's interests
48. Respect patients dignity and privacy
49. Respect patients dignity and privacy
50. Act quickly to protect patients from risk if you have good reason to believe that you or a colleague may not be fit to practice
51. Pseudo-obstruction
52. Diverticular disease
53. Acute pancreatitis
54. Chronic active hepatitis
55. Acute appendicitis
56. Infective arthritis
57. Felty's syndrome
58. Pseudogout
59. Juvenile chronic arthritis
60. Sinus bradycardia
61. Supraventricular tachycardia
62. Blood loss
63. Atrial fibrillation
64. Sinus bradycardia
65. Ventricular extrasystoles
66. Lumbar puncture
67. Blood culture
68. CT SCAN
69. Blood Glucose
70. ECG
71. Digoxin
72. Aortic valve replacement
73. Pericardiocentesis

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74. IV Thiamine
75. Heart transplant
76. Mid stream urine for microscopy and/or culture
77. Biopsy
78. Surgical exploration
79. Herniotomy
80. Aspiration
81. Reassurance
82. Surgical exploration
83. Emergency Appendicectomy
84. Splenectomy
85. Sigmoid colectomy
86. Heart valve replacement
87. Dental treatment of a cardiac patient
88. Benign intracranial hypertension
89. Giant cell arteritis
90. Sinusitis
91. Cluster headache
92. Migraine headache
93. Blood transfusion
94. Oral analgesia
95. Immobilization
96. Ruptured aorta
97. Oral analgesia
98. Ruptured aorta