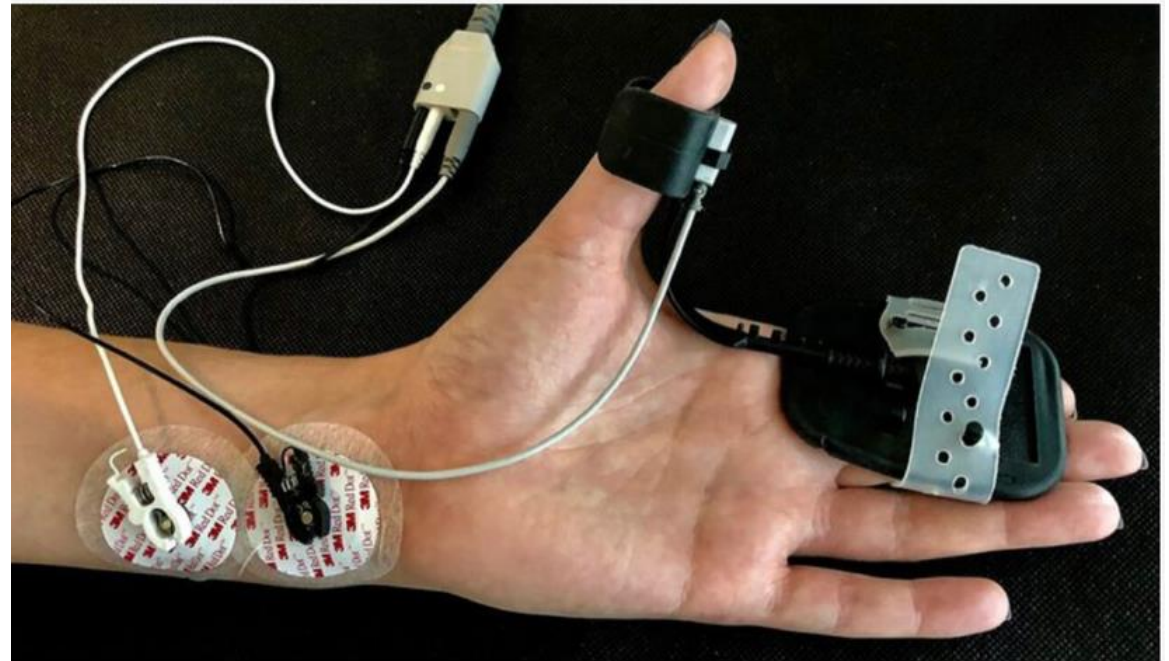


PSM Derma Anesthesia Test 2.0

Dr. Zainab Vora

1. The image given below shows neuromuscular monitoring of the patient after anesthesia. What is the most commonly used nerve for monitoring ?

- A. Ulnar nerve
- B. Median nerve
- C. Radial nerve
- D. Metacarpal nerve



2. A 54-year-old man with hypertension and hyperlipidemia who came to the emergency department with chest pain wants to know if he is having a heart attack. Test A is newly available for diagnosing myocardial infarction (MI). In a recent study, the results of test A (compared to a gold standard diagnosis of MI) were as follows. The patient has a positive result on test A. Assuming his pre-test probability is equivalent to the prevalence of MI in the study, what is the probability that the patient has an MI ?

- A. 40%
- B. 50%
- C. 60%
- D. 80%

| | | Disease | |
|------|---|---------|----|
| | | + | - |
| Test | + | 200 | 50 |
| | - | 120 | 80 |

3. A 28-year-old woman comes to the OPS due to a painful leg ulcer that has been expanding over the last 2 months. She has a history of Crohn disease, which has been well controlled for the past 2 years with azathioprine. The patient works as a gardener. The remainder of the physical examination is normal. Which of the following is the most likely diagnosis ?

- A Ecthyma gangrenosum
- B. Erythema nodosum
- C. Pyoderma gangrenosum
- D. Sporotrichosis

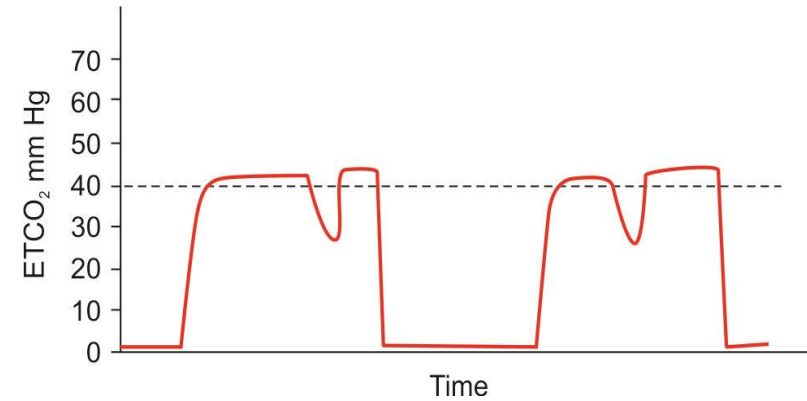


4. Couple has given birth to their first child, the family is entering in which phase:

- A. Formation**
- B. Extension**
- C. Contraction**
- D. Dissolution**

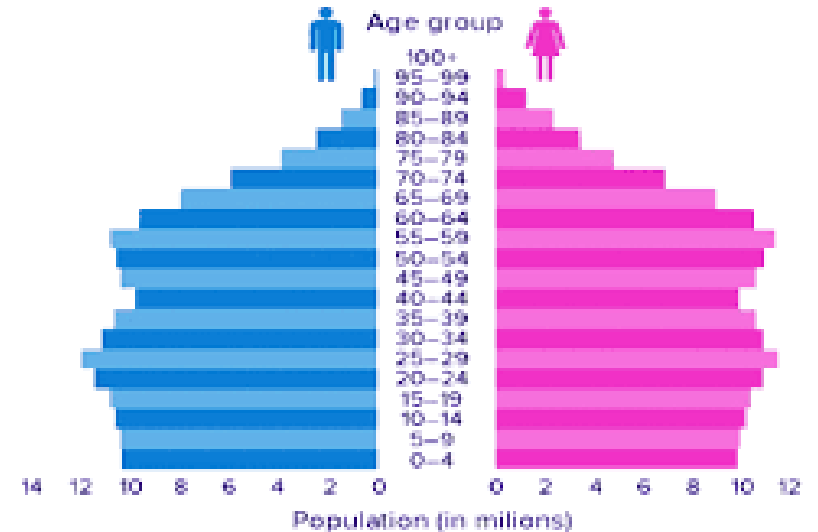
5. A capnograph obtained from an intubated patient undergoing controlled ventilation is given below. Which of the following is a likely cause of the finding seen ?

- A. Esophageal intubation**
- B. Inspiration with cardiac oscillations**
- C. Bronchospasm**
- D. Spontaneous respiratory effort**



6. Correct statement about the image shown below:

- A. The base denotes fertility
- B. Higher height of age pyramid means low life expectancy
- C. If the middle part is bulging means more males compared to females
- D. A broad apex of age pyramid means more working population.



7. A 2-day-old boy is evaluated in the newborn nursery for a diffuse rash that developed this morning and appears on the patient's face, chest, abdomen, and extremities. He has been breastfeeding every 2-3 hours and voiding frequently. The infant was born at 40 weeks gestation to a 30- year-old woman by vaginal delivery, His mother occasionally develops cold sores during stressful events, most recently a year ago. The mother also had chickenpox as a child. Physical examination shows scattered, blanching, erythematous papules and pustules that spare the palms and soles. Which of the following is the most appropriate next step in management of this patient ?

-
- A. Bacterial blood culture and intravenous antibiotics**
 - B. Contact isolation and cessation of breastfeeding**
 - C. Parental reassurance**
 - D. Viral DNA testing and intravenous antiviral therapy**



8. All of the following are true except:

- 1. TBA, ANM, AWW are grassroot, village level workers.**
- 2. JE SA-14-14-2 is a live attenuated vaccine injected subcutaneously at a dose of 0.5ml in the left upper arm**
- 3. MMR is contraindicated in a child with SCID**
- 4. STEPS approach for WHO includes Behavioral, physical and psychological measurements**

A. 1,2,3,4

B. 1,3

C. 2,4

D. 1,4

9. A patient presented with headache, vomiting, and fever. Meningitis was suspected. While performing a lumbar puncture, which is the last structure you will pierce just before entering the lumbar cistern ?

- A. Ligamentum flavum
- B. Dura mater
- C. Arachnoid mater
- D. Pia mater

10. A research group conducted a placebo-controlled clinical trial to assess whether a new drug to treat acute migraine with or without aura in adults is more effective than standard therapy. During the data analysis phase, the researchers decide to set alpha at 0.01 rather than 0.05. Which of the following is the most likely result of this change ?

- A. Any significant findings will be reported with greater confidence
- B. There will be a higher probability of a type I error
- C. There will be a higher probability of finding statistically significant results
- D. The study will have more statistical power

11. The following are types of rapid molecular tests under NTEP except :

- A. LPA
- B. TrueNAAT
- C. CBNAAT
- D. MGIT960

12. Identify the correct statements :

1. Influenza and pneumococcal vaccines are advocated in the elderly.
 2. Strict isolation is advised for Measles, Varicella, Influenza, Nipah virus and CJD
 3. Applied Nutrition program supplying seeds and manure at village level is funded by UNICEF
 4. Neurolathyrism may be prevented by banning crop, Vit C and paraboiling
-

- A. 1,2,3,4
- B. 1,3,4
- C. 2,3
- D. 1,2,3

13. . Identify the correct oxygen delivery devices with the maximum o2 saturation delivered:

A. 90%



B. 40%



C. 51%



D. 30%



14. A group of researchers conduct a study to evaluate the pharmacologic properties of oxfendazole, an anthelmintic agent. As part of the study, increasing oral doses of oxfendazole (0.5 to 60 mg/kg) are administered to 20 healthy volunteers. Data is collected to form a pharmacokinetic profile of the drug and its metabolites, and the incidence of adverse effects is recorded for the various dosages. Which of the following best describes this type of study ?

- A. Preclinical study
- B. Phase I clinical trial
- C. Phase II clinical trial
- D. Phase III clinical trial

15. Identify the Mallampati class of this patient ?

- A. Class II
- B. Class I
- C. Class IV
- D. Class III



16. Under NVBDCP, the drug combination shown below can be given under which dose combination ?

- A. 80mg, 480mg
- B. 25mg, 12.5mg
- C. 120mg, 200mg
- D. 400mg, 50mg



17. 4. A 4-week-old boy is brought to the OPD for his first well-child visit. He has been exclusively breast-fed since birth and has had normal urine and stool output. The patient takes supplemental vitamin D and no other medications. His 4-year-old brother has neurofibromatosis but is otherwise healthy. There is a 5-cm skin lesion with overlying hair on the upper back, as shown below. The remainder of the skin examination is unremarkable. Which of the following is the most likely diagnosis for this patient ?

-
- A. Café au lait macule
 - B. Congenital dermal melanocytosis
 - C. Congenital melanocytic nevus
 - D. Nevus flammeus



18. A 40 years old female posted for Laparoscopic cholecystectomy with history of hypertension and ischemic heart disease. All of the following medications may be continued except -

- A. Atenolol
- B. Lasix
- C. Clopidogrel
- D. Aspirin

19. Which of the following criteria is sufficient to start MDT ?

1. More than five hypopigmented patches
 2. A Hypopigmented patch with sensory loss
 3. Peripheral nerve thickening
 4. Peripheral nerve thickening with sensory loss
 5. Skin biopsy demonstrating bacilli
-

- A. 1,2,3 and 5
- B. 2,4 and 5
- C. 2 and 5
- D. 1,2,3,4,5

20. All are correct statements about Indian health care system except:

- A. One male health assistant is per 5000 population in plain areas and 3000 in hilly areas**
- B. Minimum number of beds in CHC is 30**
- C. Urban PHC caters to a population of 50000, which a metro CHC caters to 5 lakh population**
- D. School health program is managed by PHC**

21. A medical student is conducting a chart review of patients admitted to the local emergency department with acute pancreatitis. He is interested in comparing blood glucose levels between mild and severe cases. Blood glucose levels in patients with severe acute pancreatitis were found to have a strong positively skewed distribution. Which of the following is most likely to be true regarding the data for the severe acute pancreatitis group ?

- A. The mean is equal to the mode**
- B. The mean is greater than the median**
- C. The median is greater than the mean**
- D. The mode is greater than the mean**

22. Match the following Mapleson circuits with the features described:

| | |
|---|-------------------------|
| a. Most effective for spontaneous ventilation | 1. Bain's circuit |
| b. Most effective for controlled ventilation | 2. Magill's circuit |
| c. Used in emergency intubations | 3. Jackson Rees circuit |
| d. Most effective in pediatric population | 4. Type C circuit |

- A. 1-c, 2-a, 3-d, 4-b
- B. 1-b, 2-a, 3-d, 4-c
- C. 1-d, 2-a, 3-b, 4-c
- D. 1-c, 2-a, 3-b, 4-d

23. A group of geneticists plans to conduct a study on the distribution of allelic variants for a particular gene in a rat population. In the sample population of 15 rats, the genotype distribution is 5 AA, 5 Aa, and 5 aa. The phenotypes represented by the various allele combinations do not provide any specific benefit for survival. During the study, rats will be allowed to mate randomly, but no new rats will be introduced to the population. Based on the information provided, are the current allele and genotype frequencies in this population in Hardy-Weinberg equilibrium ?

- A. No, because there is no selective advantage for this gene**
- B. No, because this is an isolated community with no genetic diversity**
- C. No, because this population size is too small**
- D. Yes, because these features contribute to a stable gene pool**

24. All of the following are contraindications in IVRA except:

- A. Bupivacaine
- B. Sickle cell anemia
- C. Scleroderma
- D. Mepivacaine

25. An 11-year-old boy is brought to the OPD by his parents due to a pruritic skin rash for 2 weeks. The rash started on his hands and subsequently spread to the trunk and lower extremities. His mother reports that the patient is constantly scratching the rash and his sleep is now disturbed due to intense pruritus. A cousin who recently visited and shared a room with him had similar symptoms. The patient has had no fever and is up to date with routine vaccinations. Physical examination shows numerous 2- to 3-mm erythematous papules and vesicles with excoriation on his neck, hands, feet, and waistline. His chest and proximal arms and legs are unaffected. Which of the following is the most appropriate initial intervention in management of this patient ?

- A. No intervention necessary**
- B. Oral acyclovir**
- C. Topical hydrocortisone**
- D. Topical permethrin**

26. A 16-month-old child with 8 kg weight is assessed on a growth chart, the child falls in the zone between -2SD and -3SD. What should be do for the management of the child ?

- A. Re-assurance of the mother
- B. Admit to PHC
- C. Home based-nutritional care, growth monitoring
- D. Refer to CHC

27. A 60-year-old patient with a history of severe (chronic obstructive pulmonary disease presents for an elective hernia repair. The patient has a forced expiratory volume in 1 second (FEV1) of 60% predicted and requires supplemental oxygen on activity. Under what ASA-PS classification would you place him ?

- A. ASA 1
- B. ASA 2
- C. ASA 3
- D. ASA 4

28. Officials of a public health department report a higher than normal prevalence of AML among children age 5-12 in their community. They observe that some households in the community are exposed to chemical waste from a nearby factory and worry that exposure to this waste is responsible for the increased prevalence of AML. A case-control study is designed to evaluate the health department officials' claim that exposure to chemical waste is associated with AML in childhood. Which of the following populations should be selected as the control group ?

- A. Children who do not have AML and are exposed to chemical waste**
- B. Children who do not have AML and are not exposed to chemical waste**
- C. Children who do not have AML, regardless of exposure status to chemical waste**
- D. Children who have AML, regardless of exposure status to chemical waste**

29. After using a hair dye a lady developed a skin reaction as shown in the image. Which of the following chemicals among given options is responsible for this condition ?

- A. Pollen
- B. Chromates
- C. Balsam of Peru
- D. Para-Phenylenediamine



30. Which of the following is a conditioning influence for malnutrition ?

- A. Child rearing
- B. Infectious diseases
- C. Food habits
- D. Socioeconomic factors

31. An unconscious patient in ICU is on endotracheal intubation and now needs a tracheostomy. What type of tube should be considered in this situation ?

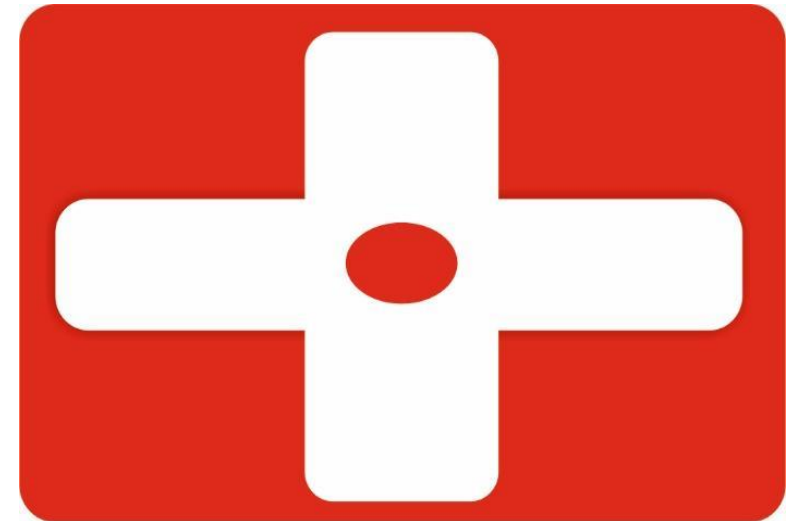
- A. Uncuffed tracheostomy tube**
- B. Cuffed tracheostomy tube**
- C. Metallic tracheostomy tube**
- D. Endotracheal tube**

32. An 18-month-old girl is brought to the OPD by her parents due to a rash and blisters throughout the body that started this morning. Yesterday, the child had a fever that responded well to ibuprofen. This morning, the parents noted erythema and peeling skin around her mouth, axillae, and inguinal areas. Slight focal pressure to the back results in sloughing of the top layer of skin with underlying erythema. The face appears edematous, with perioral crusting. No mucosal lesions are seen. Which of the following is the most likely diagnosis in this patient ?

- A. Bullous impetigo**
- B. Scarlet fever**
- C. Staphylococcal scalded skin syndrome**
- D. Toxic epidermal necrolysis**

33. Identify the logo given in the image below?

- A. Allopathic private clinic practitioner
- B. First aid
- C. Red cross emblem
- D. Suraksha clinic



34. All of the following anaesthetic agents can be used in bronchial asthma except

- A. Halothane
- B. Sevoflurane
- C. Propofol
- D. Thiopentone

35. A 56-year-old man presents with a facial lesion as shown in the image below. On examination, the lesions are painful & the edges are well demarcated & raised. Ear is also showing similar erythematous lesions. This infection is most likely to be caused by which of the following organisms ?

- A. Group B streptococcus
- B. Group A streptococcus
- C. Staphylococcus aureus
- D. Hemophilus influenza type b



36. Which of the following statement is false regarding Rabies vaccination and immunoglobulin ?

- 1. Most of immunoglobulin is given in deltoid as im injection**
- 2. HRIG is given at dose of 20 IU/kg**
- 3. Anti-rabies vaccine given as-d0,3,7,14,28 as intramuscular injection**
- 4. Do immediate proper wound suturing**

-
- A) 1,2,3,4**
 - B) 2,3,4**
 - C) 2,3**
 - D) 1,4**

37. A 7-year-old boy is brought to the OPD due to hair loss. For the last few weeks, he has had worsening hair loss in patches on the scalp. There is no associated pain or itching. Medical history is unremarkable, and the patient's height and weight have consistently tracked at around the 30th percentile for age. Which of the following is the most likely cause of this patient's hair loss ?

- A. Alopecia areata
- B. Discoid lupus erythematosus
- C. Tinea capitis
- D. Trichotillomania



38. Which of the following is an absolute contraindication to the below device ?

- A. Past H/o PID
- B. Past H/o ectopic pregnancy
- C. Sub serous fibroid
- D. Unexplained vaginal bleeding



39. Identify the Instrument shown below ?

- A. LMA ProSeal
- B. LMA Supreme
- C. LMA classic
- D. I-GEL LMA



40. Which of the following diseases is endogenously transmitted disease in India ?

- A. Hendra virus
- B. Nipah virus
- C. Crimean Congo hemorrhagic fever
- D. Yellow fever

41. Which of the following statement is true about Oxidation Pond ?

- A. Aerobic during day time and anaerobic during night time
- B. Anaerobic during day time and aerobic during night time
- C. Anaerobic during day time and night time
- D. Aerobic during day time and night time

42. A 16-year-old boy comes to the OPD due to a skin condition. For the last 3 years, he has had small "pimples" on the posterior surface of her upper arms. The lesions are associated with mild pruritus during the winter months but are otherwise asymptomatic, and the patient is primarily concerned due to their appearance when he wears short-sleeved tops. Which of the following is the most likely diagnosis of this patient's skin condition ?

-
- A. Folliculitis
 - B. Keratosis pilaris
 - C. Miliaria
 - D. Pseudofolliculitis



43. What proportion of GNP has WHO proposed to spend on healthcare sector ?

- A. 2 %
- B. 4 %
- C. 2.5 %
- D. 5 %

44. Identify the incorrect pair

1. Etomidate-Does not cause myocardial suppression
 2. Propofol-Maximum pain on injection
 3. Ketamine- Post-op Delirium
 4. Thiopentone-Best for porphyria
-

- A. 2,3,4
- B. 1,2,3,4
- C. 3,4
- D. 4

45. A sexually active male presented with warts on his penis as shown below. Similar looking lesions were present near the anal canal of his wife. What is the most likely diagnosis?

- A. Condyloma lata
- B. Condyloma acuminata
- C. Bowen disease
- D. Hemorrhoids



46. in a patient with HIV, which of following is correct statement for prophylaxis of opportunistic infections ?

- A. Prophylaxis for Pneumocystis carinii Pneumonia (PCP) is indicated when CD4 count is $<500/\mu\text{l}$
- B. Stop prophylaxis for PCP if CD4 count is $>350/\mu\text{l}$ for consecutive 6 months
- C. Prophylaxis for MAC is indicated when CD4 count is $<50/\mu\text{l}$
- D. Prophylaxis for Cryptococcus is indicated when CD4 count is $<150/\mu\text{l}$

47. 17-year-old girl comes to the OPD due to a rash. She joined the high school cross country running team 2 months ago and has had a progressive itchy rash on her feet since that time. The patient tried replacing her running shoes and socks, but the symptoms continued. Examination findings are shown in the image below. Which of the following is the most appropriate treatment for this patient's condition ?

- A. Cephalexin capsules
- B. Miconazole cream
- C. Nystatin powder
- D. Permethrin cream



48. You are working in a primary health center (PHC) situated in a high seismic zone. Which of the following will you do as part of preparedness for an emergency?

- 1. Disaster preparedness by making sure all financial and other resources are available**
- 2. Increase public awareness through campaigns and loudspeakers**
- 3. Conduct a simulation for the disaster and assess the response**
- 4. Follow instructions given over the phone or radio by higher officials**

-
- A. 1, 2, 3, 4**
 - B. 2,3,4**
 - C. 1,2,3**
 - D. 1, 2. 4**

49. A 29 years old male patient with RTA was brought to emergency. On examination his airway seemed obstructed. What is the next intervention to be done in this patient ?

- A. Laryngoscopy and intubation**
- B. Head tilt and chin lift**
- C. Jaw thrust**
- D. Recovery position**

50. A soldier presents with fever, rash not involving the palms and soles and myalgia. There is also history of louse infestation in the soldier barracks. The probable causative organism is

- A. *R. prowazekii*
- B. *R. conori*
- C. *R. typhi*
- D. *R. akari*

51. Which of the following is part of the concurrent list of the Indian Constitution ?

- A. Adulteration of food**
- B. Fishing and fisheries beyond territorial waters**
- C. Regulating labor in mines**
- D. Public health and sanitation**

52. An 8-year-old previously healthy girl is brought to the OPD by her mother due to hair loss on the scalp. Several weeks ago, the mother noticed the patch of hair loss, which has progressively enlarged. The mother also says that the girl frequently scratches at the area. The child recently changed to a different school and has been anxious about new teachers and friends. Skin examination findings are shown in the image below. There are several enlarged, tender, occipital and posterior auricular lymph nodes. Which of the following is the most likely cause of this patient's condition?

- A. Dermatophyte infection
- B. Pressure-induced alopecia
- C. Repeated hair plucking
- D. Seborrheic dermatitis



53. Identify the correct statements about lower extent of the following structures:

1. Subarachnoid space-Lower border of S2
2. Filum terminale-Coccyx
3. Spinal cords in infants-Upper border of L3
4. Adult spinal cord-Lower border of L1

-
- A. 1,2,3,4
 - B. 1,2
 - C. 1,2,3
 - D. 1,2,4

54. Researchers are interested in the association between colorectal carcinoma and nonsteroidal anti-inflammatory drug use. They first interview a group of patients with biopsy-proven colorectal carcinoma and then interview a group consisting of the patients' neighbors who are of similar age and race. The analysis is based on comparing the results of pairs of individuals who have similar characteristics. This design technique best helps address which of the following potential problems with this study ?

- A. Confounding**
- B. Observer bias**
- C. Recall bias**
- D. Selection bias**

55. In Sustainable Development Goal 3, the target 3.1 aims to reduce the Maternal Mortality Ratio by 2030 to (per 1 lakh live births):

- A. <70
- B. <100
- C. <50
- D. <130

56. A 65-year-old man comes to the OPD due to a nonhealing ulcer on the left upper extremity. For the last 2 months, he has had an enlarging ulcerated lesion, with intermittent bleeding and itching. In the last 3 weeks, the patient has also noted local numbness, paraesthesia, and burning pain. He does not recall any injury prior to the onset of symptoms. The patient has a history of renal transplantation and takes an appropriate immunosuppressive regimen. Which of the following is the most likely diagnosis?

- A. Basal cell carcinoma
- B. Kaposi sarcoma
- C. Malignant melanoma
- D. Squamous cell carcinoma



57. A 2 years old child was playing with marbles and suddenly went limp and became unresponsive. Mother of the child was beside and saw him collapse. What is the first step to be done by mother in the situation?

- A. Call emergency medical services
- B. Feel for pulse and assess the breathing
- C. Back thrust
- D. Heimlich manoeuvre

58. A 10-year-old school going child presents to OPD and is never immunized. Which of the following vaccines will be given as per the national immunization program ?

- A. BCG
- B. MMR
- C. Td
- D. DPT

59. The best indicators for routine monitoring of air pollution are:

- A. Sulfur dioxide, smoke, and suspended particles**
- B. Sulfur dioxide, lead, and particulate matter**
- C. Sulfur dioxide and carbon monoxide**
- D. Carbon monoxide and hydrogen sulfide**

60. A farmer presented to the outpatient department with a non-tender, non-mobile, non-compressible firm swelling over his palm as shown in the image. A few months back he got injured with a thorn. What is the presentation given below ?

- A. Ameloblastoma
- B. Embryogenic dermoid
- C. Sequestration dermoid
- D. Implantation dermoid



61. A 23-year-old woman comes to the OPD due to hair loss. Two weeks ago, she suddenly developed loss of large numbers of hair fibers when washing or brushing her hair. The patient has had 2 pregnancies; the first led to a spontaneous abortion at 13 weeks, and the second led to a normal term vaginal delivery 4 months ago. She subsequently experienced severe postpartum unipolar major depression requiring psychiatric hospitalization. Current medications include fluoxetine and olanzapine. Examination shows diffuse hair loss with no erythema or scaling in the scalp. When tracts of hair are pulled firmly, >20% of fibers are pulled out. Which of the following is the most likely diagnosis for this patient's hair loss ?

- A. Alopecia areata
- B. Androgenetic alopecia
- C. Anagen effluvium
- D. Telogen effluvium

62. Arrange following parts of Anesthesia machine according to increasing pressure (from low to high):

1. Vaporizer mounting devices
 2. Hanger yoke assembly
 3. Flow meter assembly
 4. Pipelines
-

- A) 1-2-3-4
- B) 1-3-4-2
- C) 2-3-4-1
- D) 2-4-3-1

63. A 45-year-old truck driver presented with a lesion shown in the image below with a history of multiple sex partners. What is the most likely diagnosis:

- A. Secondary syphilis**
- B. HSV**
- C. Disseminated gonorrhea**
- D. Psoriasis**



64. Which of the following options are correct ?

1. VVM has a chemical indicator in the circle, which changes colour
 2. VVM gives an idea for number of days for expiry of vaccine
 3. It indicates whether the vaccine has been exposed to a combination of excessive heat over time and whether it is likely to have been damaged
 4. It tells about the efficacy of the vaccine
-

- A. 1,2,3,4
- B. 3,4
- C. 3
- D. 2,4

65. What is the dosage of vitamin A given for a 2-year-old baby with keratomalacia ?

- A. 2,00,000 IU immediately, followed by same dose after 24 hours
- B. 1,00,000 IU immediately, followed by the same dose after 1 week
- C. 1,00,000 IU immediately, followed by the same dose after 24 hours and after a week
- D. 2,00,000 IU immediately, followed by the same dose 24 hours later and after 2 weeks

66. A group of 30 trekkers have gone for a campfire for a week. Best method of disposal of the waste generated is :

- A) Dumping
- B) Burial
- C) Controlled tipping
- D) Manure pit

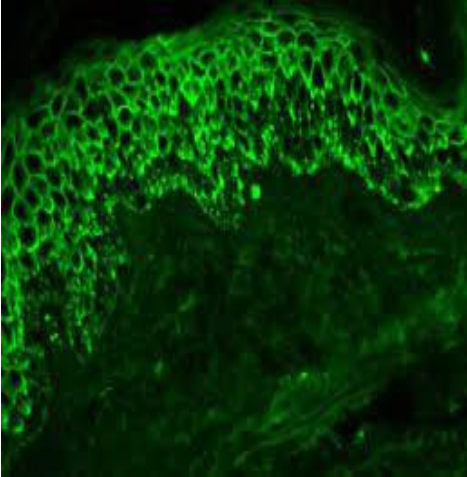
67. Identify the correct statements:

1. Most common mode for absorption of lead in industries is via skin
 2. 1 acre land is needed to fill a trench for sewage disposal of 10000 population
 3. Social pathology is the study of a disease and social conditions
 4. MMU are run by external agency and supplies come from the external agency too
-

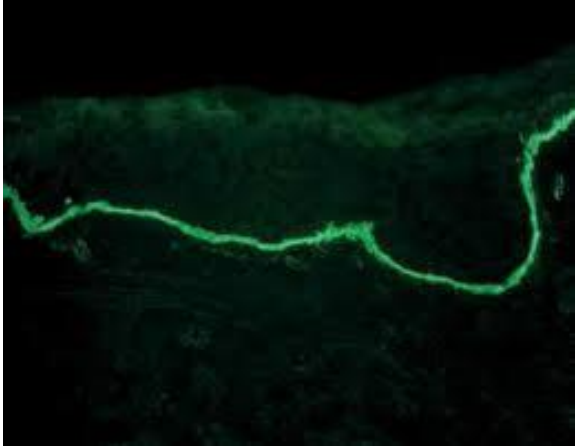
- A. 1,2,3,4
- B. 1,3
- C. 2,3
- D. 1,4

68. A 55-year-old man comes to the OPD due to skin sores. He developed painful ulcerations in his mouth 3 weeks ago, followed by diffuse onset of large, painful blisters affecting the trunk and extremities. On examination, the oral mucosa shows several erosions and ulcerations. The skin shows scattered, large erosions and a few flaccid bulla. Light rubbing of uninvolved skin causes easy separation of the epidermis. Punch biopsy of the skin is performed. Which of the following would be the expected findings ?

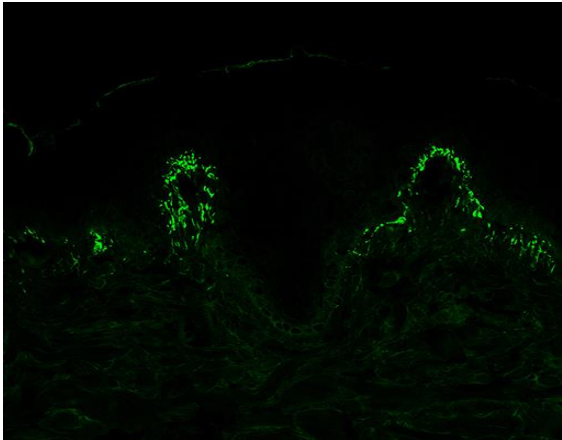
A. IgG



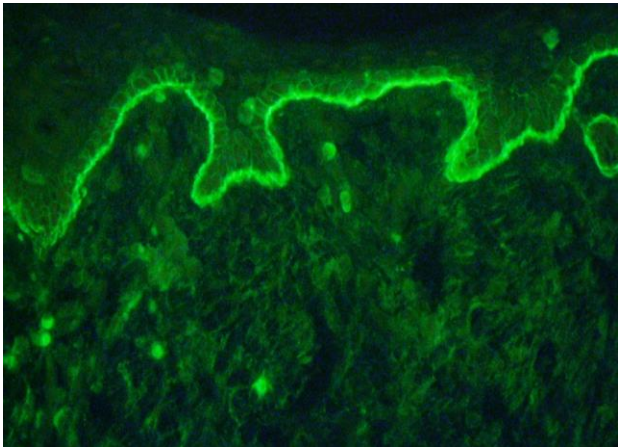
B. IgA



C. IgA



D. IgG



69. Match the following wastes with the disposal :

A- Broken vaccine glass vial

B- Cotton gauze

C- Gloves paper cover

D- Blood bag

1-Yellow

2-Red

3-Blue

4-Black

5-White

-
- A. A-1, B-1,C-2,D-1
- B. A-3, B-1,C-4,D-1
- C. A-1, B-2,C-2,D-1
- D. A-1, B-2,C-4,D-1

70. A 28-year-old male admitted with the history of road traffic accident and sustained injury to the right upper limb. This patient was planned for open reduction and internal fixation with plating for both bone-fracture right forearm under brachial plexus block. Inj. Lignocaine with adrenaline was used to decrease the bleeding and systemic toxicity. The maximum dose of lignocaine with adrenaline could be used for this patient to obtain adequate blockade is-

- A) 7 mg/kg Body weight
- B) 5 mg/kg Body weight
- C) 2 mg/kg Body weight
- D) 3 mg/kg Body weight

71. A 30-year-old female came with chief complaints of vaginal discharge with lower abdominal pain and cervical motion tenderness. which color kit will you prescribe her ?

- A. Grey kit (1)
- B. Red kit (5)
- C. Yellow kit (6)
- D. Black kit (7)

72. A 24-year-old woman comes to the OPD due to skin lesions on her trunk and proximal upper limbs. The patient noticed the lesions after returning from a summer vacation at a Goa beach a week ago. During the vacation, she had sun exposure on several occasions without prior application of sunscreen. The lesions are mildly itchy but not painful. Medical history is notable for hypothyroidism, for which she takes levothyroxine. Which of the following is the most likely cause of this patient's current condition?

- A. Autoimmune melanocyte injury
- B. Dermatophyte skin infection
- C. *Malassezia globosa* infection
- D. Ultraviolet skin damage



73. Which of the following does not cause hardness of water ?

- A. Calcium carbonate
- B. Calcium sulphate
- C. Calcium bicarbonate
- D. Magnesium bicarbonate

74. A patient who was being given intercostal nerve block for rib fracture suddenly collapsed while the block was being performed. He is diagnosed to have local anesthetic systemic toxicity. What is the treatment of this condition ?

- A. 20% intralipid emulsion
- B. 15% intralipid emulsion
- C. 35% intralipid emulsion
- D. 100% intralipid emulsion

75. Which article of the Indian Constitution confers Right to Life to the citizens of India ?

- A. Article 11
- B. Article 21
- C. Article 23
- D. Article 25

76. 32-year-old woman comes to the OPD due to a "mole." The lesion is located on her back, and she believes it has been present for years but does not recall when it first appeared. The patient thinks it might be enlarging and is concerned due to a family history of skin cancer. The lesion is not painful and does not itch or bleed. Skin examination shows a few scattered benign-appearing nevi and a single prominent lesion at her right scapular area. Which of the following additional skin examination findings would be most concerning for malignancy ?

- A. Central keratin plug**
- B. Multicolored lesion**
- C. Peripheral scaling**
- D. "Stuck-on" appearance**

77. All of the following are contraindications of neuraxial blockade except:

- A) Spinal deformity
- B) Patient refusal
- C) Local infection
- D) Papilledema

78. Which of the following is true about Factories Act ?

- A. Children under 14 years of age must not be employed in factories
- B. A child of 16 years can be employed only between 6 AM and 8 PM
- C. The maximum working hours for an adult is 72 hours per week
- D. A child of 16 years can work till 5 hours per day

79. A child learning the steps of handwashing. This is known as what kind of learning:

- A. Cognitive
- B. Psychomotor
- C. Affective
- D. Imitation

80. A 19-year-old woman comes to the OPD for evaluation of chronic acne. Over the last 6 months, the patient has tried several over-the-counter acne treatments without improvement. She has a history of attention-deficit hyperactivity disorder and mild intellectual disability. Her mother has a seizure disorder, and her maternal grandmother died of kidney failure. Vital signs are within normal limits. Facial examination findings are shown below. Which of the following is the most likely underlying cause of this patient's condition ?

- A. Fabry disease
- B. Neurofibromatosis type 1
- C. Tuberous sclerosis
- D. Von Hippel-Lindau disease



81. Identify the correct statements:

1. Best site for measuring the core temperature intra-operatively is lower 1/3 of esophagus
 2. Titanium and Aluminium cylinders are MRI compatible
 3. T10 level anesthesia is adequate for LSCS
 4. Sch can cause hyperkalemia, tachycardia, raised ICP and raised intra-gastric pressure
-

- A. 1,2,3,4
- B. 1,2
- C. 3,4
- D. 2,3

82. All of the following are true about the School Health Program except:

- A) Minimum area of 10 sq ft per child should be allocated
- B) Less than 40 students per classroom
- C) Plus type desk
- D) 1 urinal per 60 students

83. Identify the correct statements

- 1.Lowest MAC=Highest potency
 - 2.Min MAC-N₂o, Max MAC-Methoxyflurane
 - 3.Blood gas partition coefficient (BGC) directly proportional to the speed of induction
 - 4.Lowest BGC-Xenon, Highest BGC-Methoxyflurane
-

- A. 1,2,3,4
- B. 1,3
- C. 2,4
- D. 1,4

84. A child with a history of night-blindness presented to you with the following findings. What is the diagnosis ?

- A. Phrynoderma
- B. Keratoses pilaris
- C. Darier disease
- D. Follicular eczema



85. A researcher is interested in studying whether there is an association between neural tube defects and use of acetaminophen during the first 3 months of pregnancy. He randomly chooses a group of women who have just delivered babies with neural tube defects, and a second group of women who delivered apparently healthy babies. These 2 groups were then asked about their use of acetaminophen during the first 3 months of pregnancy. Which of the following measures of association are the investigators most likely to report ?

- A. Odds ratio
- B. Prevalence
- C. Incidence
- D. Relative risk

86. Which of the following is the most peripheral centre under the Revised National Tuberculosis Control Programme organization structure ?

- A. District TB centre
- B. Intermediate Reference Laboratory
- C. Tuberculosis Unit
- D. Designated Microscopy Centre

87. On world health day, 4 senior faculty from various departments sit in front of audience to talk about a topic. The director of hospital welcome audience and introduces everyone. There is no specific agenda, no order of speaking, and no set speech. In the end, audience is invited to take part. Identify this method of communication:

- A. Panel discussion**
- B. Symposium**
- C. Group discussion**
- D. Seminar**

88. Which of the following is the sensitive indicator to assess the availability, utilization, and effectiveness of healthcare in a community ?

- A. Infant mortality rate
- B. Maternal mortality rate
- C. Immunization coverage
- D. Disability-adjusted life years

89 A young male came to the hospital with a clean-cut wound without any bleeding. The patient received a full course of tetanus vaccination 10 years ago. What is the best management for this patient ?

- A. Human tetanus immunoglobulin and full course of vaccine
- B. Human tetanus immunoglobulin only
- C. Single-dose tetanus toxoid
- D. Full course tetanus toxoid

90. A 26-year-old man comes to the OPD due to upper and lower limb skin lesions that have been present for the past week. The lesions started as small, red papules that gradually enlarged but are not painful or pruritic. The patient had similar lesions several months ago and was told that the antibiotic prescribed for a dental infection could be the cause. The lesions spontaneously resolved in about 2 weeks. There is no mucous membrane involvement. Which of the following is most likely related to this patient's skin condition ?

- A. Contact with an individual having similar lesions**
- B. Occupational skin trauma from vegetation**
- C. Recent bite from an Ixodes scapularis tick**
- D. Recurrent episodes of painful genital ulcers**



91. Match the following wastes with the level of prevention

A- Pap smear

B- Handwashing

C- Limiting fat intake

D-Spectacles

1-Primordial

2-Primary

3-Secondary

4-Tertiary

A) A-2, B-1,C-2,D-3

B) A-3, B-2,C-2,D-4

C) A-2, B-1,C-1,D-3

D) A-1, B-2,C-1,D-4

92. Which of the following drugs used as nail lacquer belongs to morpholines ?

- A. Amorolfine
- B. Oxiconazole
- C. Ciclopirox olamine
- D. Tioconazole

93. A pregnant woman comes for first antenatal visit at 28 weeks of pregnancy. She has a 2-year-old child. Which Tetanus vaccination will you administer to her ?

- A. Td vaccination 2 doses
- B. TT booster dose
- C. Td booster dose
- D. TT vaccination 2 doses

94. How to measure the size of an oropharyngeal airway

- A) Measure the length from angle of mouth to angle of mandible
- B) Measure the length from tip of nose to ear lobule
- C) Measure the length from mid of lip to ear lobule
- D) Measure the length from ala of nose to ear lobule

95. Research is being conducted to find the association between aniline dye exposure and bladder cancer in workers who have worked in the industry for >20 years. Two groups were formed: one directly involved with dye handling and the other group consisting of office clerks not directly exposed to the dye. Years of occupation were noted from records. Then Bladder cancer cases were identified from both the groups in the current time. What type of study is being performed ?

- A) Measure the length from angle of mouth to angle of mandible
- B) Measure the length from tip of nose to ear lobule
- C) Measure the length from mid of lip to ear lobule
- D) Measure the length from ala of nose to ear lobule

96. A 35-year-old man comes to the OPD due to skin lesions on his knees for the past several months. The lesions began as small papules and gradually increased in size but are not painful or itchy. Which of the following is the most appropriate management for this patient's skin lesions ?

- A. Allergen avoidance
- B. Gluten-free diet
- C. Topical antifungal
- D. Topical glucocorticoid



97. In a reference sample of hundreds of healthy subjects, the laboratory reference range for a novel marker of cardiac injury is 0.04-0.08 U/mL at the standard 95% level of probability. The marker has very high sensitivity and specificity for myocardial tissue. The clinical cardiology team would like to use a 99.7% reference range to assess patients who come to the emergency department with chest pain and have a high pretest probability of cardiac ischemia. Assuming a normal distribution with a mean of 0.06 U/mL, which of the following most closely approximates the corresponding reference range ?

- A. 0.03 to 0.09**
- B. 0.035 to 0.085**
- C. 0.045 to 0.075**
- D. 0.05 to 0.07**

98. Which of the following is a primary skin lesion ?

- A. Crust
- B. Atrophy
- C. Purpura
- D. Induration

99. Mr. Ramesh, who is 35-year-old, works in a factory and lives with his pregnant wife and a child in an apartment. His younger brother and his wife come to visit him for one month. You are conducting a family survey in the area and will classify this family as:

- A. Nuclear family**
- B. 3 generation family**
- C. Extended family**
- D. Joint family**

100. Which of the following is not weaning mode of ventilation:

- A) CMV
- B) SIMV
- C) PSV
- D) CPAP

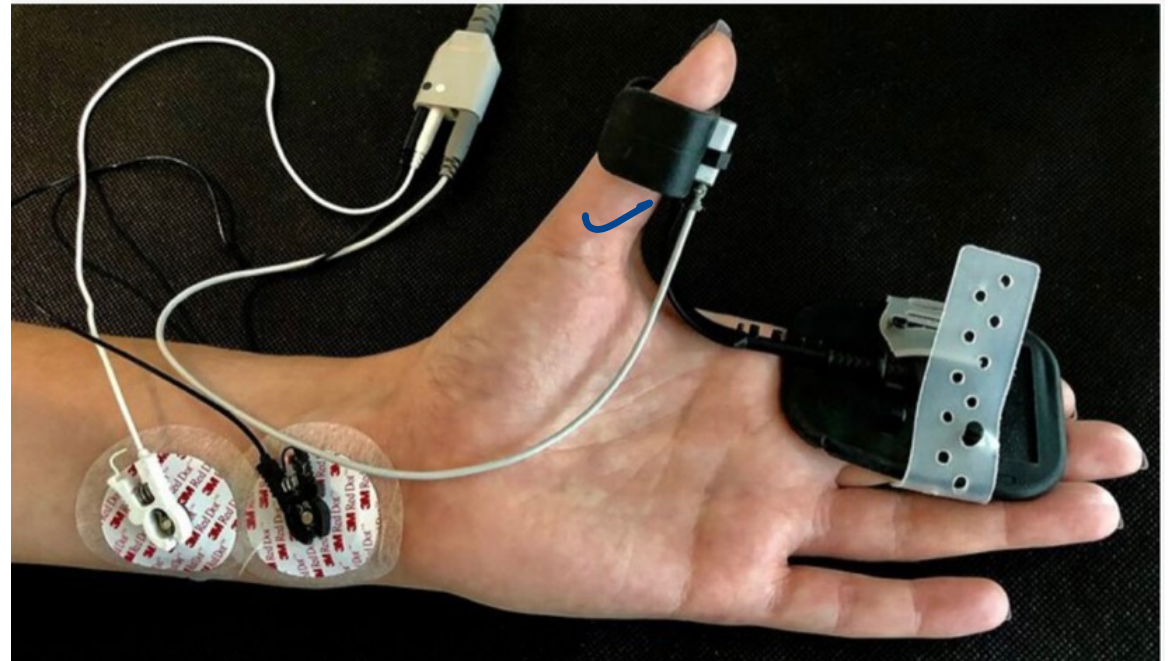
Thank You!

PSM Derma Anesthesia Test 2.0

Dr. Zainab Vora

1. The image given below shows neuromuscular monitoring of the patient after anesthesia. What is the most commonly used nerve for monitoring ?

- ✓ A. Ulnar nerve *-add pollicis*
- B. Median nerve
- C. Radial nerve
- D. Metacarpal nerve



2. A 54-year-old man with hypertension and hyperlipidemia who came to the emergency department with chest pain wants to know if he is having a heart attack. Test A is newly available for diagnosing myocardial infarction (MI). In a recent study, the results of test A (compared to a gold standard diagnosis of MI) were as follows. The patient has a positive result on test A. Assuming his pre-test probability is equivalent to the prevalence of MI in the study, what is the probability that the patient has an MI?

Prevalance

PPV

- A. 40%
- B. 50%
- C. 60%
- D. 80%

| | | Disease | |
|------|---|---------|----|
| | | + | - |
| Test | + | 200 | 50 |
| | - | 120 | 80 |

Handwritten annotations: A blue circle around the '+' in the Disease header. A blue circle around the '+' in the Test header. A blue circle around the '200' cell. A blue circle around the '50' cell. A blue circle around the 'PPV' text. A blue arrow points from the '200' cell to the fraction $\frac{200}{250}$. A blue arrow points from the '50' cell to the denominator '250'. Green arrows point from the '200' and '50' cells to the right, and from the '120' and '80' cells to the bottom.

3. A 28-year-old woman comes to the OPS due to a painful leg ulcer that has been expanding over the last 2 months. She has a history of Crohn disease, which has been well controlled for the past 2 years with azathioprine. The patient works as a gardener. The remainder of the physical examination is normal. Which of the following is the most likely diagnosis ?

- A Ecthyma gangrenosum - (ic) multifocal
- B. Erythema nodosum - shin
- C. Pyoderma gangrenosum
- D. Sporotrichosis xx Linear



4. Couple has given birth to their first child, the family is entering in which phase:

A. Formation

~~B. Extension~~

C. Contraction ~~x~~

D. Dissolution ~~x~~

• Formⁿ

• Extension

• Complete extensions



Contraction — 1st child leaves house

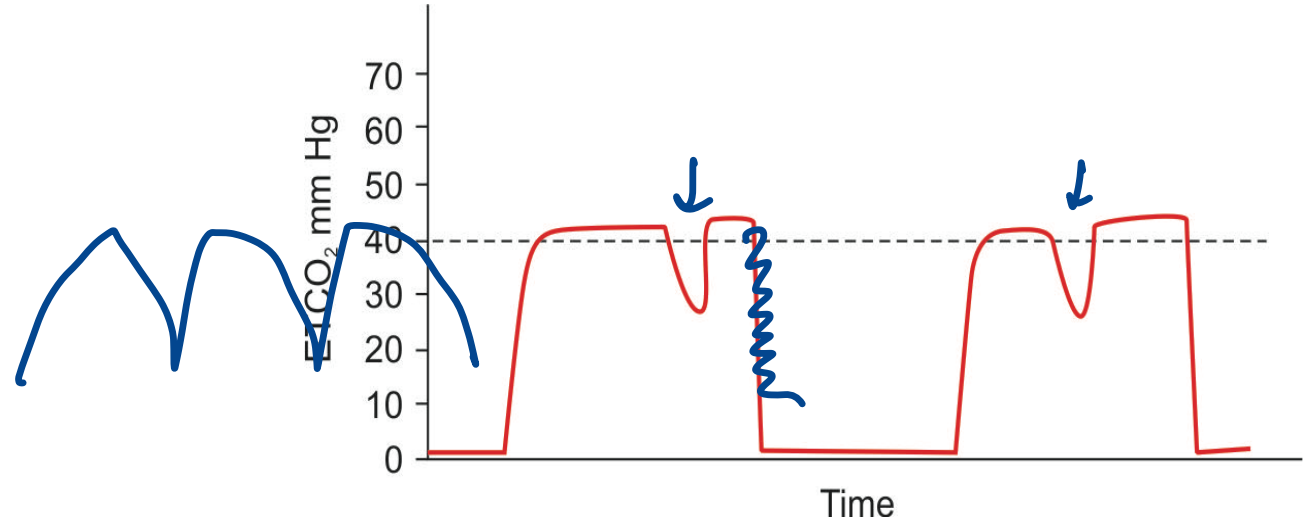
• Complete Contrⁿ

• Dissolⁿ

• Extinction

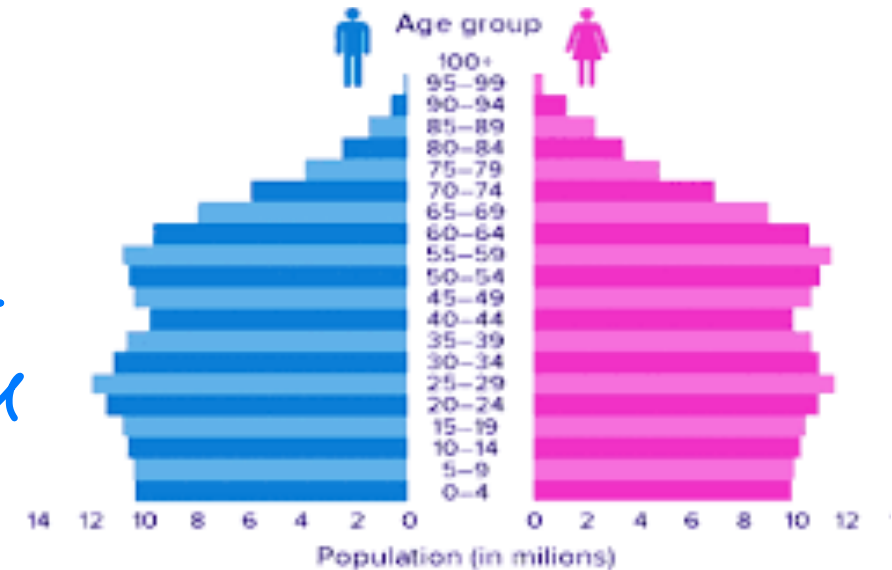
5. A capnograph obtained from an intubated patient undergoing controlled ventilation is given below. Which of the following is a likely cause of the finding seen ?

- A. Esophageal intubation *Not*
- B. Inspiration with cardiac oscillations
- C. Bronchospasm
- D. Spontaneous respiratory effort



6. Correct statement about the image shown below:

- A. The base denotes fertility ✓
- B. Higher height of age pyramid means low life expectancy ✗
- C. If the middle part is bulging means more males compared to females ↑ middle age
- D. A broad apex of age pyramid means more working population ✗✗



7. A 2-day-old boy is evaluated in the newborn nursery for a diffuse rash that developed this morning and appears on the patient's face, chest, abdomen, and extremities. He has been breastfeeding every 2-3 hours and voiding frequently. The infant was born at 40 weeks gestation to a 30-year-old woman by vaginal delivery. His mother occasionally develops cold sores during stressful events, most recently a year ago. The mother also had chickenpox as a child. Physical examination shows scattered, blanching, erythematous papules and pustules that spare the palms and soles. Which of the following is the most appropriate next step in management of this patient?

HSV-1

HSV-2

- A Bacterial blood culture and intravenous antibiotics ✗
- B. Contact isolation and cessation of breastfeeding ✗
- C. Parental reassurance ✓
- D. Viral DNA testing and intravenous antiviral therapy ✗✗



8. All of the following are true except:

1. TBA, ANM, AWW are grassroot, village level workers. (F) ✓
2. JE SA-14-14-2 is a live attenuated vaccine injected subcutaneously at a dose of 0.5ml in the left upper arm (T)
3. MMR is contraindicated in a child with SCID (F)
4. STEPS approach for WHO includes Behavioral, physical and psychological measurements (Biochemical)

A. 1,2,3,4

B. 1,3

~~C. 2,4~~

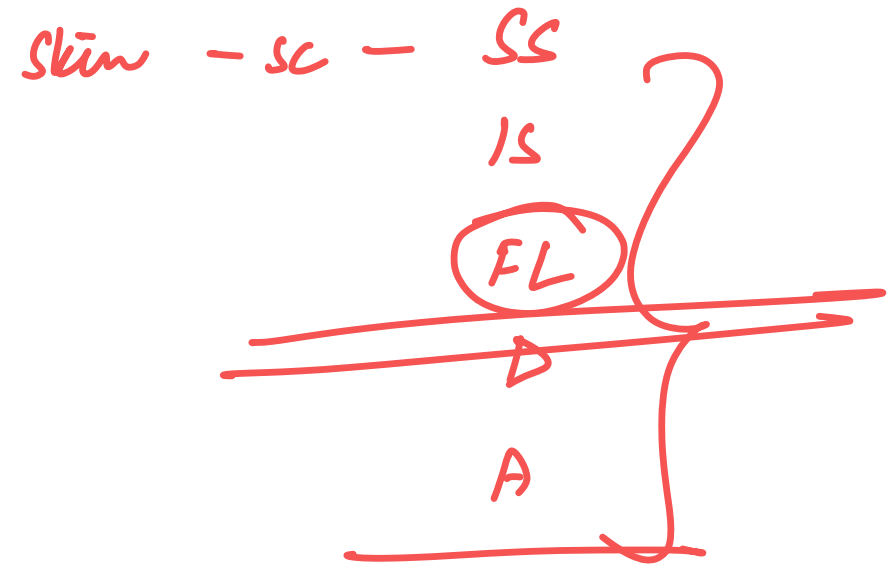
D. 1,4

| Rt | Lt |
|------------------|-----------------|
| IPV - id - 0.1 | BCG - id - 0.1 |
| MMR - SC - 0.5ml | JE - SC - 0.5ml |

killed vaccine
↳ mmr

9. A patient presented with headache, vomiting, and fever. Meningitis was suspected. While performing a lumbar puncture, which is the last structure you will pierce just before entering the lumbar cistern ?

- A. Ligamentum flavum
- B. Dura mater
- C. Arachnoid mater
- D. Pia mater ~~XX~~



10. A research group conducted a placebo-controlled clinical trial to assess whether a new drug to treat acute migraine with or without aura in adults is more effective than standard therapy. During the data analysis phase, the researchers decide to set alpha at 0.01 rather than 0.05. Which of the following is the most likely result of this change?

$P < 0.05$

$< 5\%$

~~A. Any significant findings will be reported with greater confidence~~

B. There will be a higher probability of a type I error ~~(X)~~

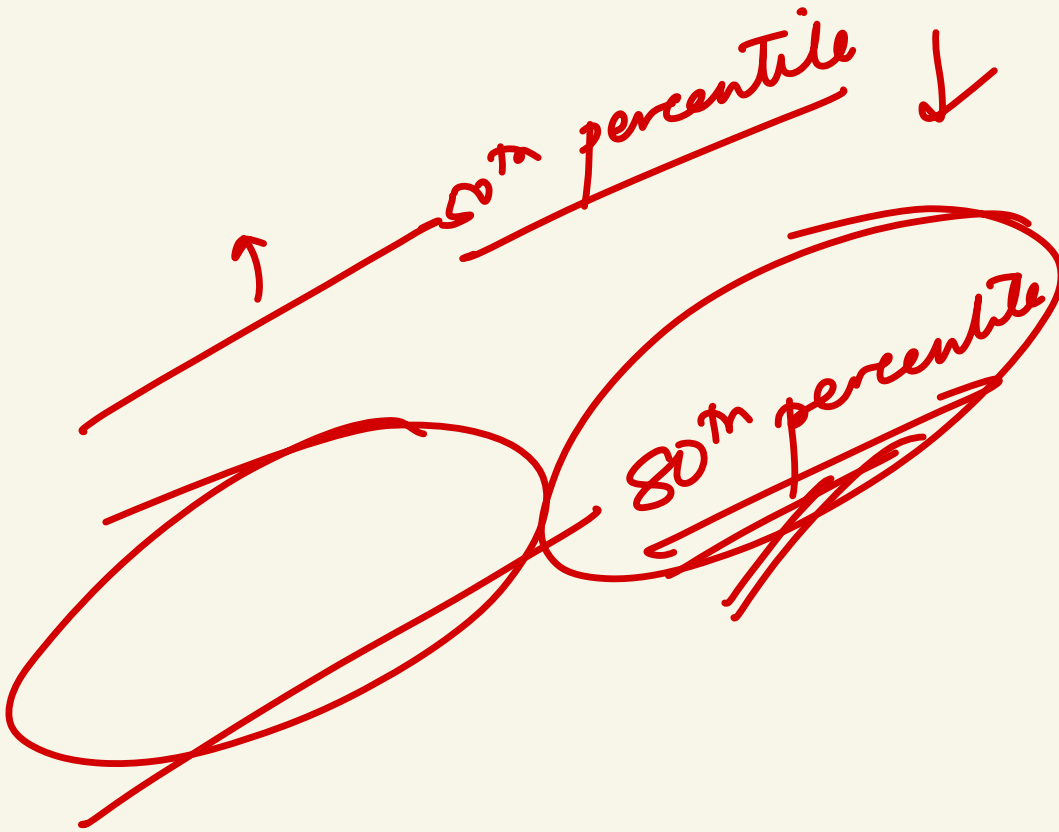
C. There will be a higher probability of finding statistically significant results

D. The study will have more statistical power

$P < 1\%$

$1 - \beta$

\downarrow ppc



11. The following are types of rapid molecular tests under NTEP except :

- A. LPA
- B. TrueNAAT
- C. CBNAAT
- D. MGIT960 - culture

12. Identify the correct statements :

1. Influenza and pneumococcal vaccines are advocated in the elderly. (T)

2. Strict isolation is advised for Measles, Varicella, COVID-19 → aerobine
Influenza, Nipah virus and CJD (X) — duplet (X) → prion

3. Applied Nutrition program supplying seeds and manure at village level is funded by UNICEF (T)

4. Neurolathyrism may be prevented by banning crop, Vit C and paraboiling (T)

Khesari dal

A. 1,2,3,4

~~B. 1,3,4~~

C. 2,3

D. 1,2,3

13. . Identify the correct oxygen delivery devices with the maximum o2 saturation delivered:

40 - 60 - 60

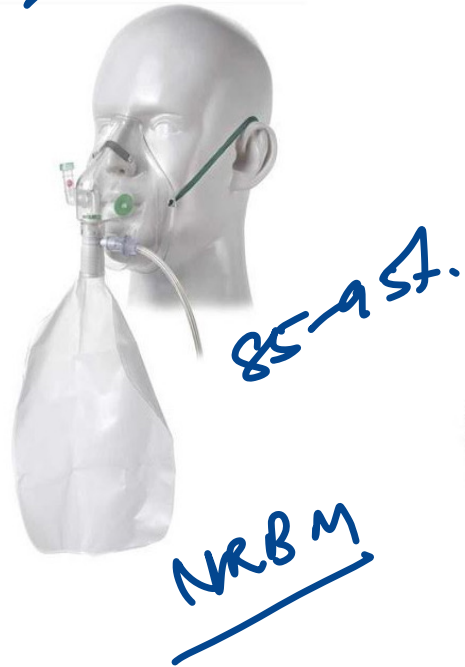
85 - 100 - 100

A. 90%

B. 40%

C. 51%

D. 30%



14. A group of researchers conduct a study to evaluate the pharmacologic properties of oxfendazole, an anthelmintic agent. As part of the study, increasing oral doses of oxfendazole (0.5 to 60 mg/kg) are administered to 20 healthy volunteers. Data is collected to form a pharmacokinetic profile of the drug and its metabolites, and the incidence of adverse effects is recorded for the various dosages. Which of the following best describes this type of study?

A. Preclinical study

B. Phase I clinical trial

C. Phase II clinical trial

D. Phase III clinical trial

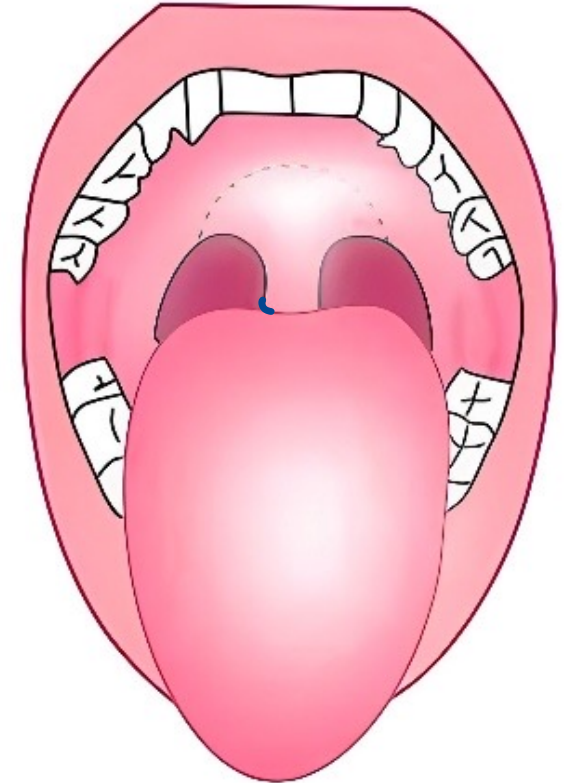
animals

pts

SWIM

15. Identify the Mallampati class of this patient ?

- A. Class II
- B. Class I
- C. Class IV
- D. Class III

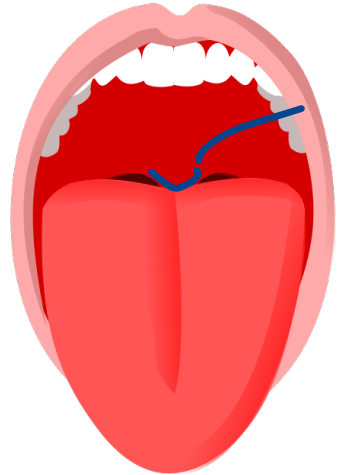




I



II



III

only



IV

only HP

16. Under NVBDCP, the drug combination shown below can be given under which dose combination ?

- A. 80mg, 480mg
- B. 25mg, 12.5mg ✗
- C. 120mg, 200mg ✗
- D. 400mg, 50mg ✗

1:6



| <u><3yrs</u> | <u>3-8yrs</u> | <u>9-14yrs</u> | <u>>14yrs</u> |
|-----------------|-----------------|-----------------|------------------|
| <u>20/120mg</u> | <u>40/240mg</u> | <u>60/360mg</u> | <u>80/480mg</u> |

17. 4. A 4-week-old boy is brought to the OPD for his first well-child visit. He has been exclusively breast-fed since birth and has had normal urine and stool output. The patient takes supplemental vitamin D and no other medications. His 4-year-old brother has neurofibromatosis but is otherwise healthy. There is a 5-cm skin lesion with overlying hair on the upper back, as shown below. The remainder of the skin examination is unremarkable. Which of the following is the most likely diagnosis for this patient ?

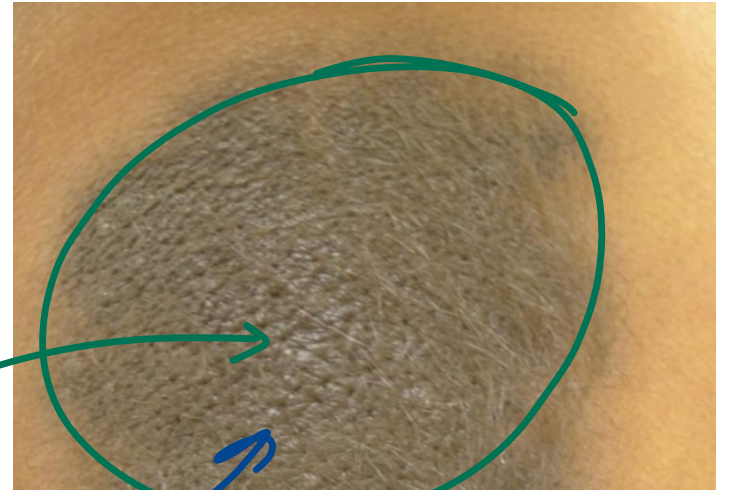
- A. Café au lait macule *macule*
- B. Congenital dermal melanocytosis
- C. Congenital melanocytic nevus
- D. Nevus flammeus

ABLD E

benign

*proliferⁿ
of melanocytes*

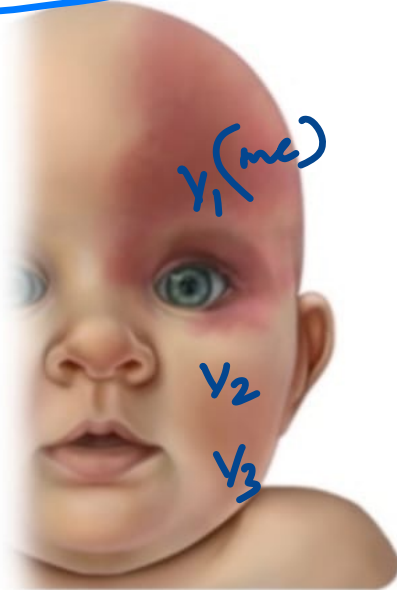
Mongolian spots



(+) hair

r/o SWS

PWS =
Nevus flammeus



- Red to purple patches that do not regress
- Respect midline

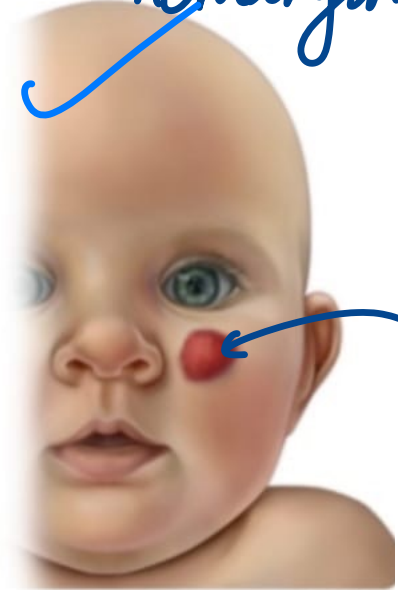
Salmon patch

Nevus simplex



- Blanching pink patches that fade with time
- Usually located on eyelids, glabella, and nape of neck

Capillary hemangioma



- Bright red raised plaque
- Undergoes proliferation followed by involution

CMN

↳ Hairy

dermal

↳ Mongolian spots

Becker's nevus
↳ shoulder

18. A 40 years old female posted for Laparoscopic cholecystectomy with history of hypertension and ischemic heart disease. All of the following medications may be continued except -

A. Atenolol

B. Lasix

~~C. Clopidogrel~~

D. Aspirin

Pre-op Drug Orders

Clopidogrel

7d

Warfarin

- 5d

LMWH

- 24h

UFH

- 4hr

Lithium

- 48hr

MAO/TCA

- 3wks

ACE inhibitors/ARBs

OHG, insulin

-

omit mg dose

19. Which of the following criteria is sufficient to start MDT ?

1. More than five hypopigmented patches

2. A Hypopigmented patch with sensory loss

3. Peripheral nerve thickening

4. Peripheral nerve thickening with sensory loss + motor weakness

5. Skin biopsy demonstrating bacilli

A. 1,2,3 and 5 ✗

B. 2,4 and 5 ✗

C. 2 and 5 ✓

D. 1,2,3,4,5 ✗

20. All are correct statements about Indian health care system except:

- A. One male health assistant is per 5000 population in plain areas and 3000 in hilly areas
- B. Minimum number of beds in CHC is 30
- C. Urban PHC caters to a population of 50000, which a metro CHC caters to 5 lakh population
- D. School health program is managed by PHC

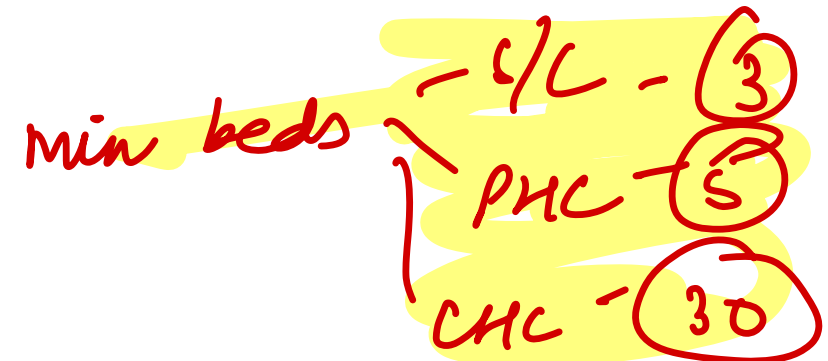
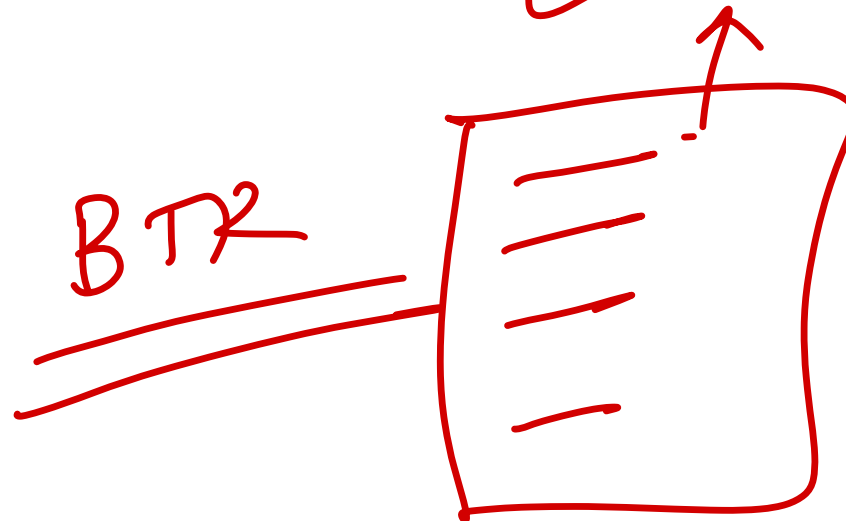
PHC

ANM

M.D.W

S/C

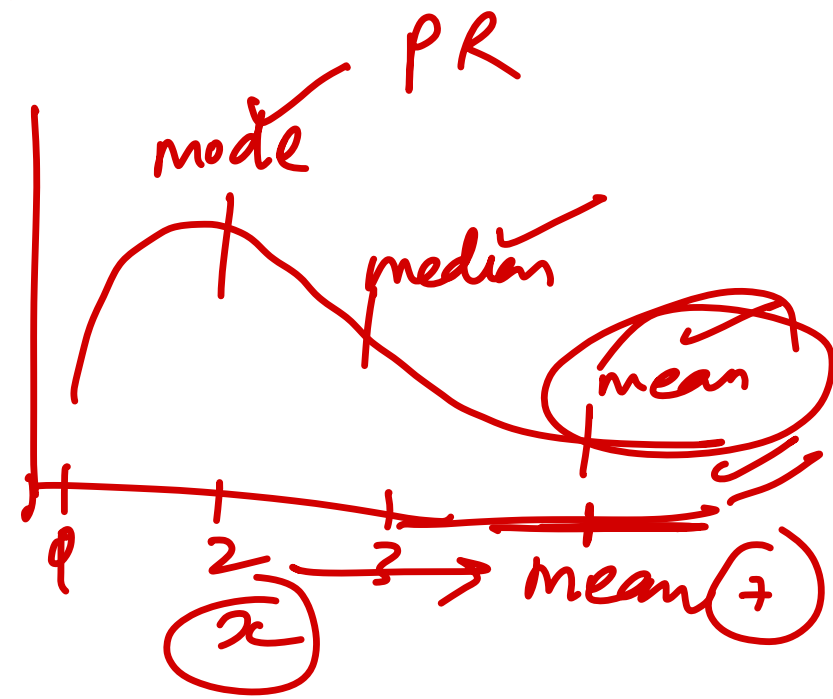
V-CHC: 1/2.5 Lakh



Bth

21. A medical student is conducting a chart review of patients admitted to the local emergency department with acute pancreatitis. He is interested in comparing blood glucose levels between mild and severe cases. Blood glucose levels in patients with severe acute pancreatitis were found to have a **strong positively skewed distribution**. Which of the following is most likely to be true regarding the data for the severe acute pancreatitis group ?

- A. ~~The mean is equal to the mode~~
- B. The mean is greater than the median
- C. ~~The median is greater than the mean~~
- D. ~~The mode is greater than the mean~~



22. Match the following Mapleson circuits with the features described:

| | |
|---|-------------------------|
| a. Most effective for spontaneous ventilation | 1. Bain's circuit |
| b. Most effective for controlled ventilation | 2. Magill's circuit |
| c. Used in emergency intubations | 3. Jackson Rees circuit |
| d. Most effective in pediatric population | 4. Type C circuit |

(A) Magill Lack

(D) AMBU

- A. 1-c, 2-a, 3-d, 4-b
- ~~B.~~ 1-b, 2-a, 3-d, 4-c
- C. 1-d, 2-a, 3-b, 4-c
- D. 1-c, 2-a, 3-b, 4-d

E/F
 Ayre
 Jackson Rees
 Corrigated
 TT

23. A group of geneticists plans to conduct a study on the distribution of allelic variants for a particular gene in a rat population. In the sample population of 15 rats, the genotype distribution is 5 AA, 5 Aa, and 5 aa. The phenotypes represented by the various allele combinations do not provide any specific benefit for survival. During the study, rats will be allowed to mate randomly, but no new rats will be introduced to the population. Based on the information provided, are the current allele and genotype frequencies in this population in Hardy-Weinberg equilibrium ?

- A. No, because there is no selective advantage for this gene
- B. No, because this is an isolated community with no genetic diversity ~~XX~~
- ~~C.~~ No, because this population size is too small
- D. Yes, because these features contribute to a stable gene pool

The Hardy-Weinberg Principle

frequency of homozygous dominant genotype

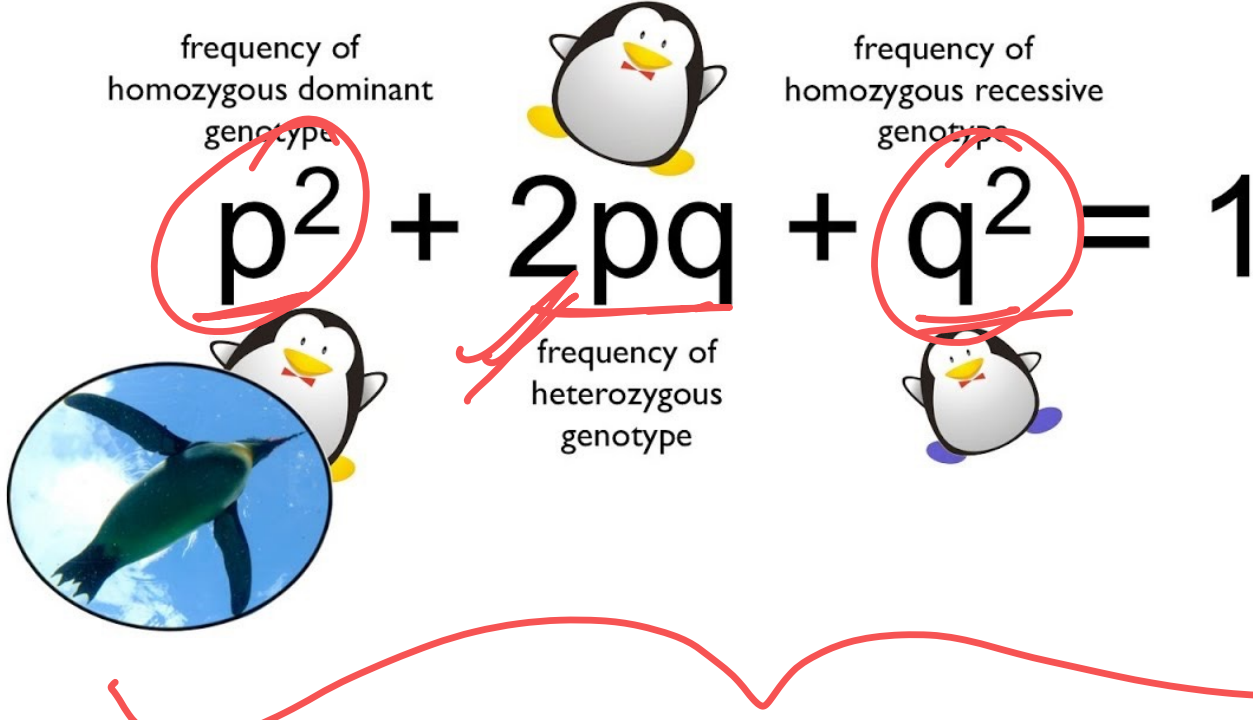
p^2

frequency of homozygous recessive genotype

q^2

frequency of heterozygous genotype

$2pq$

$$p^2 + 2pq + q^2 = 1$$


The diagram illustrates the Hardy-Weinberg equation $p^2 + 2pq + q^2 = 1$. The terms are annotated with penguin illustrations: p^2 is associated with a penguin and a circular inset of a penguin flying; $2pq$ is associated with a penguin; and q^2 is associated with a penguin. The terms p^2 and q^2 are circled in red, and $2pq$ is underlined in red. A large red bracket is drawn under the entire equation.

PARTY

1. Random mating
2. No mutation
3. No Natural selection
4. No Migration
5. Large population



24. All of the following are contraindications in IVRA
except: *Bier's block*

A. Bupivacaine CI — ♡ toxic

B. Sick cell anemia — xx CI

C. Scleroderma xx CI

PAD - CI

~~D. Mepivacaine~~

25. An 11-year-old boy is brought to the OPD by his parents due to a pruritic skin rash for 2 weeks. The rash started on his hands and subsequently spread to the trunk and lower extremities. His mother reports that the patient is constantly scratching the rash and his sleep is now disturbed due to intense pruritus. A cousin who recently visited and shared a room with him had similar symptoms. The patient has had no fever and is up to date with routine vaccinations. Physical examination shows numerous 2- to 3-mm erythematous papules and vesicles with excoriation on his neck, hands, feet, and waistline. His chest and proximal arms and legs are unaffected. Which of the following is the most appropriate initial intervention in management of this patient ?

- A. No intervention necessary ~~X~~
- B. Oral acyclovir ~~X~~
- C. Topical hydrocortisone ~~X~~
- D. Topical permethrin

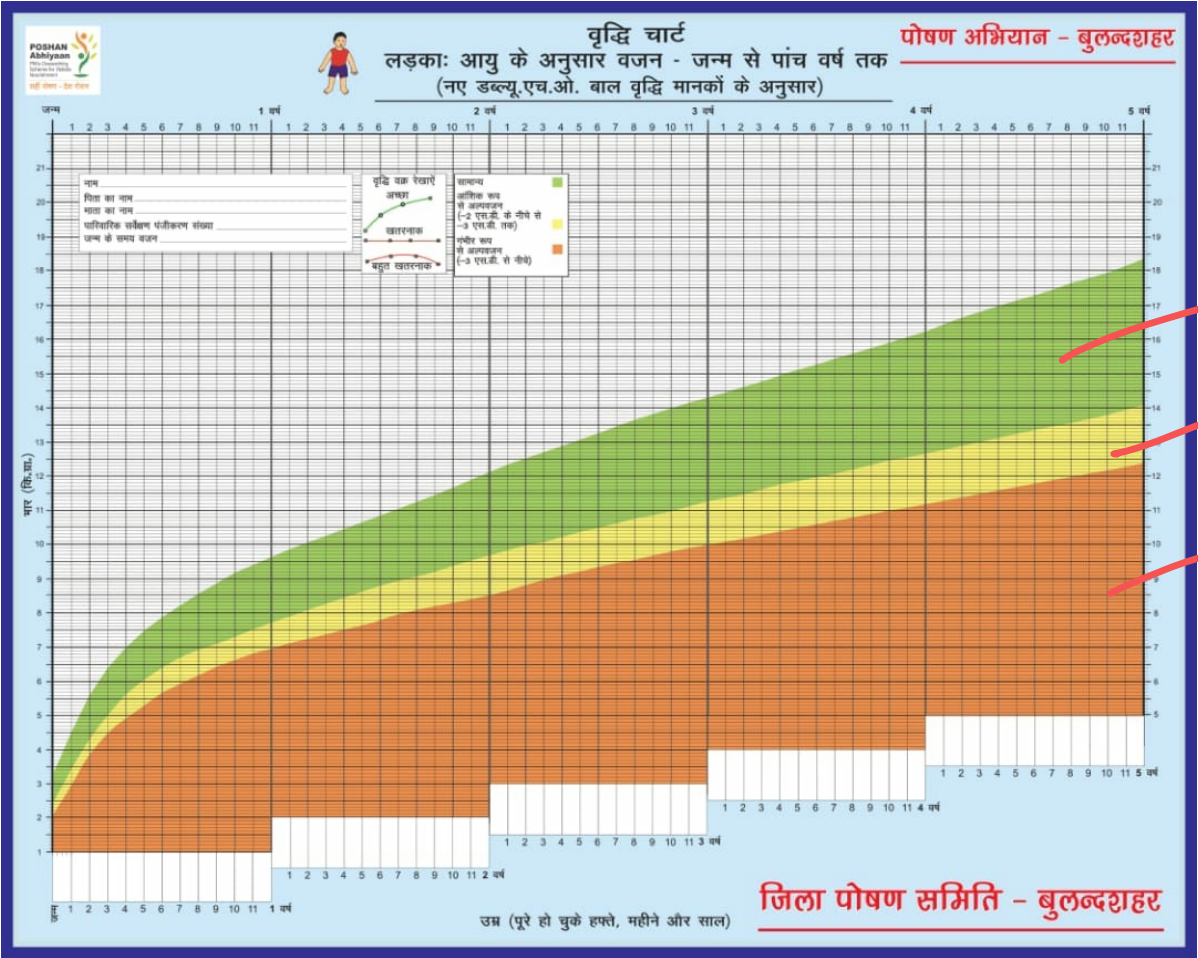
trunk

26. A 16-month-old child with 8 kg weight is assessed on a growth chart, the child falls in the zone between -2SD and -3SD. What should be do for the management of the child ?

- A. Re-assurance of the mother
- B. Admit to PHC
- C. Home based-nutritional care, growth monitoring
- D. Refer to CHC

Growth Charts: WHO

Multicenter Growth Reference Study (MGRS)



→ Road to health
 → -2 to -3SD: Home based
 → -3SD: Refer to CHC - pedⁿ

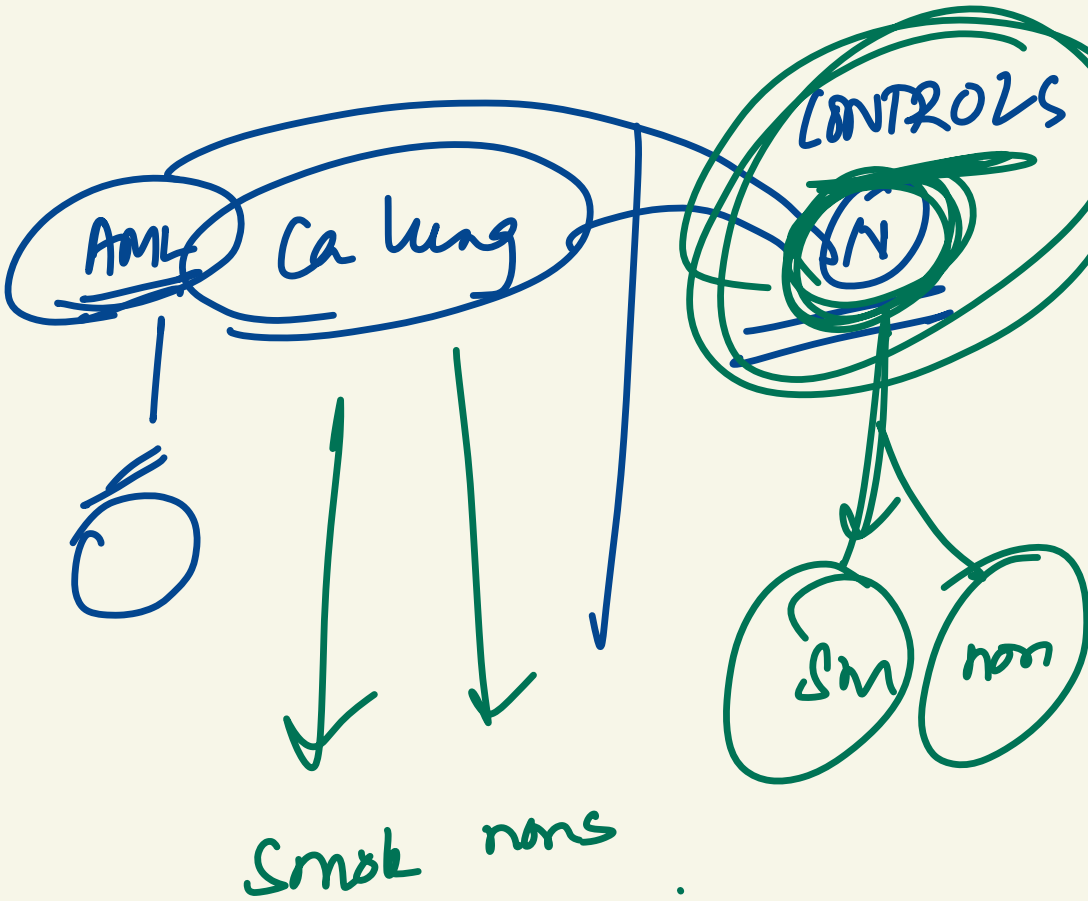
27. A 60-year-old patient with a history of severe (chronic obstructive pulmonary disease presents for an elective hernia repair. The patient has a forced expiratory volume in 1 second (FEV1) of 60% predicted and requires supplemental oxygen on activity. Under what ASA-PS classification would you place him ?

- A. ASA 1
- B. ASA 2
- C. ASA 3**
- D. ASA 4

| ASA PS Classification | Definition | Examples, including, but not limited to: |
|-----------------------|---|---|
| ASA I | A normal healthy patient | Healthy, non-smoking, no or minimal alcohol use |
| ASA II | A patient with mild systemic disease | Mild diseases only without substantive functional limitations. Examples include (but not limited to): current smoker, social alcohol drinker, pregnancy, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease |
| ASA III | A patient with severe systemic disease | Substantive functional limitations. One or more moderate to severe diseases. Examples include (but not limited to): poorly controlled DM or HTN, COPD, morbid obesity (BMI≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, premature infant PCA < 60 weeks, history (>3 months) of MI, CVA, TIA, or CAD/stents. |
| ASA IV | A patient with severe systemic disease that is a constant threat to life | Examples include (but not limited to): recent (<3 months) MI, CVA, TIA, or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis |
| ASA V | A moribund patient who is not expected to survive without the operation | Examples include (but not limited to): ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction |
| ASA VI | A declared brain-dead patient whose organs are being removed for donor purposes | |

28. Officials of a public health department report a higher than normal prevalence of AML among children age 5-12 in their community. They observe that some households in the community are exposed to chemical waste from a nearby factory and worry that exposure to this waste is responsible for the increased prevalence of AML. A case-control study is designed to evaluate the health department officials' claim that exposure to chemical waste is associated with AML in childhood. Which of the following populations should be selected as the control group ?

- A. Children who do not have AML and are exposed to chemical waste
- B. Children who do not have AML and are not exposed to chemical waste
- C. Children who do not have AML, regardless of exposure status to chemical waste
- D. Children who have AML, regardless of exposure status to chemical waste



29. After using a hair dye a lady developed a skin reaction as shown in the image. Which of the following chemicals among given options is responsible for this condition ?

- A. Pollen
- B. Chromates
- C. Balsam of Peru
- D. Para-Phenylenediamine

Allergic contact
D





Patch — 48, 96 hrs!

Allergic

Nickel (mc) — artificial jewellery

Potassium dichromate — cement

PTBP → bridi

PPD → hair dye

Mono-benzyl ether of Hydroquinone (MBEH)

→ rubber → leukoderma

30. Which of the following is a conditioning influence for malnutrition ?

- A. Child rearing
- B. Infectious diseases**
- C. Food habits
- D. Socioeconomic factors

cultures

31. An unconscious patient in ICU is on endotracheal intubation and now needs a tracheostomy. What type of tube should be considered in this situation ?

-
- A. Uncuffed tracheostomy tube - rarely children - microcuffed
 - B. Cuffed tracheostomy tube
 - C. Metallic tracheostomy tube - long term
 - D. Endotracheal tube
XX

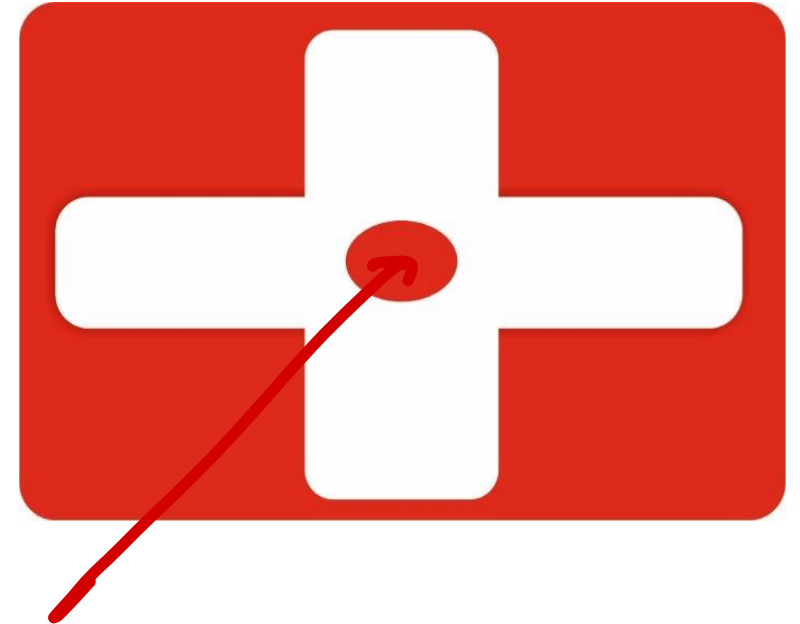
32. An 18-month-old girl is brought to the OPD by her parents due to a rash and blisters throughout the body that started this morning. Yesterday, the child had a fever that responded well to ibuprofen. This morning, the parents noted erythema and peeling skin around her mouth, axillae, and inguinal areas. Slight focal pressure to the back results in sloughing of the top layer of skin with underlying erythema. The face appears edematous, with perioral crusting. No mucosal lesions are seen. Which of the following is the most likely diagnosis in this patient?

- A. Bullous impetigo xx
- B. Scarlet fever
- ~~C. Staphylococcal scalded skin syndrome~~
- D. Toxic epidermal necrolysis

SSSS - mucosal
Nikolsky's sign xx
epidermal
SJS - TEN

33. Identify the logo given in the image below?

- A. Allopathic private clinic practitioner
- B. First aid
- C. Red cross emblem
- D. Suraksha clinic



34. All of the following anaesthetic agents can be used in bronchial asthma except

- A. Halothane ✓
- B. Sevoflurane ✓
- C. Propofol ✓
- D. Thiopentone - CE

35. A 56-year-old man presents with a facial lesion as shown in the image below. On examination, the lesions are painful & the edges are well demarcated & raised. Ear is also showing similar erythematous lesions. This infection is most likely to be caused by which of the following organisms ?

- A. Group B streptococcus
- B. Group A streptococcus
- C. Staphylococcus aureus
- D. Hemophilus influenza type b

Erysipelas



36. Which of the following statement is false regarding Rabies vaccination and immunoglobulin?

1. Most of immunoglobulin is given in deltoid as im injection \times

2. HRIG is given at dose of 20 IU/kg

3. Anti-rabies vaccine given as-d0,3,7,14,28 as intramuscular injection - Essen

4. Do immediate proper wound suturing \times

F

F

F

$\sim 70\%$ - wound
 $\sim 30\%$ - im
- mainly wound

E - 40 IU/kg

A) 1,2,3,4

B) 2,3,4

C) 2,3

D) 1,4

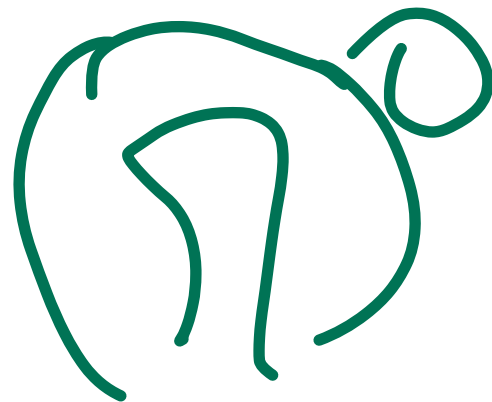
37. A 7-year-old boy is brought to the OPD due to hair loss. For the last few weeks, he has had worsening hair loss in patches on the scalp. There is no associated pain or itching. Medical history is unremarkable, and the patient's height and weight have consistently tracked at around the 30th percentile for age. Which of the following is the most likely cause of this patient's hair loss ?

- A. Alopecia areata
- B. Discoid lupus erythematosus ~~xx~~
- C. Tinea capitis ~~xx~~
- D. Trichotillomania ~~xx~~



38. Which of the following is an absolute contraindication to the below device ?

- A. Past H/o PID *relative*
- B. Past H/o ectopic pregnancy
- C. Sub serous fibroid
- D. Unexplained vaginal bleeding



Absolute contraindications of IUCD:

- Suspected Pregnancy
- PID
- Vaginal bleeding of undiagnosed etiology
- Ectopic pregnancy
- Cancer of cervix, uterus, adnexa

Relative contraindications are as follows:

- Anemia
- Menorrhagia
- History of PID
- Uterine Malformation
- Unmotivated Female
- Fibroids

< 3rd 10^m

> 90^m

39. Identify the Instrument shown below ?

- A. LMA ProSeal
- B. LMA Supreme
- C. LMA classic
- D. I-GEL LMA



40. Which of the following diseases is endogenously transmitted disease in India ?

PSM

A. Hendra virus ✕

~~B. Nipah virus~~

C. Crimean Congo hemorrhagic fever

D. Yellow fever ✕

Gujarati

Kneller

41. Which of the following statement is true about Oxidation Pond ?

- A. Aerobic during day time and anaerobic during night time
- B. Anaerobic during day time and aerobic during night time
- C. Anaerobic during day time and night time
- D. Aerobic during day time and night time

43. What proportion of GNP has WHO proposed to spend on healthcare sector ?

- A. 2%
- B. 4%
- C. 2.5% ← currently
- D. 5%

44. Identify the incorrect pair

1. Etomidate-Does not cause myocardial suppression

T

2. Propofol-Maximum pain on injection

T

3. Ketamine- Post-op Delirium

T

4. Thiopentone-Best for porphyria

CI

A. 2,3,4

B. 1,2,3,4

C. 3,4

~~D. 4~~

4

45. A sexually active male presented with warts on his penis as shown below. Similar looking lesions were present near the anal canal of his wife. What is the most likely diagnosis?

- A. Condyloma lata ~~Syphilis~~
- B. Condyloma acuminata HPV 6, 11
- C. Bowen disease ✗
- D. Hemorrhoids ✗





46. in a patient with HIV, which of following is correct statement for prophylaxis of opportunistic infections ?

NACO < 350

• A. Prophylaxis for Pneumocystis carinii Pneumonia (PCP) is indicated when CD4 count is <500/ul ~~xx~~

• ~~B. Stop prophylaxis for PCP if CD4 count is >350/ul for consecutive 6 months~~

• C. Prophylaxis for MAC is indicated when CD4 count is <50/ul (x)

• D. Prophylaxis for Cryptococcus is indicated when CD4 count is <150/pl ~~xx~~

PCP

Adults and Adolescents (Table 2.9.2):

CD4 counts <350 cells/mm³ or WHO Clinical stage 3 and 4

Indication for secondary prophylaxis in adults and adolescents

For all patients who have completed successful treatment for PCP until CD4 is >350 cells/mm³ (at least on two occasions, done 6 months apart)

Regimen:

- Cotrimoxazole one DS tablet (SMX 800 mg/TMP 160 mg), each day or two single strength (SS) tablets daily
- Alternative: If allergic or intolerant to Cotrimoxazole (rash, anaemia, neutropenia), Cotrimoxazole desensitization may be tried; if severe, Dapsone 100 mg/day

Discontinuation: When CD4 count >350 cells/mm³ on two different occasions 6 months apart with an ascending trend and devoid of any WHO clinical stage 3 and 4 conditions

Cryptococcal

Secondary prophylaxis or maintenance therapy:

Indications: Recommended after 2 weeks of successful treatment of cryptococcal disease (meningeal and non-meningeal) and 8 weeks of consolidation phase with fluconazole (400–800 mg daily for adults; 6–12 mg/kg/day for children/adolescents, up to maximum of 800 mg daily)

Maintenance (secondary prophylaxis): Fluconazole (200 mg daily for adults; 6 mg/kg/day for children/adolescents)

Discontinuing Fluconazole maintenance treatment: It is recommended that, after successful treatment of Cryptococcal disease (meningeal and non-meningeal) and consolidation phase treatment, the criteria for discontinuing Fluconazole maintenance treatment should take into consideration ALL the following:

- Person is adherent to ART and free of cryptococcal disease
- Fluconazole maintenance treatment given for at least 1 year
- CD4 cell count ≥ 100 cells/mm³
- Suppressed plasma viral load (Plasma viral load <1000 copies/ml)

Pre-emptive treatment for PLHIV with asymptomatic cryptococcal infection in relation to CrAg test results is described in greater detail in Chapter 4.2 (Central Nervous System).

47. 17-year-old girl comes to the OPD due to a rash. She joined the high school cross country running team 2 months ago and has had a progressive itchy rash on her feet since that time. The patient tried replacing her running shoes and socks, but the symptoms continued. Examination findings are shown in the image below. Which of the following is the most appropriate treatment for this patient's condition ?

A. Cephalexin capsules

B. Miconazole cream

C. Nystatin powder

D. Permethrin cream

XX

Candida oral

XX



48. You are working in a primary health center (PHC) situated in a high seismic zone. Which of the following will you do as part of preparedness for an emergency?

1. Disaster preparedness by making sure all financial and other resources are available ✓

2. Increase public awareness through campaigns and loudspeakers ✓

3. Conduct a simulation for the disaster and assess the response ✓

4. Follow instructions given over the phone or radio by higher officials ✗ ✗

A. 1, 2, 3, 4

B. 2,3,4

✓ C. 1,2,3

D. 1, 2. 4

Emergency preparedness refers to long-term development activities that strengthen the capacity of a country to effectively manage all kinds of emergencies. It involves the following steps:

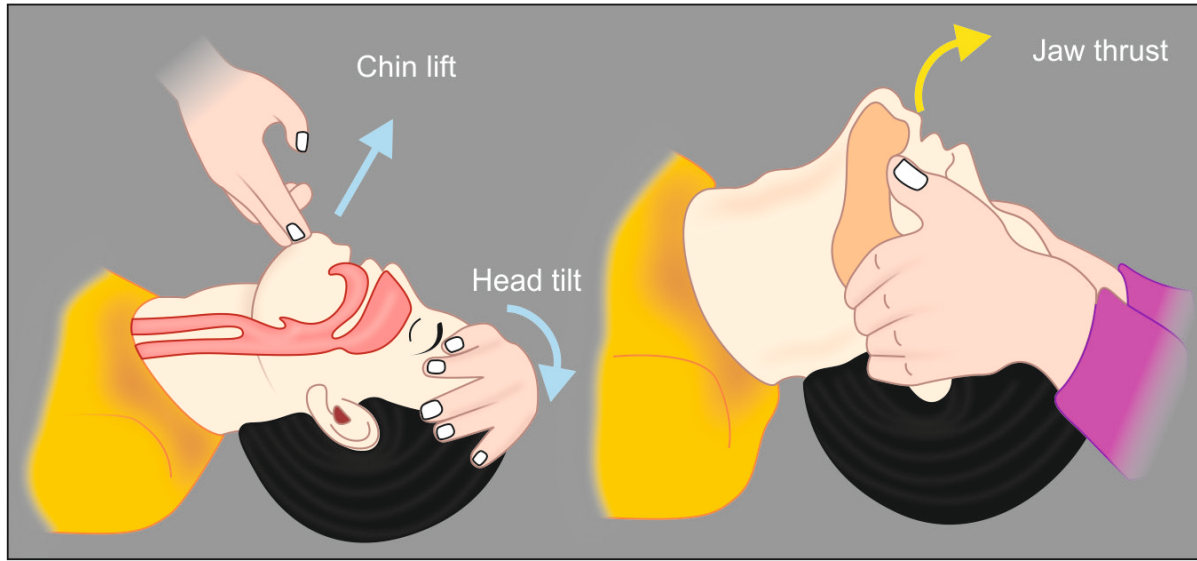
1. Disaster preparedness by making sure all financial and other resources are available
2. Increase public awareness through campaigns and loudspeakers
3. Conduct a simulation for the disaster and assess the response
4. Evaluate the risk of disaster ✓
5. Information sessions coordination with news media ✓
6. Adopt standards and regulations ✓

49. A 29 years old male patient with RTA was brought to emergency. On examination his airway seemed obstructed. What is the next intervention to be done in this patient ?

- A. Laryngoscopy and intubation
- B. Head tilt and chin lift
- C. Jaw thrust
- D. Recovery position

BLS





50. A soldier presents with fever, rash not involving the palms and soles and myalgia. There is also history of louse infestation in the soldier barracks. The probable causative organism is

✓ A. R. prowazekii

B. R. conori

C. R. typhi - End

D. R. akari

✓ ✓ RMSF
CARC ✓

Typhus

51. Which of the following is part of the concurrent list of the Indian Constitution ?

- A. Adulteration of food
- B. Fishing and fisheries beyond territorial waters
- C. Regulating labor in mines
- D. Public health and sanitation

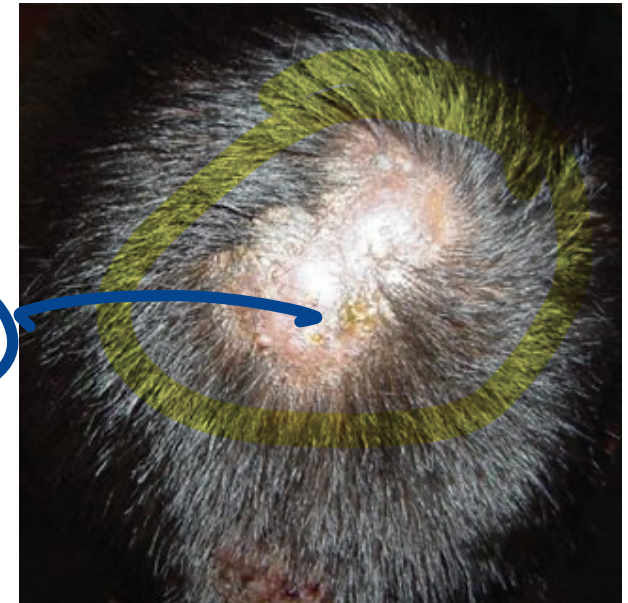
The legislative section of the seventh schedule is divided into three lists:

- **Union list** - a list of 100 items on which the parliament has exclusive power to legislate
- **State list** - a list of 61 items on which the state government has exclusive power to legislate
- **Concurrent list** - a list of 52 items on which both central and state governments have the power to legislate

52. An 8-year-old previously healthy girl is brought to the OPD by her mother due to hair loss on the scalp. Several weeks ago, the mother noticed the patch of hair loss, which has progressively enlarged. The mother also says that the girl frequently scratches at the area. The child recently changed to a different school and has been anxious about new teachers and friends. Skin examination findings are shown in the image below. There are several enlarged, tender, occipital and posterior auricular lymph nodes. Which of the following is the most likely cause of this patient's condition?

- ~~A.~~ Dermatophyte infection
 - B. Pressure-induced alopecia
 - C. Repeated hair plucking
 - D. Seborrheic dermatitis
- XX

Keion
T. capitis



53. Identify the correct statements about lower extent of the following structures:

1. Subarachnoid space-Lower border of S2
2. Filum terminale-Coccyx
3. Spinal cords in infants-Upper border of L3
4. Adult spinal cord-Lower border of L1

QQQ

- A. 1,2,3,4
- B. 1,2
- C. 1,2,3
- D. 1,2,4

54. Researchers are interested in the association between colorectal carcinoma and nonsteroidal anti-inflammatory drug use. They first interview a group of patients with biopsy-proven colorectal carcinoma and then interview a group consisting of the patients' neighbors who are of similar age and race. The analysis is based on comparing the results of pairs of individuals who have similar characteristics. This design technique best helps address which of the following potential problems with this study?

- ~~A.~~ Confounding
- B. Observer bias
- C. Recall bias
- D. Selection bias
random?

Matching — Case control

55. In Sustainable Development Goal 3, the target 3.1 aims to reduce the Maternal Mortality Ratio by 2030 to (per 1 lakh live births):

- A. <70
- B. <100
- C. <50
- D. <130

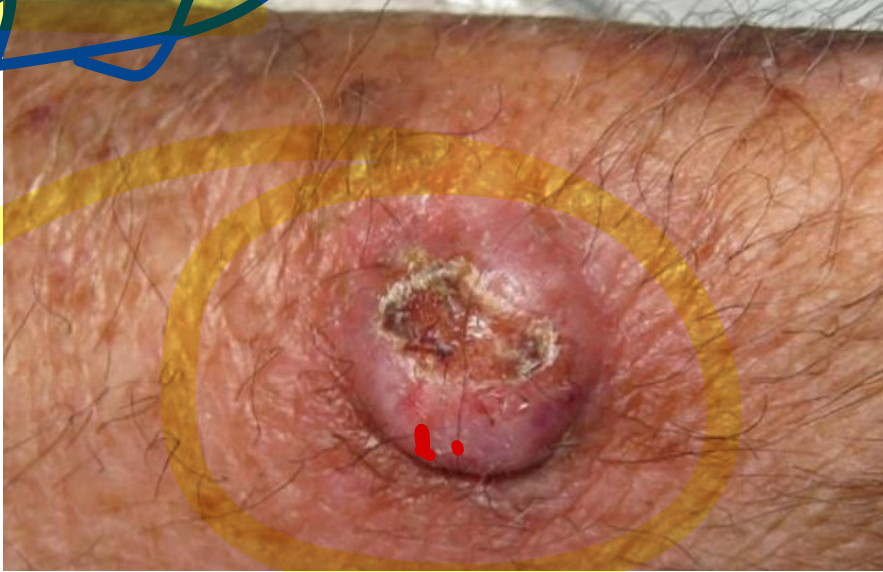
56. A 65-year-old man comes to the OPD due to a nonhealing ulcer on the left upper extremity. For the last 2 months, he has had an enlarging ulcerated lesion, with intermittent bleeding and itching. In the last 3 weeks, the patient has also noted local numbness, paraesthesia, and burning pain. He does not recall any injury prior to the onset of symptoms. The patient has a history of renal transplantation and takes an appropriate immunosuppressive regimen. Which of the following is the most likely diagnosis?

- A. Basal cell carcinoma
- B. Kaposi sarcoma
- C. Malignant melanoma
- D. Squamous cell carcinoma

MC malignancy

neuropathy

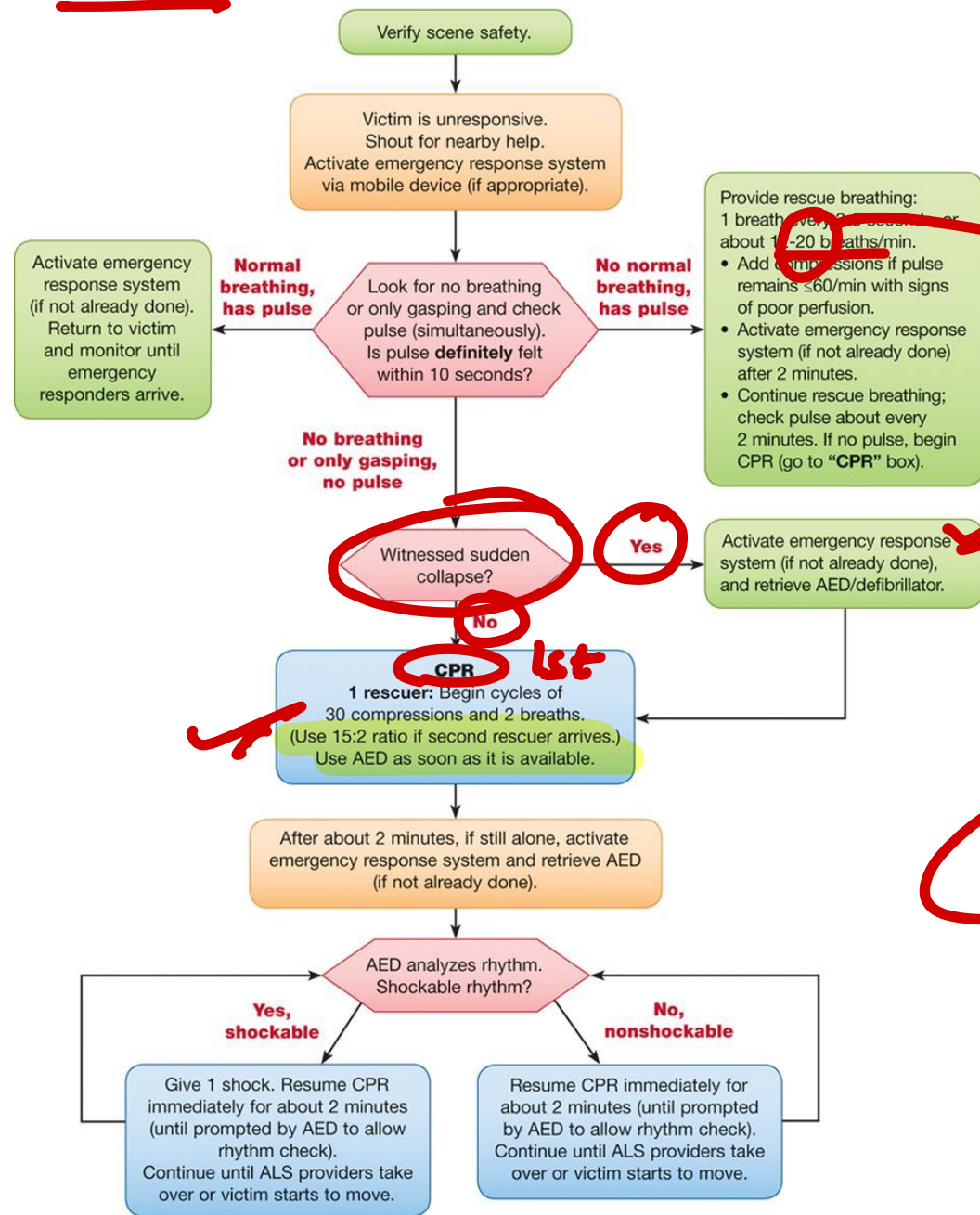
ABUDE



57. A 2 years old child was playing with marbles and suddenly went limp and became unresponsive. Mother of the child was beside and saw him collapse. What is the first step to be done by mother in the situation?

- A. ~~Call emergency medical services~~
 - B. ~~Feel for pulse and assess the breathing~~ (X)
 - C. Back thrust < 2yr
 - D. Hemlich manouever > 2yr, responsive, conscious
- BLS uncons

**BLS Healthcare Provider
Pediatric Cardiac Arrest Algorithm for the Single Rescuer—2015 Update**



10-126
20-30
40-60

tracheal
↳ infant

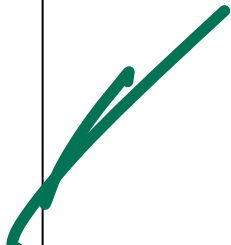
58. A 10-year-old school going child presents to OPD and is never immunized. Which of the following vaccines will be given as per the national immunization program ?

- A. BCG - 1yr
- B. MMR - 5yr
- C. Td
- D. DPT

DELAYED IMMUNISATION:

BCG
HEP B
IPV
ROTA
PENTA
PCV

} 1yr



MEASLES/MR

VIT A
OPV

} 5yr

Hib - 6y

DTP - 7y

JE - 15y

dT/TT - any

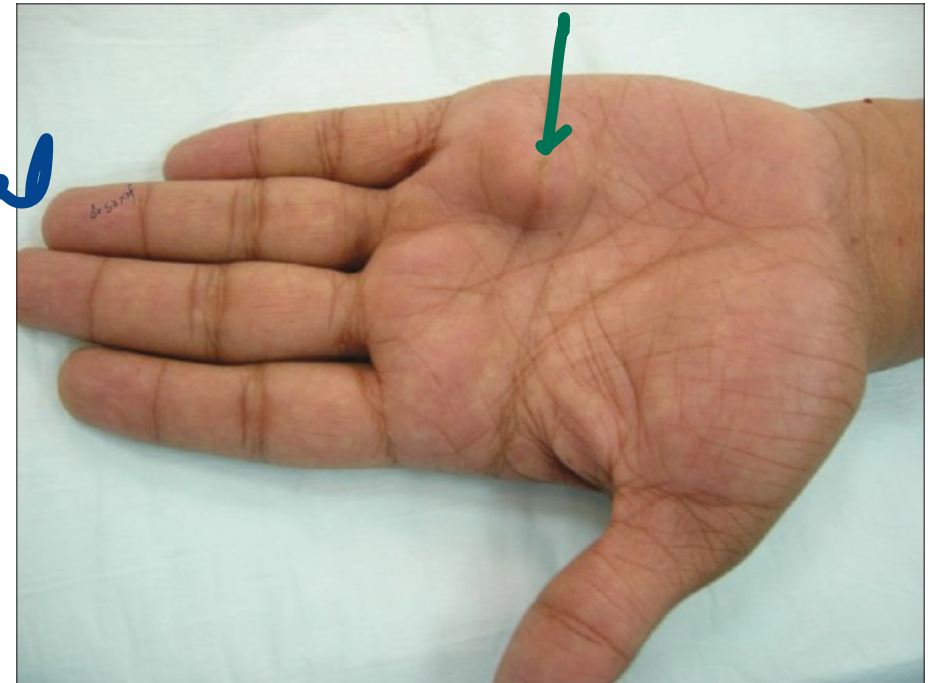


59. The best indicators for routine monitoring of air pollution are:

- A. Sulfur dioxide, smoke, and suspended particles**
- B. Sulfur dioxide, lead, and particulate matter
- C. Sulfur dioxide and carbon monoxide
- D. Carbon monoxide and hydrogen sulfide

60. A farmer presented to the outpatient department with a non-tender, non-mobile, non-compressible firm swelling over his palm as shown in the image. A few months back he got injured with a thorn. What is the presentation given below ?

- A. ~~Ameloblastoma~~ Sporotrichosis
- B. Embryogenic dermoid] Longental
- C. Sequestration dermoid
- D. Implantation dermoid



61. A 23-year-old woman comes to the OPD due to hair loss. Two weeks ago, she suddenly developed loss of large numbers of hair fibers when washing or brushing her hair. The patient has had 2 pregnancies; the first led to a spontaneous abortion at 13 weeks, and the second led to a normal term vaginal delivery 4 months ago. She subsequently experienced severe postpartum unipolar major depression requiring psychiatric hospitalization. Current medications include fluoxetine and olanzapine. Examination shows diffuse hair loss with no erythema or scaling in the scalp. When tracts of hair are pulled firmly, >20% of fibers are pulled out. Which of the following is the most likely diagnosis for this patient's hair loss ?

- A. Alopecia areata
- B. Androgenetic alopecia
- C. Anagen effluvium
- ~~D.~~ Telogen effluvium

chemotherapy
3m on

62. Arrange following parts of Anesthesia machine according to increasing pressure (from low to high):

1. Vaporizer mounting devices

2. Hanger yoke assembly — cylinder — higher

3. Flow meter assembly

4. Pipelines

intermediate

low

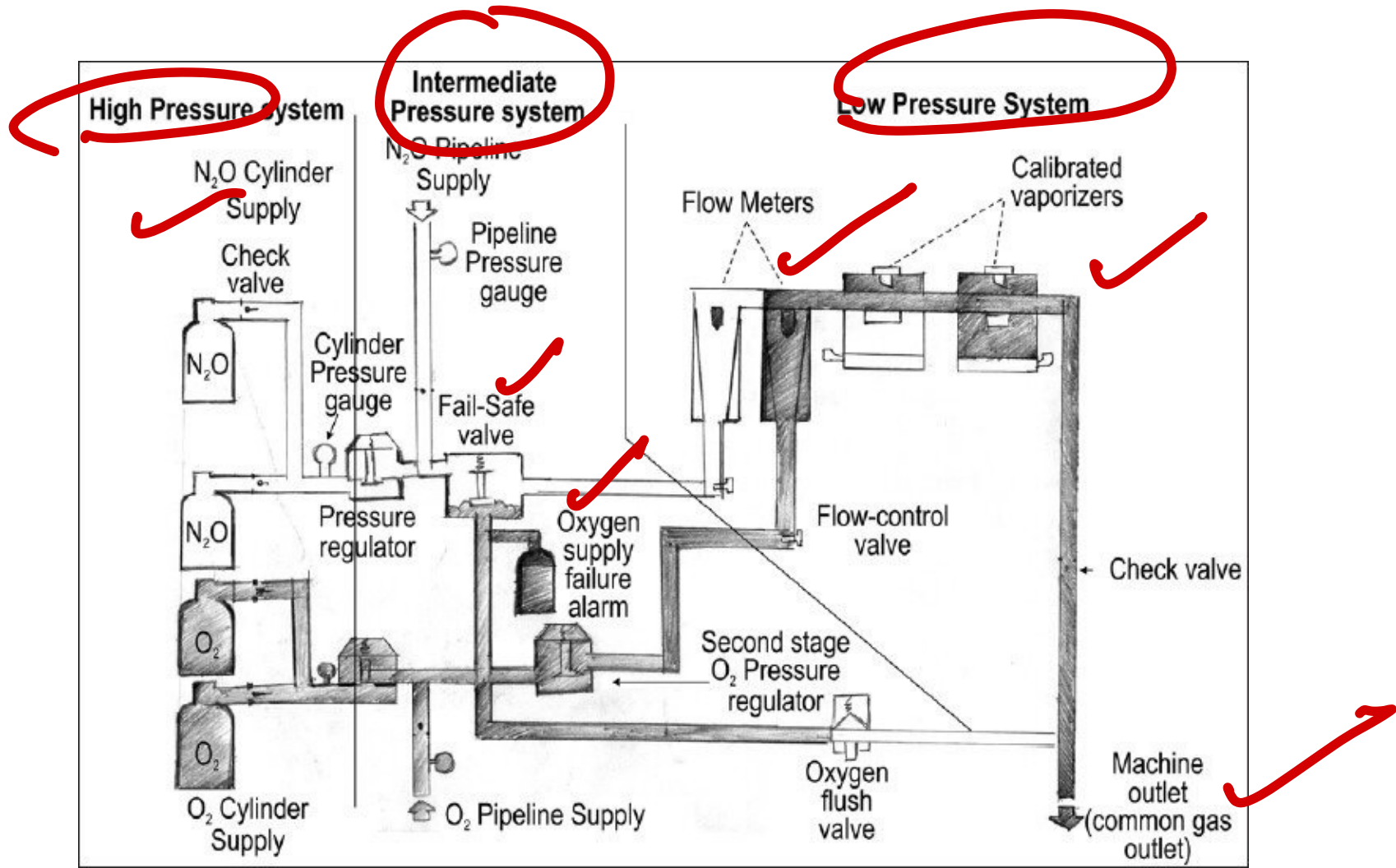
low

A) 1-2-3-4

~~B) 1-3-4-2~~

C) 2-3-4-1

D) 2-4-3-1



63. A 45-year-old truck driver presented with a lesion shown in the image below with a history of multiple sex partners. What is the most likely diagnosis: _____

- ✓ A. Secondary syphilis
- B. HSV
- C. Disseminated gonorrhea
- D. Psoriasis xx

puscular



CARS

64. Which of the following options are correct ?


1. VVM has a chemical indicator in the circle ^{square} which changes colour
2. VVM gives an idea for number of days for expiry of vaccine ~~xx~~
3. It indicates whether the vaccine has been exposed to a combination of excessive heat over time and whether it is likely to have been damaged
4. It tells about the efficacy of the vaccine ~~xx~~

potency - indirect



- A. 1,2,3,4
- B. 3,4
- ~~C. 3~~
- D. 2,4

65. What is the dosage of vitamin A given for a 2-year-old baby with keratomalacia ?

- A. 2,00,000 IU immediately, followed by same dose after 24 hours
- B. 1,00,000 IU immediately, followed by the same dose after 1 week
- C. 1,00,000 IU immediately, followed by the same dose after 24 hours and after a week
-  D. 2,00,000 IU immediately, followed by the same dose 24 hours later and after 2 weeks

Oral dose of vitamin A as per the age:

Age < 12 months – dose given is 1 lac IU each day on day 0,1, after 14 days

Age > 12 months – dose given is 2 lac IU each day on day 0,1, after 14 day

66. A group of 30 trekkers have gone for a campfire for a week. Best method of disposal of the waste generated is :

A) Dumping

~~B) Burial~~ — *temporary*

C) Controlled tipping

D) Manure pit

67. Identify the correct statements:

1. Most common mode for absorption of lead in industries is via skin ^x *inhalation*

2. 1 acre land is needed to fill a trench for sewage disposal of 10000 population **(T)**

3. Social pathology is the study of a disease and social conditions **(T)**

4. ~~MMU are run by external agency and supplies come from the external agency too~~ *Govt* **(F)**

A. 1,2,3,4 *gvt.*

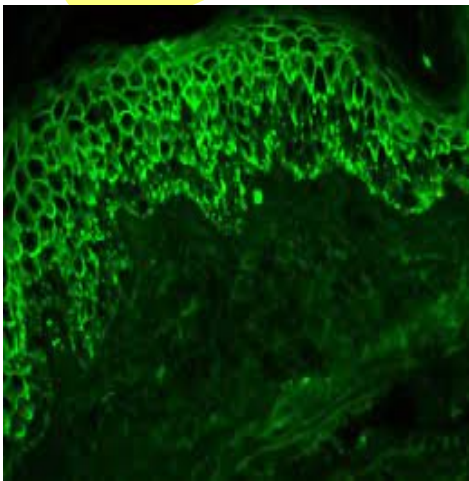
B. 1,3

~~C. 2,3~~

D. 1,4

68. A 55-year-old man comes to the OPD due to skin sores. He developed painful ulcerations in his mouth 3 weeks ago, followed by diffuse onset of large, painful blisters affecting the trunk and extremities. On examination, the oral mucosa shows several erosions and ulcerations. The skin shows scattered, large erosions and a few flaccid bulla. Light rubbing of uninvolved skin causes easy separation of the epidermis. Punch biopsy of the skin is performed. Which of the following would be the expected findings ?

~~A. IgG~~

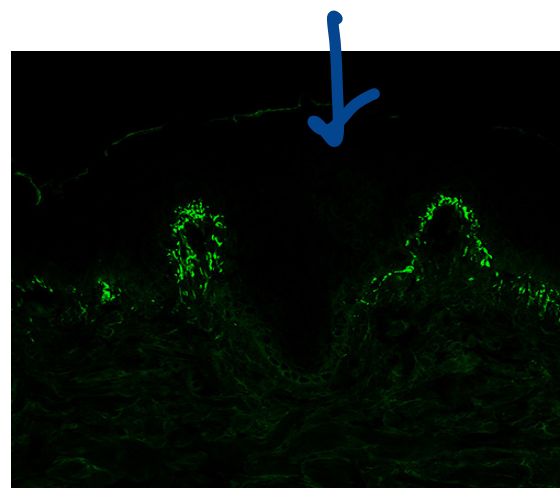


B. IgA



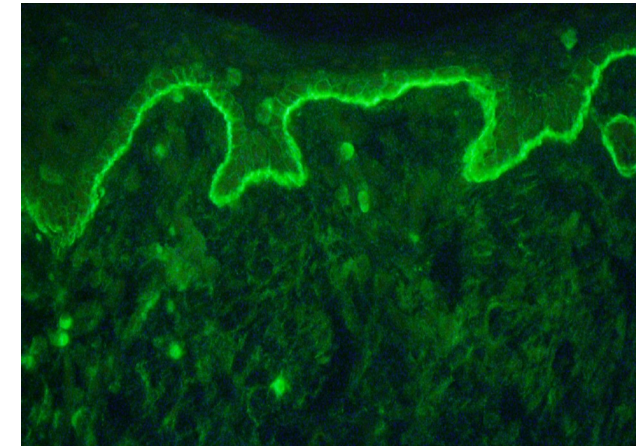
C. IgA

DH



D. IgG

BP



69. Match the following wastes with the disposal :

A- Broken vaccine glass vial

B- Cotton gauze

C- Gloves paper cover

D- Blood bag

1-Yellow

2-Red

3-Blue

4-Black

5-White

Cytotoxic drug
expused drug
yellow

VIAL
blue

A. A-1, B-1, C-2, D-1

~~B.~~ A-3, B-1, C-4, D-1

C. A-1, B-2, C-2, D-1

D. A-1, B-2, C-4, D-1

70. A 28-year-old male admitted with the history of road traffic accident and sustained injury to the right upper limb. This patient was planned for open reduction and internal fixation with plating for both bone-fracture right forearm under brachial plexus block. Inj. Lignocaine with adrenaline was used to decrease the bleeding and systemic toxicity. The maximum dose of lignocaine with adrenaline could be used for this patient to obtain adequate blockade is-

- A) 7 mg/kg Body weight
- B) 5 mg/kg Body weight *-Cont ad*
- C) 2 mg/kg Body weight
- D) 3 mg/kg Body weight

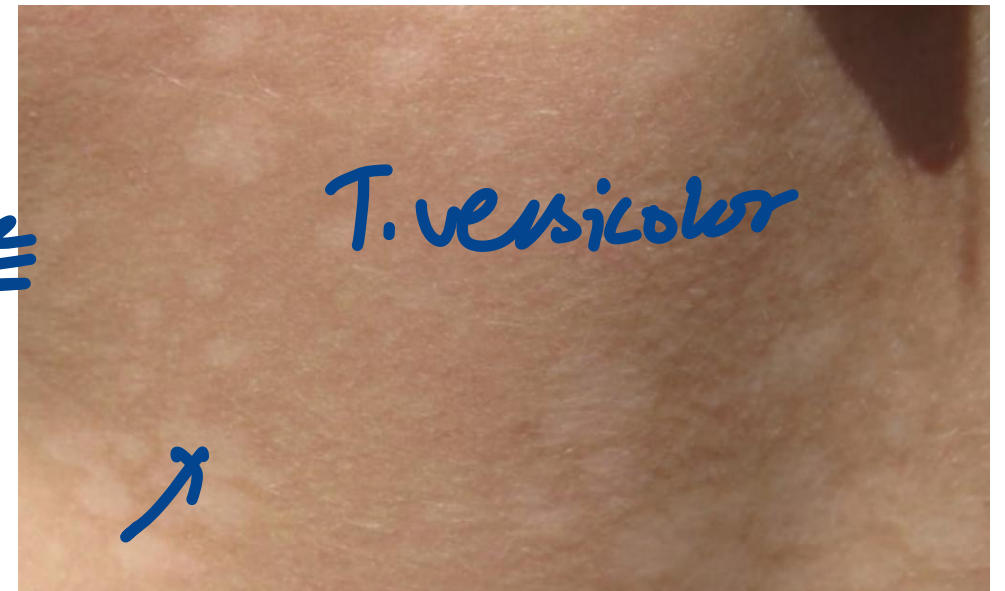
71. A 30-year-old female came with chief complaints of vaginal discharge with lower abdominal pain and cervical motion tenderness. which color kit will you prescribe her

- A. Grey kit (1)
- B. Red kit (5)
- C. Yellow kit (6)
- D. Black kit (7)

PID ectopic
pregn

72. A 24-year-old woman comes to the OPD due to skin lesions on her trunk and proximal upper limbs. The patient noticed the lesions after returning from a summer vacation at a Goa beach a week ago. During the vacation, she had sun exposure on several occasions without prior application of sunscreen. The lesions are mildly itchy but not painful. Medical history is notable for hypothyroidism, for which she takes levothyroxine. Which of the following is the most likely cause of this patient's current condition?

- A. Autoimmune melanocyte injury
- B. Dermatophyte skin infection
- C. Malassezia globosa infection
- D. Ultraviolet skin damage



73. Which of the following does not cause hardness of water ?

- A. Calcium carbonate
 - B. Calcium sulphate
 - C. Calcium bicarbonate
 - D. Magnesium bicarbonate
- NO₃ - permanent*
- temp*

74. A patient who was being given intercostal nerve block for rib fracture suddenly collapsed while the block was being performed. He is diagnosed to have local anesthetic systemic toxicity. What is the treatment of this condition ?

- A. 20% intralipid emulsion**
- B. 15% intralipid emulsion** ✗
- C. 35% intralipid emulsion** ✗
- D. 100% intralipid emulsion** ✗

75. Which article of the Indian Constitution confers **Right to Life** to the citizens of India ?

A. Article 11

citizenship

B. Article 21

C. Article 23

trafficking

D. Article 25

freedom of conscience

76. 32-year-old woman comes to the OPD due to a "mole." The lesion is located on her back, and she believes it has been present for years but does not recall when it first appeared. The patient thinks it might be enlarging and is concerned due to a family history of skin cancer. The lesion is not painful and does not itch or bleed. Skin examination shows a few scattered benign-appearing nevi and a single prominent lesion at her right scapular area. Which of the following additional skin examination findings would be most concerning for malignancy?

- A. Central keratin plug
- B. Multicolored lesion
- C. Peripheral scaling
- D. "Stuck-on" appearance

-keratocyst

ABCDE

-Tinea

-sebaceous keratosis



77. All of the following are contraindications of neuraxial blockade except:

~~A) Spinal deformity~~

B) Patient refusal ✓

C) Local infection ✓

D) Papilledema ✓

↑ ICP

78. Which of the following is true about Factories Act ?

- A. Children under 14 years of age must not be employed in factories
- B. A child of 16 years can be employed only between 6 AM and 8 PM
- C. The maximum working hours for an adult is 72 hours per week
- D. A child of 16 years can work till 5 hours per day

QQ

- Factories Act – established in 1948:
- Established to include all the factories except Defense, Mining, Railways and Eateries. DMRE
- Per capita space: more than 500 ft³
- One Safety officer for more than 1000 workers.
- Children between 14-18 years can be employed only in certain industries and work only between 6 AM-7PM.
They should not be made to work for more than four and a half hours per day.
- The maximum working hours for adults should be less than 48hrs per week or less than 9hrs per day.
- With overtime being included, it should not be more than 60 hours per week.

79. A child learning the steps of handwashing. This is known as what kind of learning:

SKILLS

A. Cognitive

knowledge

VSQ

B. Psychomotor

C. Affective

- attitude (EQ)

D. Imitation

80. A 19-year-old woman comes to the OPD for evaluation of chronic acne. Over the last 6 months, the patient has tried several over-the-counter acne treatments without improvement. She has a history of attention-deficit hyperactivity disorder and mild intellectual disability. Her mother has a seizure disorder, and her maternal grandmother died of kidney failure. Vital signs are within normal limits. Facial examination findings are shown below. Which of the following is the most likely underlying cause of this patient's condition?

subep nodules
SEA
Mk

AML, RCC, TSC

XLR

Angiodermatoma

- A. Fabry disease
- B. Neurofibromatosis type 1
- C. Tuberos sclerosis
- D. Von Hippel-Lindau disease

pho +

clear cell RCC + H&L



81. Identify the correct statements:

1. Best site for measuring the core temperature intra-operatively is lower 1/3 of esophagus T
2. Titanium and Aluminium cylinders are MRI compatible T
3. T10 level anesthesia is adequate for LSCS -T4 F
4. Sch can cause hyperkalemia, tachycardia, raised ICP and raised intra-gastric pressure F

ideal → PA

Ach

heuma

F

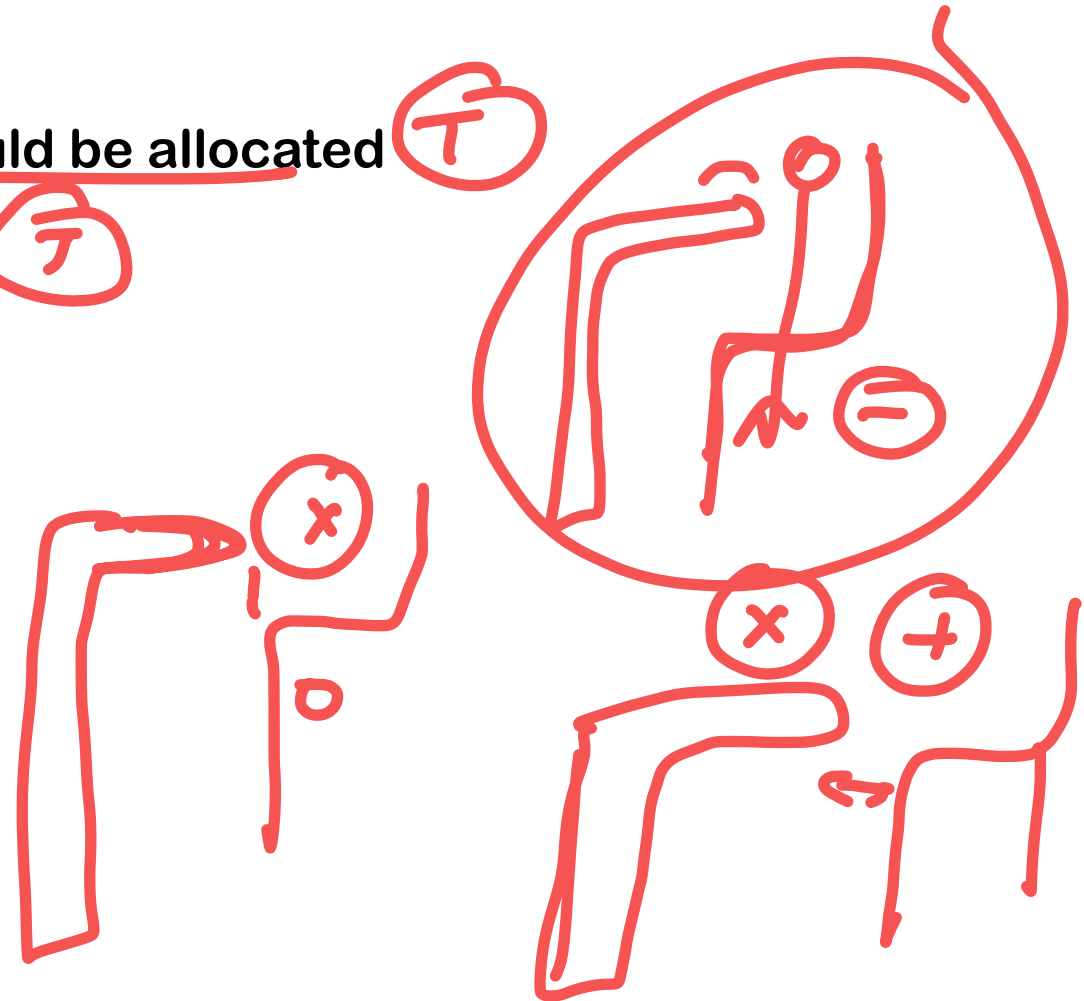
bradyc
Stainless steel

Lmc - (X)
Comp

- A. 1,2,3 X
- ~~B.~~ 1,2
- C. 3,4 X
- D. 2,3 X

82. All of the following are true about the School Health Program except:

- A) Minimum area of 10 sq ft per child should be allocated (T)
- B) Less than 40 students per classroom (T)
- ~~C) Plus type desk *Minus*~~
- D) 1 urinal per 60 students (T)



83. Identify the correct statements

1. Lowest MAC = Highest potency ^{highest (101)} ^{min}
2. Min MAC - N₂O, Max MAC - Methoxyflurane ^F
3. Blood gas partition coefficient (BGC) directly proportional to the speed of induction ^x ^{inv}
4. Lowest BGC - Xenon, Highest BGC - Methoxyflurane ^T

A. 1,2,3,4

B. 1,3

C. 2,4

~~D. 1,4~~

MAC $\propto \frac{1}{\text{potency}}$

min \rightarrow Methoxyflurane

max \rightarrow N₂O Halothane

DSIH

BGC $\propto \frac{1}{\text{speed}}$

min \rightarrow Xenon > Desf

max \rightarrow Methoxyflurane

84. A child with a history of night-blindness presented to you with the following findings. What is the diagnosis ?

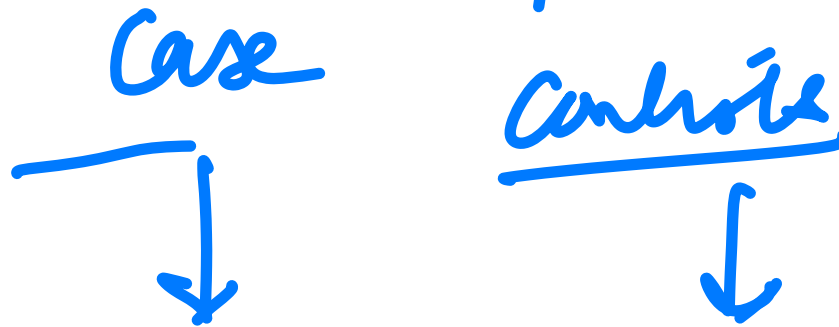
- A. Phrynoderma
- B. Keratoses pilaris
- C. Darier disease
- D. Follicular eczema

vid A



85. A researcher is interested in studying whether there is an association between neural tube defects and use of acetaminophen during the first 3 months of pregnancy. He randomly chooses a group of women who have just delivered babies with neural tube defects, and a second group of women who delivered apparently healthy babies. These 2 groups were then asked about their use of acetaminophen during the first 3 months of pregnancy. Which of the following measures of association are the investigators most likely to report ?

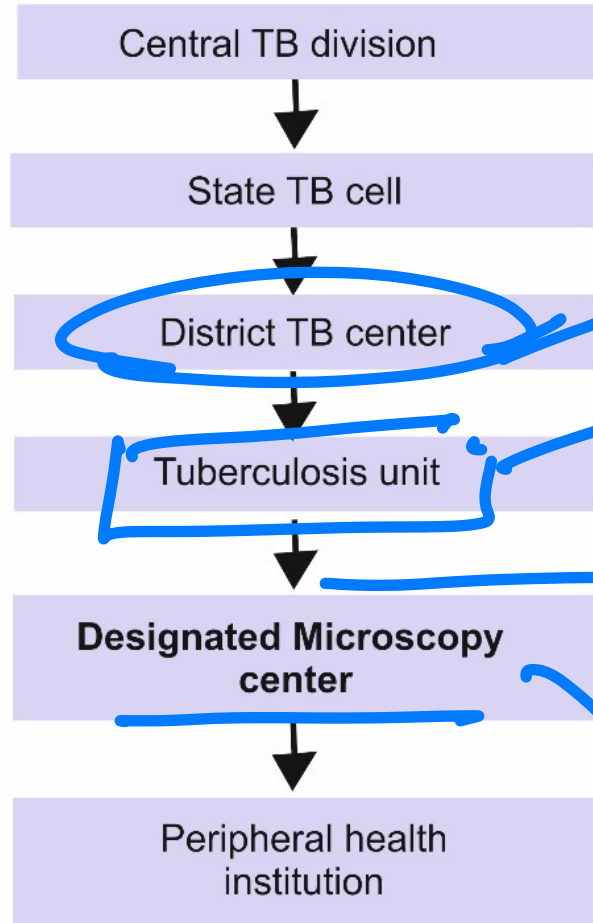
- A. Odds ratio
- B. Prevalence
- C. Incidence
- D. Relative risk



86. Which of the following is the most peripheral centre under the Revised National Tuberculosis Control Programme organization structure ?

- A. District TB centre
- B. Intermediate Reference Laboratory
- C. Tuberculosis Unit
- D. Designated Microscopy Centre

Structure of the RNTCP (Revised National Tuberculosis Control Programme)

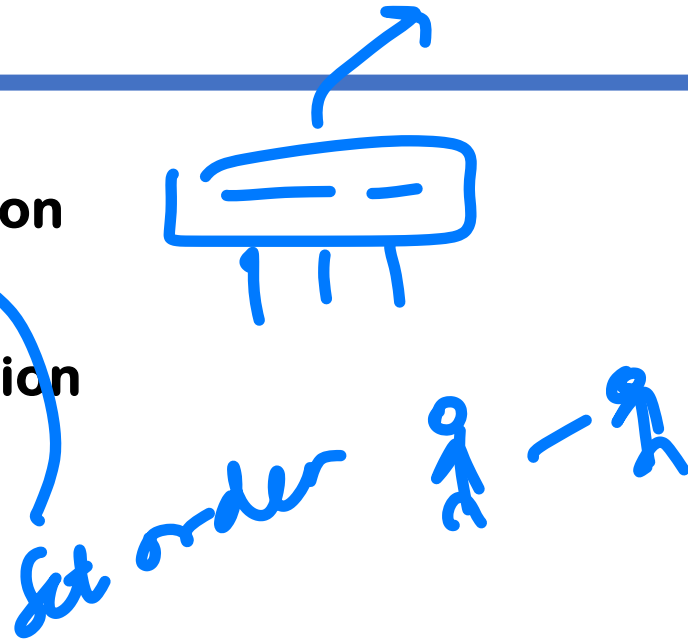


Handwritten annotations in blue ink:

- A circle around the **District TB center** box.
- A circle around the **Tuberculosis unit** box.
- A circle containing the handwritten letters **hp**.
- A circle containing the handwritten letters **SS**.
- The text **IRL** with a double underline.
- The text **ref lab** with a horizontal line extending to the right.
- The text **suscept testing**.

87. On world health day, 4 senior faculty from various departments sit in front of audience to talk about a topic. The director of hospital welcome audience and introduces everyone. There is no specific agenda, no order of speaking, and no set speech. In the end, audience is invited to take part. Identify this method of communication:

- A. Panel discussion
- B. Symposium
- C. Group discussion
- D. Seminar



88. Which of the following is the sensitive indicator to assess the availability, utilization, and effectiveness of healthcare in a community ?

- A. Infant mortality rate**
- B. Maternal mortality rate**
- C. Immunization coverage**
- D. Disability-adjusted life years**

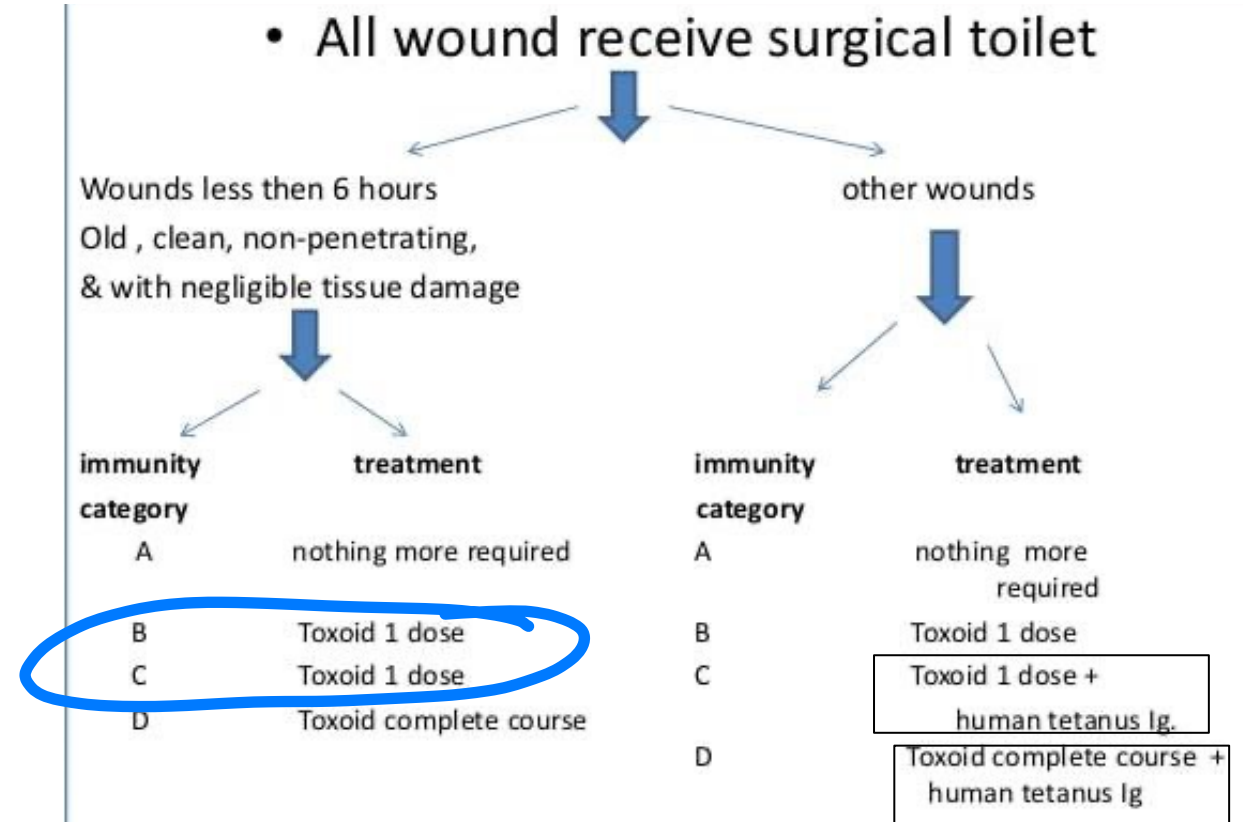
89 A young male came to the hospital with a clean-cut wound without any bleeding. The patient received a full course of tetanus vaccination 10 years ago. What is the best management for this patient ?

- A. Human tetanus immunoglobulin and full course of vaccine
- B. Human tetanus immunoglobulin only
- C. Single-dose tetanus toxoid
- D. Full course tetanus toxoid

Tetanus PEP

Bans BTR

- A - has had a complete course of Toxoid or booster dose with in the past 5 year
- B - has had a complete course of Toxoid or booster dose more then 5 years ago & less then 10 years ago
- C - has had a complete course of Toxoid or a booster dose more then 10 year ago
- D - has not had a complete course of Toxoid or immunity status unknown





90. A 26-year-old man comes to the OPD due to upper and lower limb skin lesions that have been present for the past week. The lesions started as small, red papules that gradually enlarged but are not painful or pruritic. The patient had similar lesions several months ago and was told that the antibiotic prescribed for a dental infection could be the cause. The lesions spontaneously resolved in about 2 weeks. There is no mucous membrane involvement. Which of the following is most likely related to this patient's skin condition ?

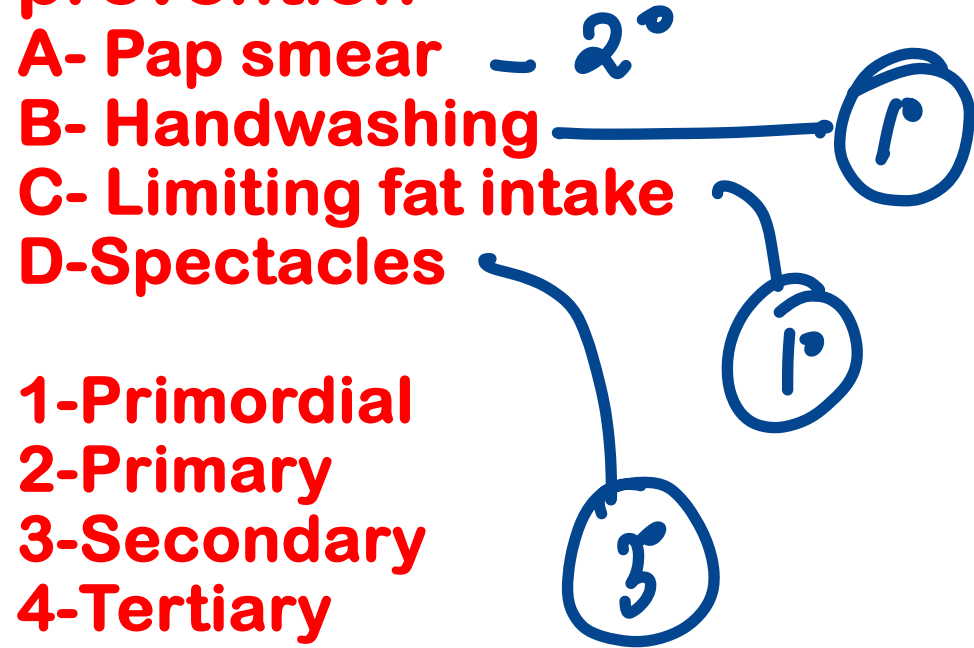
E. multijens

- A. Contact with an individual having ~~similar lesions~~ *xx*
- B. Occupational skin trauma from vegetation *xx*
- C. Recent bite from an Ixodes scapularis tick *xx*
- D. Recurrent episodes of painful genital ulcers



HSV / mycoplasma

91. Match the following wastes with the level of prevention



- A) A-2, B-1, C-2, D-3
- B) A-3, B-2, C-2, D-4
- C) A-2, B-1, C-1, D-3
- D) A-1, B-2, C-1, D-4

92. Which of the following drugs used as nail lacquer belongs to morpholines ?

- A. Amorolfine
- B. Oxiconazole
- C. Ciclopirox olamine
- D. Tioconazole

93. A pregnant woman comes for first antenatal visit at 28 weeks of pregnancy. She has a 2-year-old child. Which Tetanus vaccination will you administer to her ?

- A. Td vaccination 2 doses
- B. TT booster dose
- C. Td booster dose
- D. TT vaccination 2 doses

< 3yr

94. How to measure the size of an oropharyngeal airway

- ~~A)~~ Measure the length from angle of mouth to angle of mandible
- B) Measure the length from tip of nose to ear lobule
- C) Measure the length from mid of lip to ear lobule
- D) Measure the length from ala of nose to ear lobule

NG tube

95. Research is being conducted to find the association between aniline dye exposure and bladder cancer in workers who have worked in the industry for >20 years. Two groups were formed: one directly involved with dye handling and the other group consisting of office clerks not directly exposed to the dye. Years of occupation were noted from records. Then Bladder cancer cases were identified from both the groups in the current time. What type of study is being performed ?

- A. Retrospective cohort study
- B. Prospective cohort study
- C. ~~Case-control study~~
- D. ~~Intervention and response~~

exp

non exp

96. A 35-year-old man comes to the OPD due to skin lesions on his knees for the past several months. The lesions began as small papules and gradually increased in size but are not painful or itchy. Which of the following is the most appropriate management for this patient's skin lesions ?

- A. Allergen avoidance ✗
- B. Gluten-free diet ✗
- C. Topical antifungal ✗
- D. Topical glucocorticoid



97. In a reference sample of hundreds of healthy subjects, the laboratory reference range for a novel marker of cardiac injury is 0.04-0.08 U/ml at the standard 95% level of probability. The marker has very high sensitivity and specificity for myocardial tissue. The clinical cardiology team would like to use a 99.7% reference range to assess patients who come to the emergency department with chest pain and have a high pretest probability of cardiac ischemia. Assuming a normal distribution with a mean of 0.06 U/mL, which of the following most closely approximates the corresponding reference range?

2SD

- ~~A.~~ 0.03 to 0.09
- B. 0.035 to 0.085
- C. 0.045 to 0.075
- D. 0.05 to 0.07

3SD

$$0.06 \pm 3SD$$

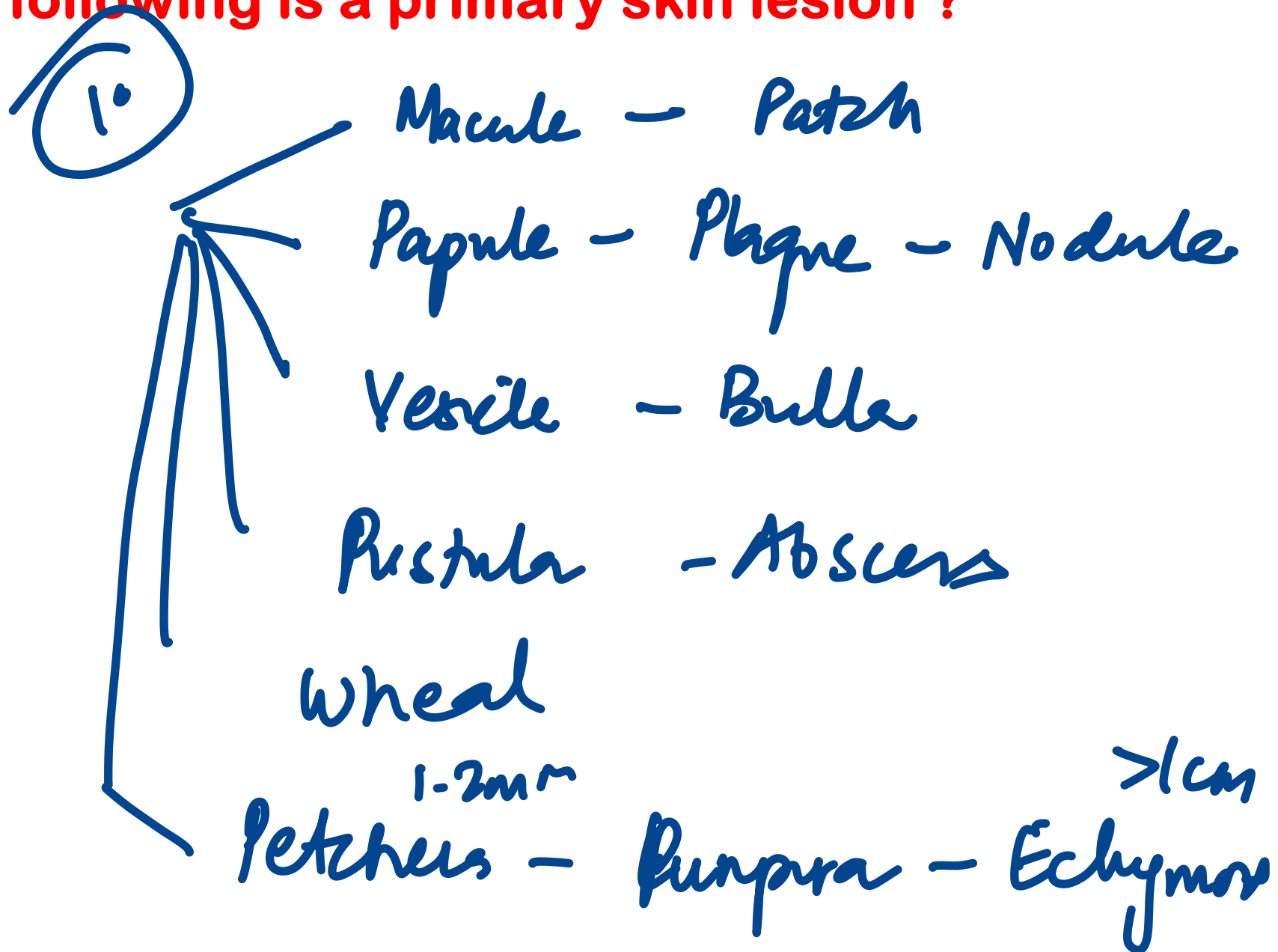
$$0.05 - 0.07$$
$$0.04 - 0.08$$



95% - 2SD

98. Which of the following is a primary skin lesion ?

- A. Crust
- B. Atrophy
- C. Purpura
- D. Induration



Secondary lesions of the skin include:

- Lichenification
- Atrophy
- Ulcer
- Erosion
- Excoriation
- Crust
- Induration
- Scar
- Fissure
- Scale

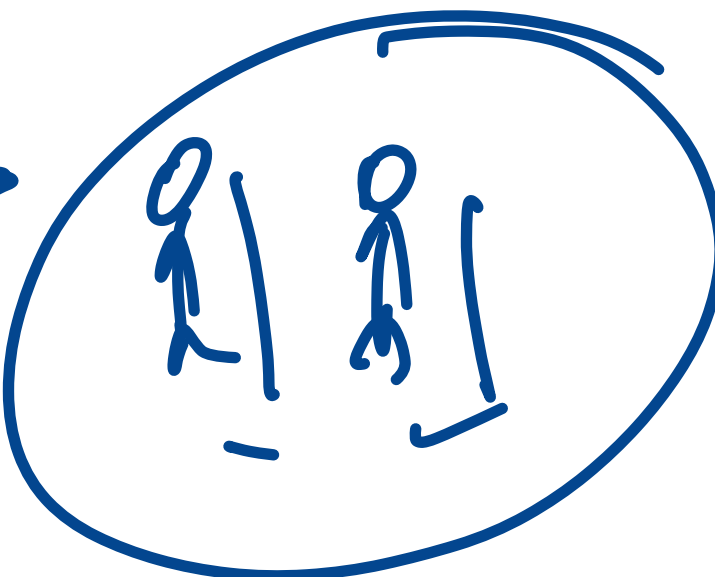
99. Mr. Ramesh, who is 35-year-old, works in a factory and lives with his pregnant wife and a child in an apartment. His younger brother and his wife come to visit him for one month. You are conducting a family survey in the area and will classify this family as:

A. Nuclear family

B. 3 generation family

C. Extended family

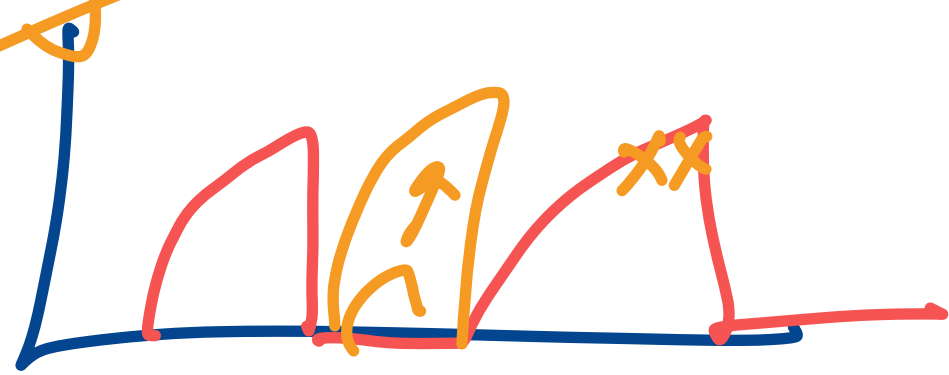
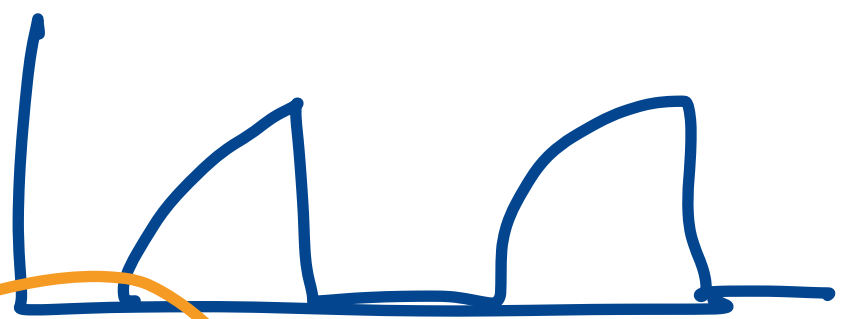
D. Joint family



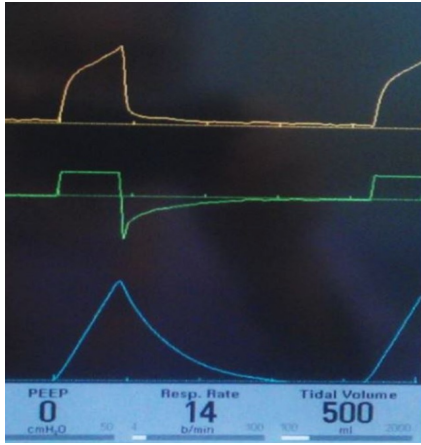
100. Which of the following is not weaning mode of ventilation:

- A) CMV
 - B) SIMV
 - C) PSV
 - D) CPAP
- RR - 12bpm TV - 500ml I:E = 1:2 PEEP = 5cm
- RR - 12bpm

↓ patient machine & ↓ work of breathing



MECHANICAL VENTILATION MODES



Volume-controlled

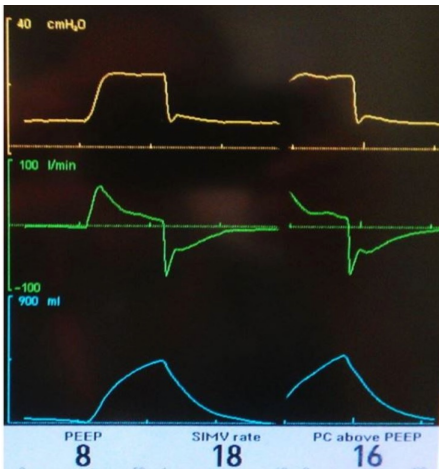
- Controlled mechanical ventilation (CMV)
- Assist-controlled ventilation (ACV)
- Synchronized intermittent mandatory ventilation (SIMV)

Breaths all triggered by ventilator; predefined rate and volume set

Breath triggered by patient's effort, if no patient breath per unit time, ventilator triggered; predefined tidal volume set

Spontaneous breathing permitted with no ventilator assist; mandatory, timed breaths delivered in synchrony with patient's breaths when possible; predefined tidal volume set.

LEAK
↑ hypoxemia



Pressure-controlled

- Pressure support ventilation (PSV)
- Continuous positive airway pressure (CPAP)
- Pressure support (PS)/SIMV

Triggered by patient's inspiration only; assist with pressure limitation provided.

All breaths patient triggered; provides gas at a constant predefined pressure

Combination of PS and SIMV; ensures spontaneous breaths permitted in SIMV receive pressure assist

Volume- and pressure-controlled