

## INICET 2021 Memory Based QuestionPaper PDF

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Q.1

Subject: Biochemistry

Topic: Vitamins

Sub-Topic:

Methyl-tetrahydro-folic acid gets accumulated in deficiency of which of the following?

O1: B2

O2: B12

O3: B1

O4: B6

Q.2

Subject: Biochemistry

Topic: Genetics

Sub-Topic:

Which of the following molecular analysis methods is used to detect RNA?

O1: Sanger's method

O2: G banding

O3: Western blot

O4: RT-PCR

Q.3

Subject: Biochemistry

Topic: Amino Acids and Proteins Chemistry

Sub-Topic:

Glycated hemoglobin (HbA1c) is best measured using?

O1: Ion exchange chromatography

O2: Affinity chromatography

O3: Isoelectric focusing

O4: Electrophoresis

Q.4

Subject: Anaesthesia

Topic: Oxygen Therapy

Sub-Topic:

In conventional oxygen therapy, which device will deliver the highest  $FiO_2$ ?

O1: Venturi mask

O2: Hudson mask

O3: Non-rebreathing mask

O4: Nasal cannula

Q.5

Subject: Biochemistry

Topic: Amino Acids and Proteins Chemistry

Sub-Topic:

Which of the following options is false in a patient with advanced liver disease?

O1: Hyperammonemia

O2: Decreased ATP synthesis

O3: Oxidative decarboxylation of alpha-ketoglutarate

O4: Increased synthesis of glutamine from alpha-ketoglutarate

Q.6

Subject: Anaesthesia

Topic: Miscellaneous

Sub-Topic:

How long should elective surgery be deferred for a patient who had a cough and fever, after recovering from COVID-19 without hospitalization?

O1: 6 weeks

O2: 8-10 weeks

O3: 12 weeks

O4: 4 weeks

Q.7

Subject: Biochemistry

Topic: Carbohydrate Metabolism

Sub-Topic:

Which of the following is not a substrate for glucose formation?

O1: Acetyl coenzyme A

O2: Glycerol

O3: Alanine

O4: Lactate

Q.8

Subject: Biochemistry

Topic: Genetics

Sub-Topic:

Wobble hypothesis explains which of the following concepts of the genetic code?

O1: Universal

O2: Unambiguous

O3: Degeneracy

O4: Non-punctuated

Q.9

Subject: Biochemistry

Topic: Genetics

Sub-Topic:

What is the repair mechanism associated with CRISPR-cas9?

O1: Non-homologous end joining

O2: Base excision repair

O3: Nucleotide excision repair

O4: Mismatch repair

Q.10

Subject: Dermatology

Topic: Skin Tumors

Sub-Topic:

A forest officer develops the lesion as shown in the image. Which of the following is not a differential to consider?



O1: Scrub typhus

O2: KFD (Kyasanur Forest Disease)

O3: Cutaneous anthrax

O4: Healing brown recluse spider bite

Q.11

Subject: Anaesthesia

Topic: Oxygen Therapy

Sub-Topic:

A 60-year-old male patient was undergoing laparoscopic cholecystectomy. During the surgery, a sudden drop in EtCO<sub>2</sub> to 8 mmHg was noted. His SpO<sub>2</sub> became 90%, his blood pressure dropped to 80/50 mmHg, and peak airway pressure was 18 cm of H<sub>2</sub>O. What is the diagnosis?

1. CO<sub>2</sub> embolism

2. Severe bronchospasm

3. Pneumothorax

4. Single bronchus intubation

O1: Both 1 and 2

O2: Both 3 and 4

O3: 1 only

O4: 2 only

Q.12

Subject: Biochemistry

Topic: Lipid Chemistry

Sub-Topic:

Which of the following is not amphipathic?

O1: Sphingolipids

O2: Phosphoglycerol

O3: Triglycerides

O4: Glycolipids

Q.13

Subject: Biochemistry

Topic: Enzymes

Sub-Topic:

The action of inhibition of acetylcholinesterase enzyme by organophosphorus compounds is through which of the following mechanisms?

O1: Non-competitive inhibition

O2: Reversible competitive inhibition

O3: Irreversible competitive inhibition

O4: Suicidal inhibition

Q.14

Subject: Dermatology

Topic: Pigmentary Disorders

Sub-Topic:

A young girl presents with leukotrichia and lesions as shown in the image. What is the most likely diagnosis?



O1: Focal vitiligo

O2: Segmental vitiligo

O3: Piebaldism

O4: Nevus depigmentosus

Q.15

Subject: Dermatology

Topic: Cutaneous Infections

Sub-Topic:

A child presents with itchy lesions on the scalp with hair loss as shown in the image below. What would be the next best step?



O1: KOH mount

O2: Slit skin mount

O3: Gram staining

O4: Biopsy

Q.16

Subject: Medicine

Topic: Infections

Sub-Topic:

Identify the correct 'organism-drug to which it is intrinsically resistant' pair.

O1: Aspergillus niger – Voriconazole

O2: Aspergillus fumigatus – Micafungin

O3: Candida albicans – Amphotericin B

O4: Candida Krusei – Fluconazole

Q.17

Subject: Anaesthesia

Topic: Regional Anesthesia

Sub-Topic:

What is the mechanism of action of local anesthetics?

O1: Block sodium channels

O2: Block potassium channels

O3: Block calcium channels

O4: Block chloride channels

Q.18

Subject: Dermatology

Topic: Eczema

Sub-Topic:

A child presented with itchy plaques over the neck, bilateral popliteal, and cubital fossae. What could be the diagnosis?





- O1: Atopic dermatitis
- O2: Dermatitis herpetiformis
- O3: Pemphigus vegetans
- O4: Psoriasis

Q.19

Subject: ENT

Topic: Nose and Paranasal Sinuses

Sub-Topic:

Identify the condition shown in the image.



- O1: Adenoid facies
- O2: Goldenhar syndrome
- O3: Horse facies
- O4: Frog facies

Q.20

Subject: Microbiology

Topic: Virology

Sub-Topic:

Which of the following causes aplastic crisis in hereditary spherocytosis?

O1: Poxvirus

O2: Epstein-Barr virus

O3: Adenovirus

O4: Parvovirus

Q.21

Subject: Medicine

Topic: Hematology

Sub-Topic:

An elderly woman presented with confusion, thirst, and abdominal pain symptoms. On examination, she had pallor and thoracic spine tenderness. X-ray spine showed osteolytic lesions. Her lab investigations showed the following findings. What is the most likely diagnosis?

Hb: 69 g/dl

WBC: 4000/cm<sup>3</sup> with normal differential count

Serum calcium: 13 mg/dl

Creatinine: 2.3 mg/dl

Total protein: 9 g/dl

Albumin: 2.4 g/dl

O1: Metastatic breast cancer

O2: Multiple myeloma

O3: Primary hyperparathyroidism

O4: Milk alkali syndrome

Q.22

Subject: Dermatology

Topic: Skin Tumors

Sub-Topic:

A young female presented with findings on the face. Which among the following will not be useful for its treatment?



O1: Topical benzoyl peroxide

O2: Topical fluocinolone

O3: Topical tazarotene

O4: Topical antibiotics

Q.23

Subject: Medicine

Topic: Infections

Sub-Topic:

During the discharge of a COVID patient treated with steroids and remdesivir, which of the following will you inform him about?

1. Repeat RT-PCR after 7 days of discharge
2. Watch for the persistence of anosmia
3. Watch for headache and nasal discharge
4. Monitor glucose levels

5. Watch for sinusitis symptoms

O1: 1, 3, and 4

O2: 2, 3, and 4

O3: 3, 4, and 5

O4: 1, 2, 3, 4, and 5

Q.24

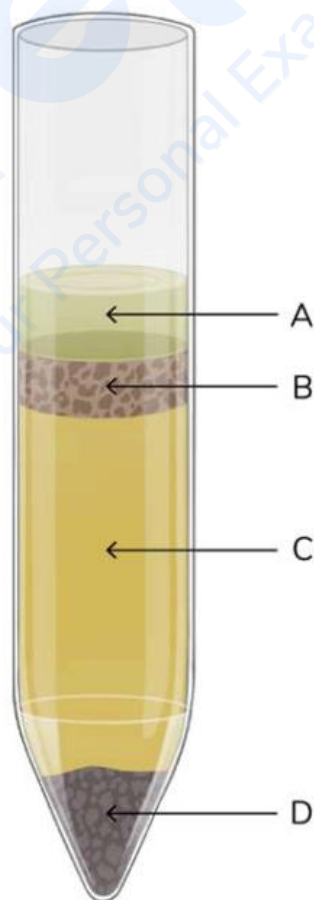
Subject: Microbiology

Topic: Parasitology

Sub-Topic:

A stool sample is collected. The specimen is processed for examination and is labeled at different levels as A, B, C, and D. Identify the level at which parasitic ova will be seen.

### Formalin-ether sedimentation technique



O1: A

O2: B

O3: C

O4: D

Q.25

Subject: ENT

Topic: Larynx

Sub-Topic:

Which among the following is not used in post-laryngectomy rehabilitation?

O1: Tracheo-esophageal prosthesis

O2: Esophageal speech

O3: Polite yawning

O4: Super supraglottic swallow

Q.26

Subject: Dermatology

Topic: Papulosquamous Disorders

Sub-Topic:

A child presented with asymptomatic lesions on the forearm and on the shaft of the penis. What is the most likely diagnosis?



- O1: Lichen planus
- O2: Lichen nitidus
- O3: Scrofuloderma
- O4: Scabies

Q.27

Subject: Medicine

Topic: Neurology

Sub-Topic:

A 50-year-old man suddenly developed right-sided weakness and aphasia within 2 hours. His BP recorded was 160/110 mmHg and NCCT was clear. What is the next step in management?

- O1: CT angiography to look for large vessel occlusion
- O2: MRI to look for intact
- O3: Tab labetalol 10 mg stat
- O4: Thrombolysis

Q.28

Subject: ENT

Topic: Ear

Sub-Topic:

A patient presents with vertigo, tinnitus, and head tilt. He underwent myringoplasty for the safe type of chronic suppurative otitis media (CSOM) 6 months back. What is your diagnosis?

- O1: Perilymphatic fistula
- O2: Labyrinthitis
- O3: Paget disease
- O4: Vestibular schwannoma

Q.29

Subject: Microbiology

Topic: Immunology

Sub-Topic:

Which cell is involved in type 4/delayed type hypersensitivity?

O1: Cytotoxic T cell

O2: Macrophage

O3: Dendritic cell

O4: Neutrophil

Q.30

Subject: Medicine

Topic: Cardiology

Sub-Topic:

For the diagnosis of resistant hypertension, the patient should have uncontrolled hypertension despite taking three antihypertensive drugs. This should include at least one:

O1: Calcium channel blocker

O2: Beta-blocker

O3: Alpha blocker

O4: Diuretic

Q.31

Subject: Dermatology

Topic: Cutaneous Infections

Sub-Topic:

A young man presented with painful lesions as shown in the image. What is the likely diagnosis?



O1: Herpes Zoster

O2: Molluscum contagiosum

O3: Herpes simplex

O4: Lymphangioma circumscriptum

Q.32

Subject: Medicine

Topic: Nephrology / Kidney Disease

Sub-Topic:

Which of the following is not true about the syndrome of inappropriate antidiuretic hormone secretion (SIADH)?

O1: Urinary sodium  $<20$  mEq/L

O2: Serum sodium  $<135$  mEq/L

O3: Urine osmolality  $>100$  mOsm/kg

O4: Patient can be clinically euvolemic to hypovolemic

Q.33

Subject: Medicine

Topic: Neurology

Sub-Topic:



Treatment of choice for an acute attack of cluster headache is:

- O1: Oral sumatriptan
- O2: Subcutaneous sumatriptan
- O3: 100% oxygen at 6 L/minute
- O4: 100% oxygen at 8 L/minute

Q.34

Subject: Microbiology

Topic: General Microbiology

Sub-Topic:

Which of the following is a xeno diagnostic method?

- O1: Rabbit ileal loop for enterotoxigenic Escherichia coli
- O2: Injecting Aedes thorax with blood of a suspected dengue patient
- O3: Injecting a hamster with splenic biopsy for diagnosis of leishmaniasis
- O4: Intradermal test on guinea pigs for toxigenicity of Corynebacterium diphtheria

Q.35

Subject: Medicine

Topic: Pulmonology

Sub-Topic:

A 35-year-old female patient with class II pulmonary hypertension presents with a negative vasoreactive test. Which of the following is used in the next step of management?

- O1: Iloprost
- O2: Ambrisentan
- O3: Nifedipine
- O4: Epoprostenol

Q.36

Subject: Medicine

Topic: Rheumatology / Connective Tissue Disorder

Sub-Topic:

Which of the following drugs is preferred in the management of primary progressive multiple sclerosis?

O1: Natalizumab

O2: Ocrelizumab

O3: Fingolimod

O4: Alemtuzumab

Q.37

Subject: Microbiology

Topic: Mycology

Sub-Topic:

A man presents with the following lesion after traumatic inoculation. Identify the causative organism.



O1: Mycobacterium scrofulaceum

O2: Sporothrix schenckii

O3: Madurella mycetomatis

O4: Phialophora verrucosa

Q.38

Subject: Forensic Medicine

Topic: Forensic Traumatology

Sub-Topic:

Match the following weapons with their possible injury type:

| Weapon            | Injury Type          |
|-------------------|----------------------|
| A. Axe            | 1. Incised wound     |
| B. RTA (Friction) | 2. Tram track bruise |
| C. Blade          | 3. Grazed abrasion   |
| D. Lathi          | 4. Chop wound        |

O1: A-4, B-3, C-1, D-2

O2: A-1, B-3, C-4, D-2

O3: A-1, B-2, C-4, D-3

O4: A-4, B-1, C-3, D-2

Q.39

Subject: Medicine

Topic: Cardiology

Sub-Topic:

A 60-year-old male patient with critical mitral stenosis presented with atrial fibrillation. He has a history of multiple episodes of transient ischemic attacks. Which of the following are true regarding preventing stroke in this patient?

1. Only aspirin is given
2. Warfarin is given

3. Direct oral anticoagulants are not indicated

4. Mitral valvotomy should be recommended

O1: 1 only

O2: 2 and 3

O3: 2, 3, and 4

O4: 1, 2, 3, and 4

Q.40

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

A pregnant woman at 36 weeks gestation is found to have high blood pressure recording and a urine protein of 3+. Concomitant presence of which of the following symptoms would make you suspect imminent eclampsia?

1. Headache

2. Blurred vision

3. Persistent pedal oedema

4. Epigastric pain

O1: 2 and 4 only

O2: 1 and 2 only

O3: 1, 2, 3

O4: 1, 2, 3, 4

Q.41

Subject: Ophthalmology

Topic: Glaucoma

Sub-Topic:

A 30-year-old female presents with redness and pain in the eye. Examination revealed 38 mm of Hg on IOP, aqueous flare, and corneal precipitates (Uveitic glaucoma). Which of the following drugs must be avoided for her?

- O1: Beta-blockers
- O2: Mannitol
- O3: Carbonic anhydrase inhibitors
- O4: Prostaglandin analogs

Q.42

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Which of the following is not used to treat PCOD?

- O1: Clomiphene citrate
- O2: Metformin
- O3: Tamoxifen
- O4: OCP

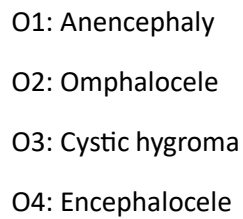
Q.43

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

A doctor tells a 31-year-old woman, who is 20 weeks pregnant, that her baby has a developmental defect. The following USG finding is seen. Identify the defect.



- O1: Mature B cells
- O2: Mature T cells
- O3: Progenitor T cells
- O4: Naïve B cells

Match the following postmortem findings and their time of appearance:

| PM Finding                          | Time of Appearance |
|-------------------------------------|--------------------|
| A. Adipocere formation              | 1. 24 hrs          |
| B. Relaxation of urethral sphincter | 2. 2-3 days        |
| C. Marbling of veins                | 3. 4-5 days        |
| D. Liquefaction of tissues          | 4. 8-10 days       |

O1: A-4, B-1, C-2, D-3

O2: A-3, B-1, C-2, D-4

O3: A-4, B-2, C-1, D-3

O4: A-1, B-2, C-3, D-4

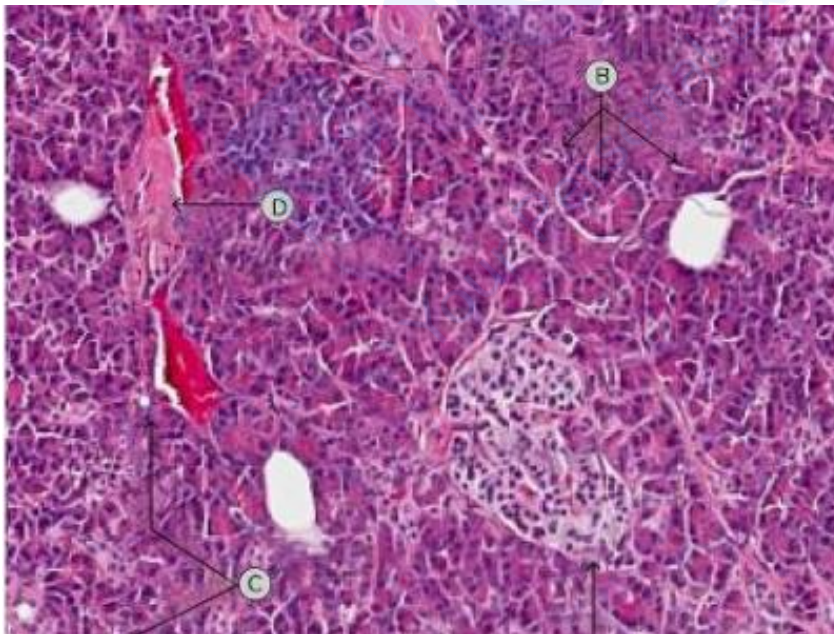
Q.46

Subject: Pathology

Topic: Respiratory System

Sub-Topic:

In cystic fibrosis, which of the following structures is affected in the pancreas?



O1: A

O2: B (Pancreatic ducts)

O3: C

O4: D

Q.47

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Arrange the following in sequential order with regards to the steps of collection of samples for pap smear testing:

1. Use posterior vaginal wall retractor
2. Take the sample
3. Make smear on a slide
4. Fix the smear

O1: 1, 2, 4, 3

O2: 2, 1, 3, 4

O3: 3, 1, 2, 4

O4: 1, 2, 3, 4

Q.48

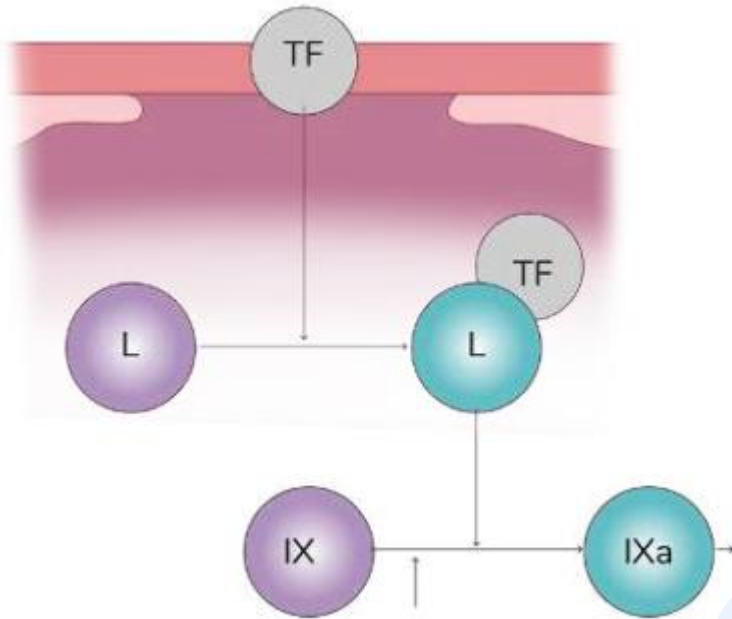
Subject: Pathology

Topic: Platelets and Blood Transfusion

Sub-Topic:

Below is an image of the coagulation cascade activation following closed endothelial injury. Identify the factor 'L' which combines with tissue factor to activate factor IX.





O1: Factor XII

O2: Factor VII

O3: Factor VIII

O4: vWF

Q.49

Subject: Forensic Medicine

Topic: Sexual Jurisprudence

Sub-Topic:

An 18-year-old female was sexually assaulted by a 20-year-old male. There was the presence of stains on the clothes of the victim. Barberio's test was performed on the stains. Which of the following is detected by this test?

O1: Spermine

O2: Acid phosphatase

O3: Choline

O4: Fructose

Q.50

Subject: Pathology

Topic: Inflammation

Sub-Topic:

Arrange the following cellular events of inflammation in the correct sequence:

1. Rolling
2. Cytokine-mediated integrin activation
3. Adhesion
4. Migration

O1: 1, 2, 3, 4

O2: 2, 1, 4, 3

O3: 4, 1, 2, 3

O4: 3, 4, 1, 2

Q.51

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

Which of the following is a part of AMTSL?

- O1: Uterotonics after delivery of placenta
- O2: Controlled cord traction
- O3: Uterine massage
- O4: Early cord clamping

Q.52

Subject: Pathology

Topic: Neoplasia

Sub-Topic:

A 5-year-old child who presented with proptosis of one of the eyes was found to have a desmin positive tumor. What is the probable diagnosis?

O1: Ewing's sarcoma

O2: Embryonal rhabdomyosarcoma

O3: Leukemia

O4: Retinoblastoma

Q.53

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Which of the following is not a cause of secondary amenorrhea?

O1: Turner's mosaic

O2: Kallman syndrome

O3: Sheehan's syndrome

O4: Asherman's syndrome

Q.54

Subject: Pathology

Topic: Neoplasia

Sub-Topic:

Which of the following is true?

1. BRCA1 is an oncogene

2. HER2neu is amplified only in a fraction of breast cancer

3. EGFR (+) is seen in non-small cell lung cancer

4. N-MYC is a tumor suppressor gene

O1: 1, 2

O2: 1, 3

O3: 2, 3

O4: All of the above

Q.55

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

What should be the ideal percentage for normal sperm morphology in a seminal fluid analysis?

O1: 10%

O2: 4%

O3: 6%

O4: 8%

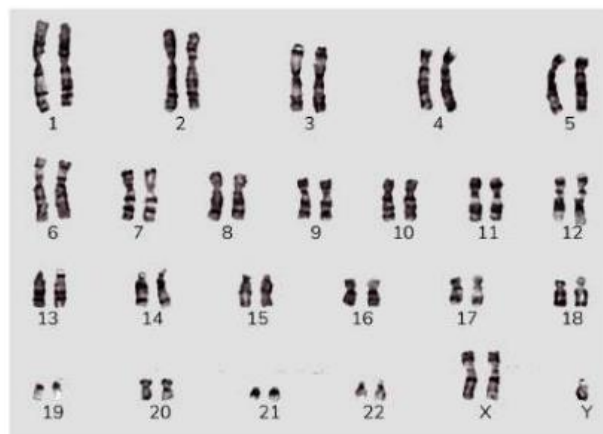
Q.56

Subject: Pathology

Topic: Genetics

Sub-Topic:

A karyotyping image is given below. What are the clinical features most likely to be expected in such patients?



O1: Gynecomastia and long limbs

O2: Flat occiput

O3: Webbing of neck and lymphedema

O4: Short stature and polydactyly

Q.57

Subject: Forensic Medicine

Topic: Forensic Thanatology

Sub-Topic:

A skull was recovered from a forest. According to inquest papers, a girl had gone missing 15 days back. The skull was sent to the forensic research lab. Which of the following would identify it as a female skull?

1. Large frontal and parietal eminence
2. Heavy cheek bones
3. Smooth glabella
4. Square orbits
5. Narrow mastoid

O1: 1 and 4 only

O2: 2, 3 and 4

O3: 1, 3 and 5

O4: 3, 4 and 5

Q.58

Subject: Pathology

Topic: Miscellaneous

Sub-Topic:

Which of the following can be prevented by transfusing irradiated RBCs?

O1: Graft versus host disease

O2: HLA Alloimmunization

O3: Immunomodulation

O4: Transfusion Related Acute Lung Injury (TRALI)

Q.59

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Match the following syndromes with their respective karyotypes.

| Syndrome                           | Karyotype  |
|------------------------------------|------------|
| 1. Turner's syndrome               | A. 46 + XX |
| 2. Sweyer's syndrome               | B. 46 + XY |
| 3. Androgen insensitivity syndrome | C. 46 + XY |
| 4. MRKH syndrome                   | D. 45 + XO |

O1: 1-D, 2-B, 3-C, 4-A

O2: 1-B, 2-C, 3-D, 4-A

O3: 1-A, 2-B, 3-C, 4-D

O4: 1-D, 2-A, 3-C, 4-B

Q.60

Subject: Forensic Medicine

Topic: Forensic Thanatology

Sub-Topic:

The dead body of a 20-year-old man found in the sea was brought in for postmortem examination. Which of the following findings would you see in seawater drowning?

1. Hypernatremia

2. Hyponatremia

3. Hyperkalemia

4. Myocardial anoxia

5. Hemodilution

O1: 1 and 3

O2: 1 and 4

O3: 2, 3 and 5

O4: 2, 4 and 5

Q.61

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

Which of the following instruments are used in the caesarean section?

1. Bard-Parker blade

2. Doyen's retractor

3. Cusco's speculum

4. Allis forceps

5. Shirodkar's uterine clamp

6. Green Armytage forceps

O1: 1, 2, 5, 6

O2: 1, 2, 3, 5

O3: 1, 2, 4, 6

O4: 1, 2, 3, 6

Q.62

Subject: Pathology

Topic: CVS, Blood Vessels and Vasculitis

Sub-Topic:

What is the gold standard investigation for the diagnosis of myocarditis?

- O1: Endo-myocardial biopsy
- O2: Magnetic Resonance Imaging
- O3: Brain natriuretic Peptide
- O4: LDH1 to LDH2 ratio

Q.63

Subject: Forensic Medicine

Topic: Violent Asphyxia Deaths

Sub-Topic:

The friend and victim had alcohol and got into an argument over a common girlfriend, following which the friend kills the victim by sitting on his chest and covering his nose and mouth (Asphyxia). This is an example of?

- O1: Burking
- O2: Smothering
- O3: Traumatic asphyxia
- O4: Overlaying

Q.64

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

What is the normal uterocervical length?

- O1: 3 cm
- O2: 5 cm
- O3: 7 cm
- O4: 10 cm



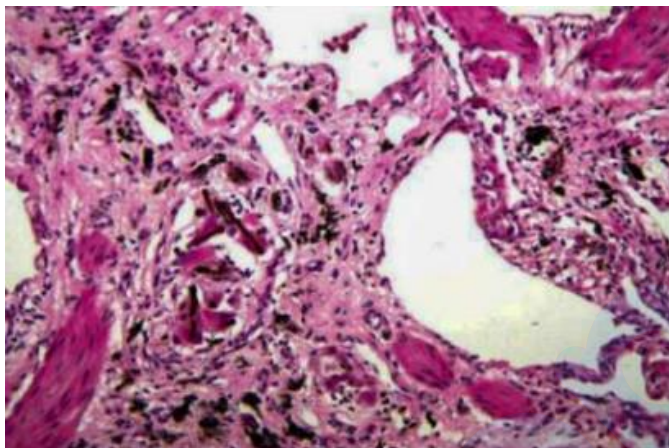
Q.65

Subject: Pathology

Topic: Respiratory System

Sub-Topic:

A person working in an industry for a long time developed progressive breathlessness. The histopathological image of his lung biopsy is given below. What industry was he most likely working in?



O1: Silica

O2: Asbestos

O3: Coal dust

O4: Cotton

Q.67

Subject: Ophthalmology

Topic: Retina

Sub-Topic:

What is the most common route of the spread of retinoblastoma?

O1: Optic nerve invasion

O2: Hematogenous

O3: Direct invasion

O4: Lymphatic spread

Q.68

Subject: Pathology

Topic: Hematology: White Blood Cells

Sub-Topic:

A patient with lytic lesions on the skull is suspected of a diagnosis of Langerhan cell histiocytosis. Which of the following is a characteristic finding on electron microscopy?

O1: Histiocytes

O2: Birbeck granules

O3: Eosinophils

O4: Giant cells

Q.69

Subject: Forensic Medicine

Topic: Forensic Toxicology

Sub-Topic:

A person working in a dye factory presented with nausea, vomiting, dark bloody stools, conjunctivitis, and a burning sensation in the throat and stomach. Which poisoning do you suspect in this case?

O1: Potassium permanganate

O2: Arsenic

O3: Thallium

O4: Lead

Q.70

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Which of the following symptoms are seen in endometriosis?

1. Infertility
2. Dysmenorrhea
3. Vaginal discharge
4. Vaginal bleeding

O1: 3, 4

O2: 2, 3

O3: 1, 2

O4: 1, 2, 4

Q.71

Subject: Forensic Medicine

Topic: Violent Asphyxia Deaths

Sub-Topic:

On conducting the autopsy on a victim of hanging, the ligature mark is seen at the lower 1/3rd of the neck. The victim is seen to have a protruded tongue. He was found with his head hanging to his left side with saliva dribbling from the left angle of his mouth. Both the pupils are dilated and the right eye is open. Compression of which of the following structures is the probable reason for an open right eye in this case?

- O1: Right internal jugular vein
- O2: Cervical sympathetic chain
- O3: Left vagus nerve
- O4: Right internal carotid artery

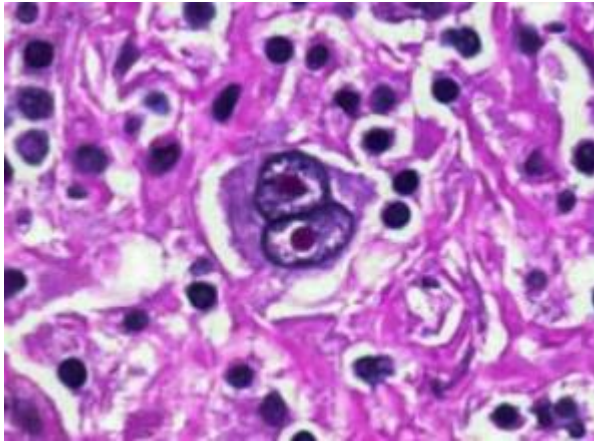
Q.72

Subject: Pathology

Topic: Neoplasia

Sub-Topic:

A 6-year-old boy came with bilateral cervical lymphadenopathy. What is the probable diagnosis, cell, and virus associated with the image given below?



O1: Non – Hodgkin's lymphoma, RS cell, EBV

O2: Kaposi sarcoma, Giant cell, HIV

O3: Hodgkin's lymphoma, RS cell, EBV

O4: Infectious mononucleosis, RS cell, CMV

Q.73

Subject: Pathology

Topic: Immunity

Sub-Topic:

A person was brought to the emergency department with facial swelling, itching, and hypotension following a bee sting (Anaphylaxis). The mentioned clinical features are due to the increase in which immunoglobulin?

O1: IgA

O2: IgE

O3: IgM

O4: IgG

Q.74

Subject: Ophthalmology

Topic: Conjunctiva

Sub-Topic:

SAFE strategy for trachoma includes all except?

O1: Surgery for trichiasis

O2: Antibiotics

O3: Facial cleanliness

O4: Evaluation of control program

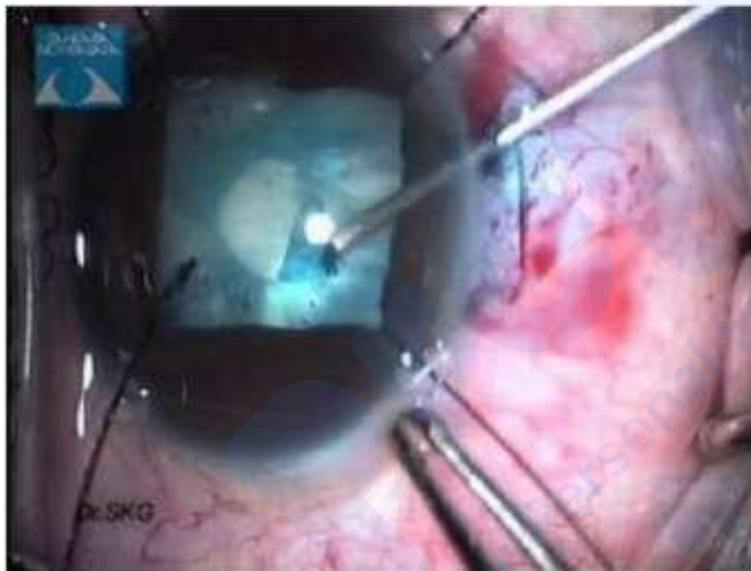
Q.75

Subject: Ophthalmology

Topic: Diseases of Lens

Sub-Topic:

Identify the surgical step shown in the image given below.



O1: Capsulorrhexis

O2: Hydrodissection

O3: Intraocular lens implantation

O4: Lens aspiration

Q.76

Subject: Pathology

Topic: Immunity

Sub-Topic:

A 42-year-old female patient presents with cough, low-grade fever, and hemoptysis. Investigations reveal a cavitory lesion on her right lung apex, which on biopsy reveals caseous necrosis. The underlying pathophysiology is:

- O1: Enzyme degradation
- O2: Type 4 hypersensitivity reaction
- O3: Fibrinoid deposition
- O4: Sudden cut off of blood supply

Q.77

Subject: Pediatrics

Topic: Infectious Diseases

Sub-Topic:

Which of the following is a true statement about congenital CMV infection?

- O1: About 20-30% of the infections are symptomatic
- O2: Triad of SNHL, periventricular calcification and enamel hypoplasia
- O3: Most children asymptomatic at birth can develop conductive hearing loss later in life
- O4: If mother is IgG positive for CMV, the child is unlikely to develop an infection

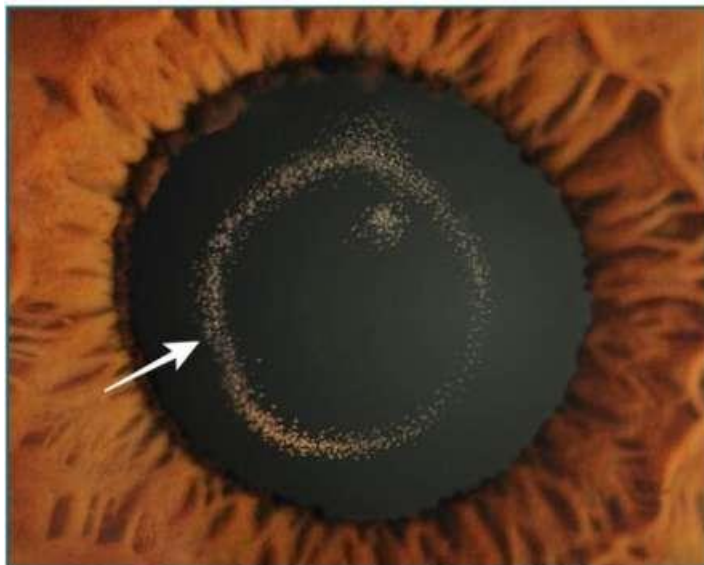
Q.78

Subject: Ophthalmology

Topic: Diseases of Lens

Sub-Topic:

Identify the finding marked by the arrow in the below image.



- O1: Vossius ring
- O2: Weiss ring
- O3: Fleischer's ring
- O4: Kayser Fleischer ring

Q.79

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

A female patient having frothy vaginal discharge was found to have a strawberry cervix. Which of the following is the drug of choice?

- O1: Metronidazole
- O2: Fluconazole
- O3: Tetracycline
- O4: Cefixime

Q.80

Subject: Pathology

Topic: Neoplasia

Sub-Topic:

A 65-year-old male patient with chronic fatigue and lymphadenopathy presents to the outpatient department. His peripheral smear shows the presence of smudge cells. Which of the following additional investigations will you do to arrive at a diagnosis?

O1: Polymerase chain reaction

O2: Fluorescent in situ hybridization

O3: Flow cytometry

O4: Cytogenetics

Q.81

Subject: Pediatrics

Topic: Infectious Diseases

Sub-Topic:

Which of the following is given as a part of the therapy for a child with severe COVID?

O1: Corticosteroids

O2: Ivermectin

O3: Remdesivir

O4: All of the above

Q.82

Subject: Pathology

Topic: Neoplasia

Sub-Topic:

A boy presents with fever, night sweats, and neck swelling. The biopsy of swelling showed a starry sky appearance. What is the most likely genetic abnormality seen in this case?

O1: MYC



O2: RAS

O3: BCR-ABL

O4: p53

Q.83

Subject: Orthopaedics

Topic: Metabolic Disorders

Sub-Topic:

Which of the following is seen in osteoporosis?

O1: Normal calcium and increased ALP

O2: Normal calcium and normal ALP

O3: Decreased calcium and normal ALP

O4: Increased calcium and increased ALP

Q.84

Subject: Pediatrics

Topic: Infectious Diseases

Sub-Topic:

A child presents with fever and vesicular lesions on the upper limb and the lower limb. Neck stiffness was present. Similar lesions were present on the palms, soles, and oral cavity. CSF analysis revealed normal glucose levels and elevated lymphocytes and protein. What is the most likely diagnosis?



A



B

O1: Bacterial meningitis with sepsis

O2: Coxsackie viral meningitis and Hand Foot Mouth disease

O3: Herpes simplex gingivostomatitis and meningoencephalitis

O4: Tuberculous meningitis

Q.85

Subject: Orthopaedics

Topic: General + Upper Limb Traumatology

Sub-Topic:

Which of the following findings appear late in compartment syndrome?

O1: Pallor

O2: Paralysis

O3: Pulselessness

O4: Pain on passive stretch

Q.86

Subject: Pathology

Topic: Hematology: Red Blood Cells

Sub-Topic:

Which of the following is not likely to be seen in a patient with Paroxysmal Nocturnal Hemoglobinuria (PNH)?

O1: Aplastic anemia

O2: Leukemia

O3: Thrombosis

O4: Hemolysis

Q.87

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

A primigravida in her 10th week of gestation presents with spotting. On examination, the uterus corresponds to 12 weeks. Transvaginal ultrasound was done and it is given below. What is your diagnosis?



- O1: Blighted ovum
- O2: Missed abortion
- O3: Ectopic pregnancy
- O4: Hydatidiform mole

Q.88

Subject: Pediatrics

Topic: Pediatric Cardiology

Sub-Topic:

Which of the following congenital heart diseases has equal saturation in all heart chambers?

- O1: Tetralogy of Fallot
- O2: Total anomalous pulmonary venous circulation
- O3: Tricuspid atresia
- O4: Transposition of great arteries

Q.89

Subject: Orthopaedics

Topic: General + Upper Limb Traumatology

Sub-Topic:

An old lady slipped and fell at home. She was diagnosed with a Colles fracture and managed with a POP cast. What is the correct sequence of reduction?

O1: Traction, POP, palmar flexion, ulnar deviation

O2: Traction, palmar flexion, ulnar deviation, POP

O3: Traction, ulnar deviation, palmar flexion, POP

O4: Palmar flexion, ulnar deviation, traction, POP

Q.90

Subject: Pediatrics

Topic: Pediatric Neurology

Sub-Topic:

Which of the following are causes of neonatal seizures?

1. Hypernatremia
2. Hypomagnesemia
3. Hypocalcemia
4. Hypernatremia

O1: 1, 2, 3 only

O2: 1, 2, 3, and 4

O3: 1, 3, 4 only

O4: 2, 4 only

Q.91

Subject: Physiology

Topic: Excretory System

Sub-Topic:

The formula for urea clearance is  $UV/P$ , where U is?

O1: Urine volume

O2: Serum urea in mg/100 ml

O3: Urine urea in g/24h

O4: Urine urea in mg/100 ml

Q.92

Subject: Orthopaedics

Topic: Spine + Pelvis + Lower Limb Traumatology

Sub-Topic:

Following a femoral shaft fracture, your consultant asks you to provide tibia traction. Which of the following will you request from the nurse?

1. Thomas splint

2. K-wire

3. Steinmann pin

4. Denham's pin

5. Bohler's stirrup

6. Bohler Braun splint

O1: 1, 2, 4

O2: 3, 5, 6

O3: 3, 4, 5

O4: 1, 2, 3, 4, 5, 6

Q.93

Subject: Physiology

Topic: Gastrointestinal System

Sub-Topic:

The relaxation of the intestinal segment distal to the segment with the bolus of food during peristalsis is because of?

O1: VIP

O2: Substance P

O3: Dopamine from adrenergic fibers

O4: Acetylcholine from myenteric fibers

Q.94

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

A primigravida is in labor. Her per-vaginal examination revealed a posterior cervix with 5 cm cervical length, 1 cm dilatation, soft consistency, and head at -1 station. Calculate the Bishop score.

O1: 8

O2: 5

O3: 3

O4: 0

Q.95

Subject: Pediatrics

Topic: Growth

Sub-Topic:

At what age does a child attain half-height of the adult height?

O1: 12-18 months

O2: 20-24 months

O3: 32-36 months

O4: 40-48 months

Q.96

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

What is the dose of carbetocin used in the prevention of postpartum hemorrhage?

O1: 50 mcg

O2: 150 mcg

O3: 200 mcg

O4: 100 mcg

Q.97

Subject: Physiology

Topic: Endocrine and Reproductive System

Sub-Topic:

Beta hCG is structurally similar to which biochemical moiety?

O1: LH

O2: FSH

O3: ACTH

O4: Oxytocin

Q.98

Subject: Orthopaedics

Topic: Spine + Pelvis + Lower Limb Traumatology

Sub-Topic:

Following a road traffic accident, a patient develops type IIIa compound tibial fracture. Arrange the following external fixators in decreasing order of their stability (highest to lowest):

1. Ilizarov fixator
2. Uniplanar with a single rod
3. Uniplanar with double rod
4. Biplanar frame/Ring with a cylindrical rod

O1:  $1 > 2 > 3 > 4$

O2:  $2 > 4 > 3 > 1$

O3:  $1 > 4 > 3 > 2$

O4:  $2 > 3 > 1 > 4$

Q.99

Subject: Gynaecology & Obstetrics

Topic: Obstetrics

Sub-Topic:

Milk production in pregnancy is inhibited by:

- O1: Low luteinizing hormone
- O2: High estrogen
- O3: Human somatomammotropin
- O4: Low thyroid-stimulating hormone

Q.100

Subject: Orthopaedics

Topic: Peripheral Nerve Injuries

Sub-Topic:



If the outer sheath and nerve fiber are intact and the inner axon is damaged, it is known as:

- O1: Neurapraxia
- O2: Axonapraxia
- O3: Axonotmesis
- O4: Neurotmesis

Q.101

Subject: Microbiology

Topic: Virology

Sub-Topic:

Match the following in the Japanese encephalitis virus life cycle:

| Role               | Host/Organism   |
|--------------------|-----------------|
| 1. Accidental host | A. Ardeid birds |
| 2. Amplifier       | B. Culex        |
| 3. Reservoir       | C. Human        |
| 4. Vector          | D. Pigs         |

- O1: 1-d, 2-c, 3-a, 4-b
- O2: 1-c, 2-a, 3-d, 4-b
- O3: 1-c, 2-d, 3-a, 4-b
- O4: 1-d, 2-c, 3-b, 4-a

Q.102

Subject: PSM

Topic: National Health Programs

Sub-Topic:

Select the correct option regarding Mobile Medical Units (MMUs).

- 1. MMUs are run by the government

2. MMUs are run by external agencies with medical supplies given by the government
3. MMUs are run by the government and medical supplies are also given by the government
4. MMUs are run by external agencies and medical supplies are also given by the external agency

O1: Only 1

O2: 1 and 2

O3: 1, 2, and 3

O4: 1, 2, 3, and 4

Q.103

Subject: PSM

Topic: Biostatistics

Sub-Topic:

You are starting services for hypertension in your PHC. 50 patients transferred, 40 on amlodipine (5mg PO) and 10 on lisinopril (10mg PO). What number of tablets and reorder factor will you order?

O1: 1000, rf=3

O2: 1200, rf=2

O3: 1400, rf=3

O4: 1600, rf=2

Q.104

Subject: Physiology

Topic: The Nervous System

Sub-Topic:

What is the duration of short-term memory?

O1: 3-6 Hours

O2: 12-18 hours

O3: 30-300 seconds

O4: 3-4 seconds

Q.105

Subject: Physiology

Topic: Gastrointestinal System

Sub-Topic:

All of the following increase gastric acid secretion except?

O1: Gastrin

O2: Histamine

O3: Acetylcholine

O4: Serotonin

Q.106

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Which class of ovarian tumor does clear cell carcinoma of the ovary belong to?

O1: Epithelial cell tumor

O2: Germ cell tumor

O3: Sex cord stromal tumor

O4: Granulosa cell tumor

Q.107

Subject: Physiology

Topic: The Nervous System

Sub-Topic:

Pacinian corpuscle is stimulated by which of the following?

O1: Pain

O2: Temperature

O3: Touch

O4: Pressure

Q.108

Subject: PSM

Topic: Preventive Medicine in Obstetrics, Pediatrics and Geriatrics

Sub-Topic:

Compared to a pregnant female, a lactating female would require a higher level of nutrient supplementation for which of the following?

O1: Vitamin A

O2: Calcium

O3: Iron

O4: Folic acid

Q.109

Subject: Physiology

Topic: Nerve Muscle Physiology

Sub-Topic:

After reaching an equilibrium state during exercise, oxygen consumption is 1500 ml/min. Resting oxygen consumption is 250 ml/min. Calculate the MET score.

O1: 5

O2: 6

O3: 1/5

O4: 1/6

Q.110

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Asherman syndrome is most commonly associated with

O1: Oligomenorrhea

O2: Hypomenorrhea

O3: Dysmenorrhea

O4: Menorrhagia

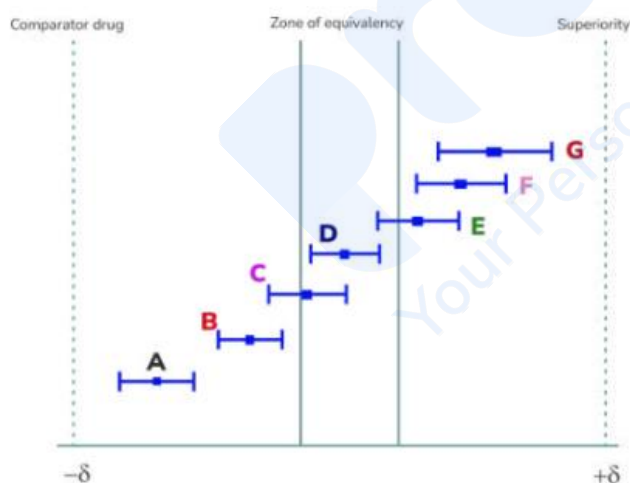
Q.111

Subject: PSM

Topic: Epidemiology

Sub-Topic:

Certain new vaccines are being studied in the market and their efficacies are compared and presented in the image as shown below. Which of the newer vaccines can be used with the same efficacy as compared to the previous vaccine?



O1: D only

O2: D and E

O3: C, D and E

O4: A, B, C and D

Q.112

Subject: Physiology

Topic: General Physiology

Sub-Topic:

An individual is in an environment of a temperature of 47°C. What is the mechanism of heat loss?

O1: Radiation

O2: Conduction

O3: Convection

O4: Sweating

Q.113

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Identify the instrument given below.



O1: Cusco's speculum

O2: Sims' speculum

O3: Proctoscope

O4: Doyen's retractor

Q.114

Subject: Physiology

Topic: Respiratory System

Sub-Topic:

Which among the following has the highest airway resistance?

O1: Alveolar duct

O2: Bronchi

O3: Respiratory bronchioles

O4: Small bronchioles

Q.115

Subject: PSM

Topic: Allied Health Disciplines

Sub-Topic:

The most common mode of absorption of inorganic lead in industries leading to lead poisoning is:

O1: Absorption through skin

O2: Inhaled lead dust

O3: Ingestion of contaminated food and water

O4: Contaminated hands

Q.116

Subject: Physiology

Topic: Cardiovascular System

Sub-Topic:

If the contractility of the heart is decreased, which of the following is seen?

O1: End diastolic volume and pressure curve shifts to the left without a change in slope

O2: Slope changes in the ESV pressure curve

O3: End systolic volume and pressure curve shifts to the left without change in slope

O4: Slope changes in EDV and pressure curve

Q.117

Subject: Physiology

Topic: Excretory System

Sub-Topic:

All of the following ions have decreased concentration on the luminal side of the proximal convoluted tubule except:

O1: Amino acids

O2: Glucose

O3: Chloride

O4: Bicarbonate

Q.118

Subject: Psychiatry

Topic: Neurotic, Stress-Related and Somatoform Disorders

Sub-Topic:

A person often feels that his hands are contaminated and is forced to wash his hands. Recently, he feels this repetitive, distressing thought of repetitive hand washing has begun affecting his performance. Which of the following is the best treatment option for this patient?

O1: DBT

O2: Exposure and response prevention

O3: Systematic desensitization

O4: CBT



Q.119

Subject: PSM

Topic: Allied Health Disciplines

Sub-Topic:

A nurse keeps the bins as shown in the image in the hospital ward. Which of the following items would go into the black bin?



O1: Soiled linen bedsheet

O2: Glove paper cover

O3: Gloves

O4: Contaminated gloves

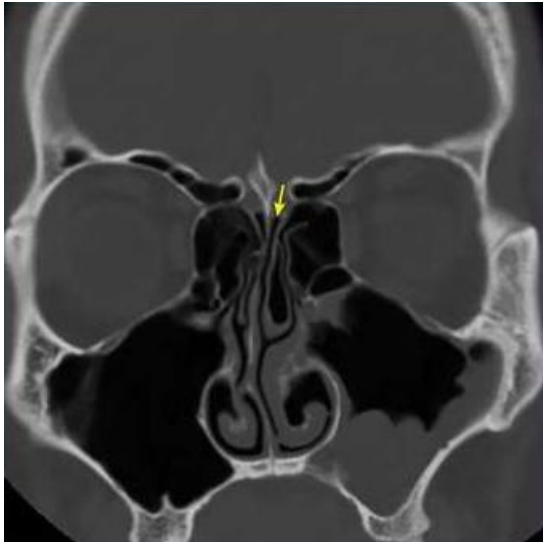
Q.120

Subject: Radiology

Topic: Basics of Radiology

Sub-Topic:

What is the structure marked in the CT scan?



O1: Anterior ethmoidal canal

O2: Posterior ethmoidal canal

O3: Optic nerve

O4: Cribriform plate

Q.121

Subject: Psychiatry

Topic: Substance-Related and Addictive Disorders

Sub-Topic:

Which of the following is true regarding nicotine substitution therapy?

O1: Preferably given by gastrointestinal route.

O2: Varenicline comes with a black box warning of cardiovascular death

O3: There should be a 15-minute gap between nicotine gum and coffee/soda/acidic food as they decrease its absorption

O4: Nicotine chewing gum is better for constant use as it gives 25% higher blood level than lozenges

Q.122

Subject: PSM

Topic: Biostatistics

Sub-Topic:

The graphical representation for flow cytometry analysis is done by which of the following?

O1: Bar diagram, dot plot

O2: Line diagram, dot plot

O3: Histogram, dot plot

O4: Pie chart, dot plot

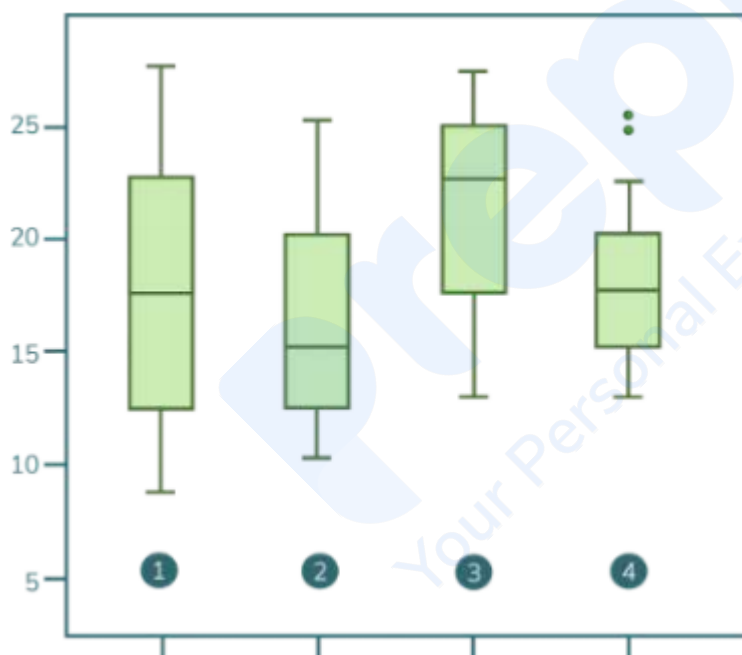
Q.123

Subject: PSM

Topic: Biostatistics

Sub-Topic:

Interpret the following graph?



O1: Normal, negatively skewed, positively skewed, skewed with outliers

O2: Normal, positively skewed, negatively skewed, normal with outliers

O3: Normal, negatively skewed, positively skewed, normal with outliers

O4: Skewed with outliers, positively skewed, negatively skewed, normal

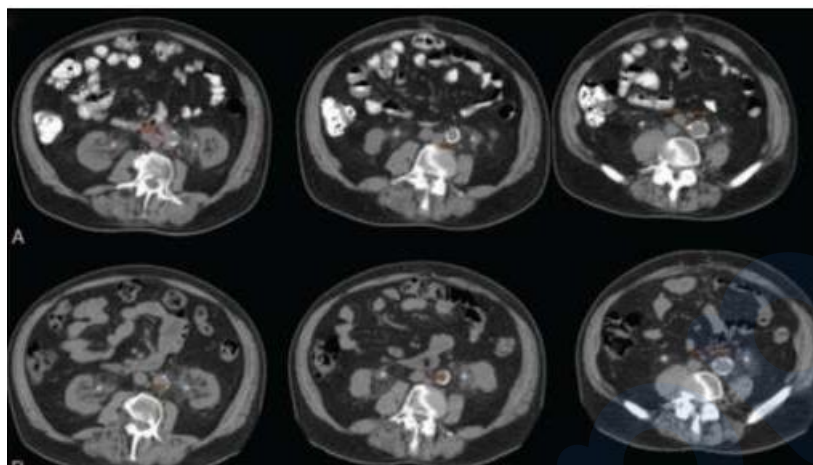
Q.124

Subject: Radiology

Topic: Basics of Radiology

Sub-Topic:

During rounds, your senior was discussing the given image. The following is an image of which of the following investigations?



O1: Contrast Dye study

O2: CT scan

O3: X-ray

O4: Angiography

Q.125

Subject: Psychiatry

Topic: Neurotic, Stress-Related and Somatoform Disorders

Sub-Topic:

Which of the following is not classified as OCD as per ICD 11?

O1: Trichotillomania

O2: Body dysmorphic disorder

O3: Hypochondriac disorder

O4: PTSD

Q.126

Subject: PSM

Topic: Epidemiology

Sub-Topic:

According to WHO, which of the following are components of the Human Development Index (HDI)?

O1: Life expectancy at birth, literacy and standard of living

O2: Life expectancy at 1 year, literacy and standard of living

O3: Infant mortality rate, literacy and standard of living

O4: Life expectancy at 1 year, literacy and infant mortality rate

Q.127

Subject: PSM

Topic: Epidemiology

Sub-Topic:

Which of the following is not a part of case-control studies?

O1: Follow up

O2: Matching

O3: Strength of association

O4: Selection of study subjects

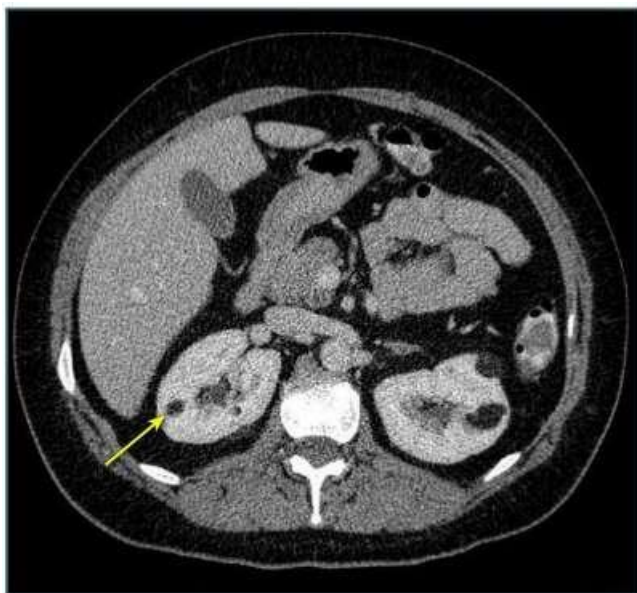
Q.128

Subject: Radiology

Topic: Gastrointestinal Radiology

Sub-Topic:

A 45-year-old patient presented with vague abdominal pain. On USG, he was found to have a renal cyst of Bosniak class III. CECT was done, as shown below. What is the diagnosis?



O1: RCC

O2: Renal oncocytoma

O3: Renal Angiomyolipoma

O4: Renal cyst

Q.129

Subject: Psychiatry

Topic: Substance-Related and Addictive Disorders

Sub-Topic:

Which of the following is a true statement about Korsakoff syndrome?

O1: Triad of confusion, ophthalmoplegia, and ataxia

O2: Loss of long-term memory but intact personality

O3: Anterograde amnesia with loss of recent memory

O4: Loss of implicit memory and immediate recall

Q.130

Subject: PSM

Topic: National Health Programs

Sub-Topic:

Hepatitis B subunit vaccine contains which of the following antigen?

O1: HbeAg

O2: HbsAg

O3: HbcAg

O4: HBV DNA

Q.131

Subject: Radiology

Topic: Gastrointestinal Radiology

Sub-Topic:

A young child presented with mild intermittent upper abdominal pain. X-ray is given below. What is the diagnosis?



O1: Bochdalek hernia

O2: Morgagni hernia

O3: Gastric volvulus

O4: Eventration of diaphragm

Q.132

Subject: PSM

Topic: Preventive Medicine in Obstetrics, Pediatrics and Geriatrics

Sub-Topic:

A new drug has been introduced into the market which was found to decrease mortality but it does not cure the disease. Which of the following is a true statement regarding prevalence and incidence?

O1: Decrease in incidence

O2: Decrease in prevalence

O3: Increase in incidence

O4: Increase in prevalence

Q.133

Subject: Surgery

Topic: Others

Sub-Topic:

What is triage for?

O1: To prepare for a disaster

O2: To assess the impact of a disaster

O3: To classify the priority of treatment

O4: To rehabilitate following a disaster

Q.134

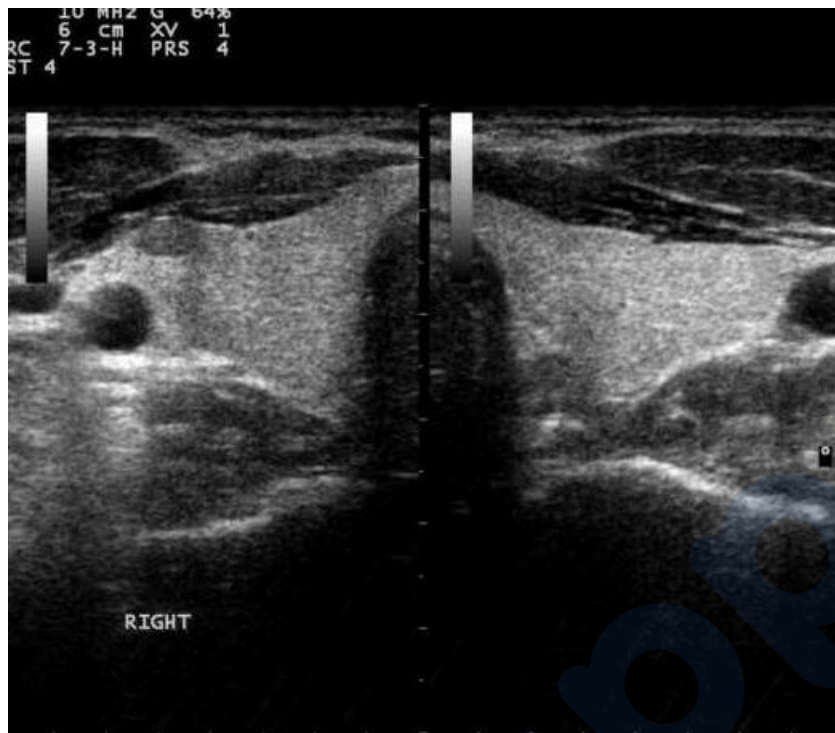
Subject: Radiology

Topic: Gastrointestinal Radiology



Sub-Topic:

Identify the imaging modality given below.



O1: USG

O2: Fluoroscopy

O3: X-Ray

O4: MRI

Q.135

Subject: Pharmacology

Topic: General Pharmacology

Sub-Topic:

Which of the following is false about the selection of essential drugs?

O1: An adequate safety profile needs to be established

O2: Cost to benefit has to be considered

O3: Fixed drug combination is preferred over single drugs

O4: Disease prevalence is considered

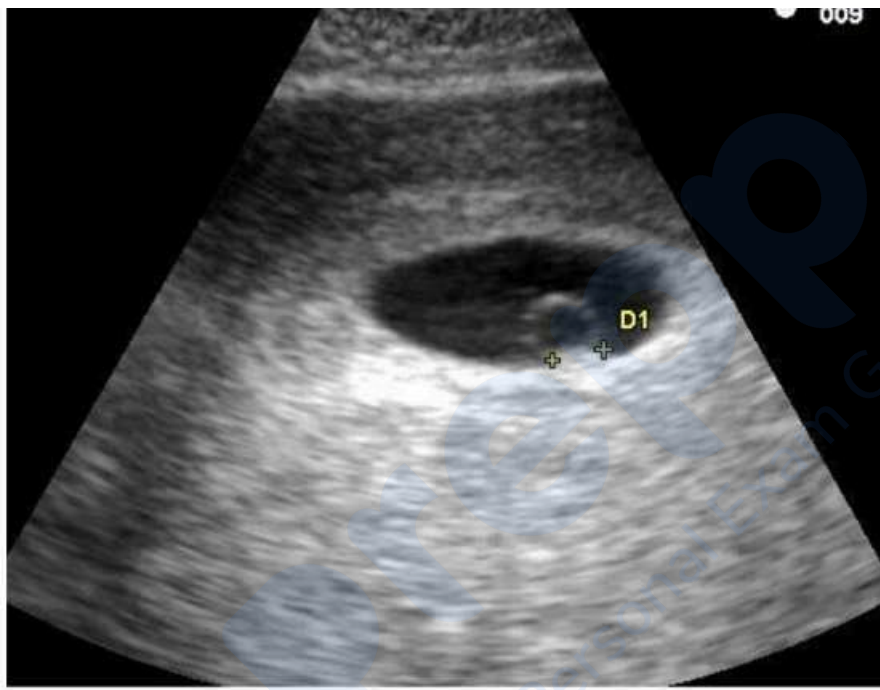
Q.136

Subject: Radiology

Topic: OB/Gy Imaging

Sub-Topic:

Double bleb sign seen in early pregnancy is due to?



O1: Twin pregnancy

O2: Amnion and chorion

O3: Yolk sac and amniotic sac

O4: Heterotopic pregnancy

Q.137

Subject: Pharmacology

Topic: CNS Pharmacology

Sub-Topic:

A patient who was diagnosed with epilepsy was put on retigabine TDS. Now phenytoin is being added. Which of the following changes should be made to retigabine?

- O1: Increase the dose
- O2: Decrease the dose
- O3: Stop the drug
- O4: Stop retigabine and start on carbamazepine

Q.138

Subject: Surgery

Topic: Gastrointestinal Surgery

Sub-Topic:

Match the following diagnosis with the diagnostic modality:

| Diagnosis                   | Modality                        |
|-----------------------------|---------------------------------|
| 1. Hirschsprung's disease   | A. CT scan                      |
| 2. Posterior urethral valve | B. MRCP                         |
| 3. Choledochal cyst         | C. Rectal biopsy                |
| 4. Intussusception          | D. Micturating cystourethrogram |

- O1: 1-C, 2-D, 3-B, 4-A
- O2: 1-A, 2-D, 3-B, 4-C
- O3: 1-C, 2-D, 3-A, 4-B
- O4: 1-D, 2-C, 3-A, 4-B

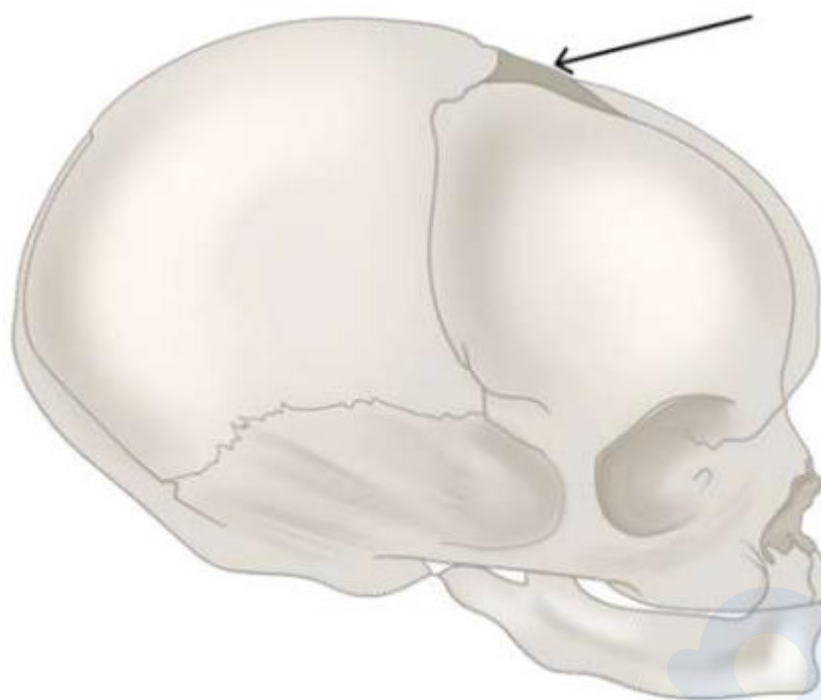
Q.139

Subject: Anatomy

Topic: Neuro Anatomy

Sub-Topic:

A 6-month-old boy was brought to the casualty with seizures. The pediatrician tries to do CSF sampling. What are the structures punctured by the pediatrician while piercing through the marked structure?



O1: Scalp, dura, arachnoid

O2: Scalp, epicranium, endocranium and dura

O3: Scalp synchondral membrane, dura, arachnoid

O4: Pericranium, dura, arachnoid

Q.140

Subject: Pharmacology

Topic: CVS Pharmacology

Sub-Topic:

A patient with history of ischemic stroke was started on clopidogrel. However, she had another attack of stroke after 6 months. Which of the following is likely to be responsible for the failure of clopidogrel in this patient?

O1: Downregulation of CYP2C19

O2: Downregulation of CYP2D6

O3: Upregulation of CYP1A1

O4: Downregulation of CYP2E1

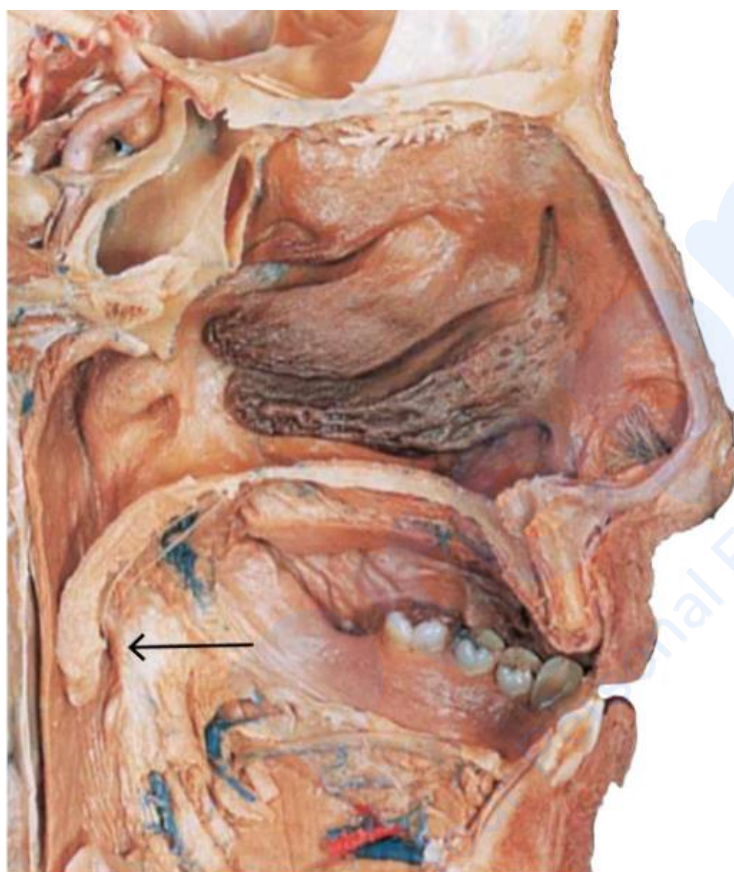
Q.141

Subject: Anatomy

Topic: Head and Neck

Sub-Topic:

A 12-year-old presented with fever and difficulty swallowing. He had swelling in the marked region and was advised to undergo surgery. Post-surgery the gauze continued to soak with blood. Which of the following vessels must have been injured?



O1: Tonsillar branch of facial artery

O2: Ascending pharyngeal artery

O3: Paratonsillar vein

O4: Retromandibular vein

Q.142

Subject: Surgery

Topic: Urology

Sub-Topic:

A mother notices a swelling in the abdomen of her 3-year-old child while bathing him. He had a history of hematuria two weeks back, which resolved spontaneously. On examination, a right-sided reniform ballotable mass was found. What investigations will you do?

1. CECT
2. PET-CT
3. 24 hour urinary VMA
4. FNAC

O1: 1 and 2

O2: 2 and 4

O3: 1, 2 and 3

O4: 1, 2, 3 and 4

Q.143

Subject: Pharmacology

Topic: Special Topics

Sub-Topic:

An HIV positive woman on ART was prescribed ergotamine for a migraine attack 4 days back. She presented with complaints that she is unable to feel her legs from the mid – thigh to her toes, for the past two days. The angiography image is given below. What is the likely diagnosis?



O1: Atherosclerosis

O2: Ergotism

O3: Polyradicular neuropathy

O4: Herniated disc

Q.144

Subject: Microbiology

Topic: Systemic Bacteriology

Sub-Topic:

A patient presented with meningitis, and the CSF sample was subjected to gram staining and microscopy and appears as shown in the microscopic image given below. Which of the following features / tests will be characteristic of the organism?



O1: Oxidase and catalase negative, does not ferment inulin

O2: Ferments glucose and maltose but not inulin

O3: Oxidase and catalase positive and does not ferment maltose or glucose

O4: Catalase negative, optochin sensitive

Q.145

Subject: Surgery

Topic: Hepatobiliary Pancreatic Surgery

Sub-Topic:

A woman who had undergone cholecystectomy presented with abdominal pain and tachycardia three days after the surgery. WBC count is 11000 cells / mm<sup>3</sup>. USG showed fluid collection 5x5 cm in the right sub-hepatic space. What is the next step in management?

- O1: Antibiotics and send home
- O2: USG-guided pigtail catheter drainage
- O3: Laparoscopy and re-exploration
- O4: ERCP and T-tube placement

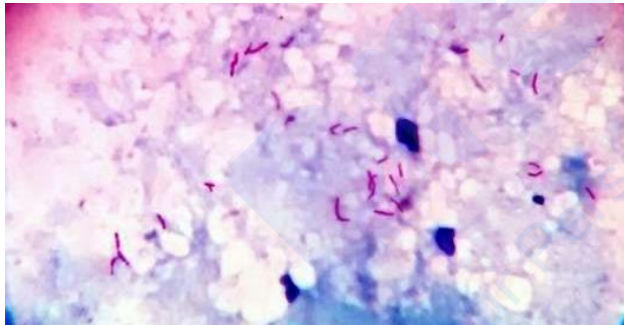
Q.146

Subject: Microbiology

Topic: General Microbiology

Sub-Topic:

A 32 year old labour working at a construction site presented with fever and hemoptysis. The sputum sample collected for examination showed the following. The smear will be stained by which of the following sequences?



- O1: Gentian violet – Iodine – alcohol saffranin
- O2: Methylene blue- malachite green-acetic acid – water
- O3: Methanol – methylene blue-acid – water
- O4: Carbol fuschin – acid – alcohol- methylene blue

Q.147

Subject: Pharmacology

Topic: CVS Pharmacology

Sub-Topic:



Which of the following is incorrectly matched?

- O1: Adexanetalfa: Edoxaban
- O2: Andexanetalfa: Rivaroxaban
- O3: Idarucizumab: Dabigatran
- O4: Ciraparantag: Fondaparinux

Q.148

Subject: Anatomy

Topic: Neuro Anatomy

Sub-Topic:

Fibers from the marked structure terminate at which of the following?



- O1: Fastigial nucleus
- O2: Inferior olivary nucleus
- O3: Red nucleus
- O4: Subthalamus

Q.149

Subject: Surgery

Topic: Hepatobiliary Pancreatic Surgery

Sub-Topic:

The instrument shown in the image is used to insufflate the abdomen for laparoscopic surgery. What is its name?



- O1: Veress needle
- O2: Lind's needle
- O3: Jacob needle
- O4: Mathew needle

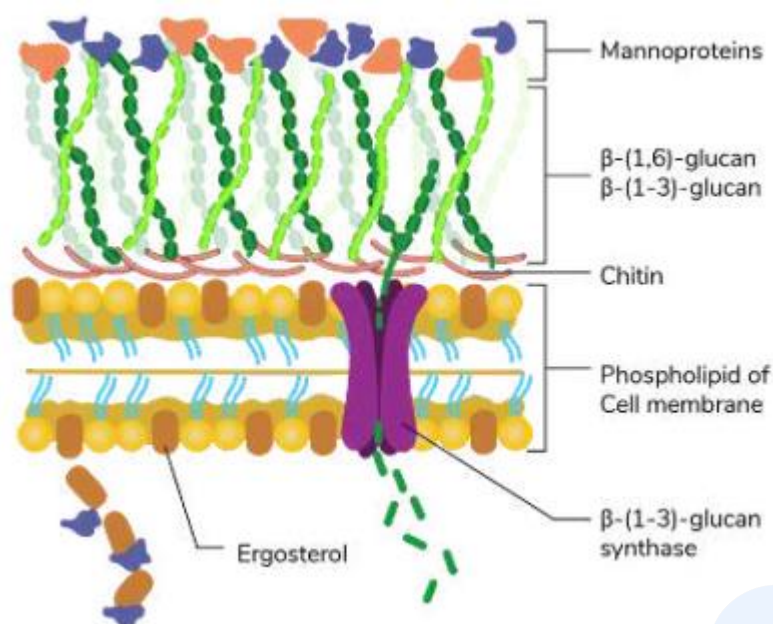
Q.150

Subject: Microbiology

Topic: Mycology

Sub-Topic:

Which of the following components of the fungal cell wall is not seen in mucormycosis?



O1: Mannoproteins

O2: Beta 1,3 glucan

O3: Chitin

O4: Ergosterol

Q.151

Subject: Surgery

Topic: Others

Sub-Topic:

A patient admitted after a road traffic accident is put on mechanical ventilation. He opens his eyes on verbal command and moves all four limbs spontaneously. Calculate his GCS.

O1: Eyes-2, Verbal -1, Motor -5

O2: Eyes-2, Verbal -NT, Motor -5

O3: Eyes -3, Verbal-1, Motor -6

O4: Eyes-3, Verbal -NT, Motor-6

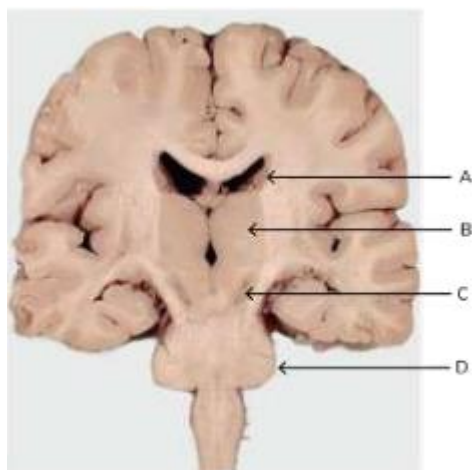
Q.152

Subject: Anatomy

Topic: Neuro Anatomy

Sub-Topic:

A woman with right-sided loss of sensations of both the upper and lower limb complains of shooting pain from her fingers to the right shoulder and a burning sensation when touching cold water. Motor functions are normal. Which of the following structures is likely to be involved?



O1: A

O2: B (Spinothalamic tract)

O3: C

O4: D

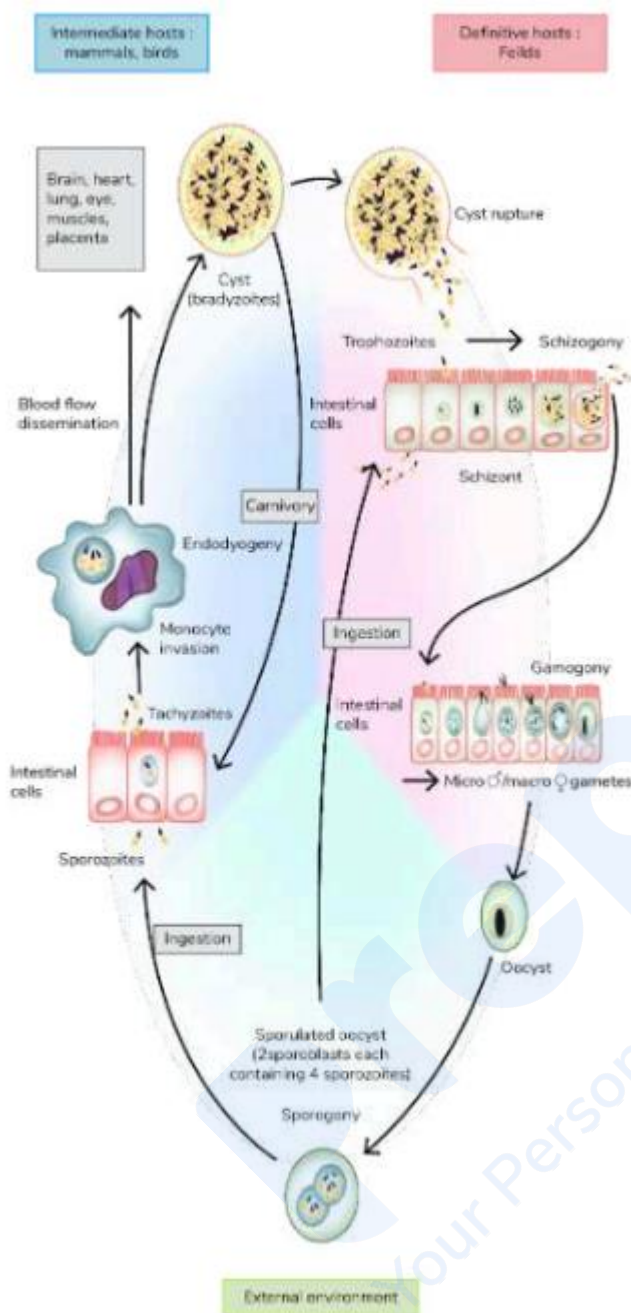
Q.153

Subject: Microbiology

Topic: Parasitology

Sub-Topic:

Identify the organism from the life cycle shown in the image.



O1: Cystoisospora

O2: Cryptosporidium

O3: Plasmodium knowlesi

O4: Toxoplasma gondii

Q.154

Subject: Pharmacology

Topic: Special Topics

Sub-Topic:

Nivolumab is used as checkpoint inhibitor in

O1: Retinoblastoma

O2: Medulloblastoma

O3: Pleuropulmonaryblastoma

O4: Hodgkin's lymphoma

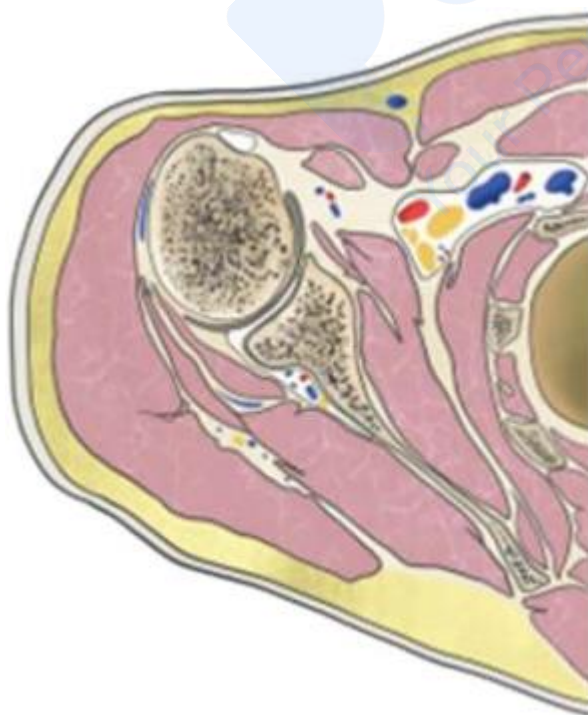
Q.155

Subject: Anatomy

Topic: Upper Limb

Sub-Topic:

A patient who has taken the first COVID vaccine comes for the second dose. An astute nurse noticed that the shoulder was flabby, flat, and was asymmetrical. There was an associated loss of contour of the shoulder joint. Injury to which of the structures might have resulted and was avoidable?



- O1: Rotator cuff
- O2: Posterior circumflex artery
- O3: Lateral cutaneous nerve of arm
- O4: Axillary nerve

Q.156

Subject: Pharmacology

Topic: Antimicrobials: Anti Bacterial Drugs

Sub-Topic:

Antimicrobial combinations are used in all except

- O1: Gonorrhea
- O2: Tuberculosis
- O3: Intra abdominal infections
- O4: Malaria

Q.157

Subject: Surgery

Topic: Endocrine Surgery

Sub-Topic:

A 55-year-old female patient presented with a 4x3 cm lump in the right upper outer quadrant, with no axillary lymph node involvement. Mammography revealed BIRADS 4b staging. She underwent breast conservation surgery, and the final HPE report showed high nuclear-grade DCIS with necrosis and 10mm margin clearance. What is the further management?

- O1: Adjuvant radiotherapy
- O2: Adjuvant chemotherapy
- O3: Follow up 6 monthly for 2 years and then yearly follow up
- O4: Trastuzumab therapy

Q.158

Subject: Microbiology

Topic: Systemic Bacteriology

Sub-Topic:

Which pathogen causes attachment–effacement lesion in the intestinal mucosa as shown in the image?



O1: Enterotoxigenic Escherichia coli

O2: Enteropathogenic Escherichia coli

O3: Enteroinvasive Escherichia coli

O4: Diffusely adherent Escherichia coli

Q.159

Subject: Surgery

Topic: Others

Sub-Topic:

You are suturing a laceration in the ER using the interrupted suturing technique. What is the angle of needle placement?



O1: 60 degrees

O2: 70 degrees

O3: 80 degrees

O4: 90 degrees

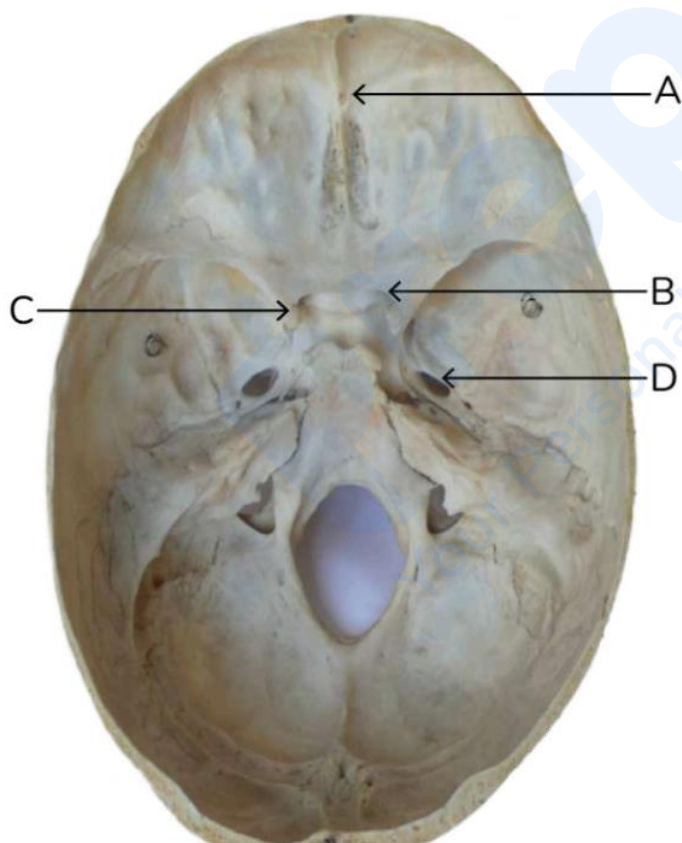
Q.160

Subject: Anatomy

Topic: Neuro Anatomy

Sub-Topic:

Through which of the following marked sites does SARS-COVID 19 spread to the brain?



O1: D

O2: C

O3: B

O4: A (Cribriform plate)

Q.161

Subject: Microbiology

Topic: General Microbiology

Sub-Topic:

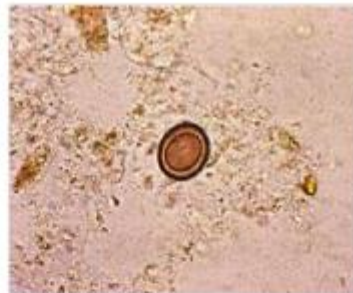
Match the following eggs to the organism:

Organisms

Eggs

1 *Hymenolepis nana*

A



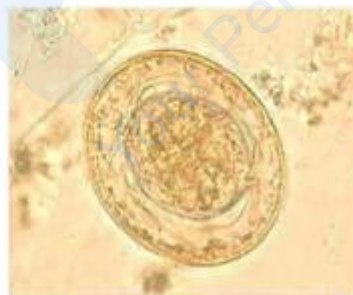
2 *Ascaris lumbricoides*

B



3 *Ancylostoma duodenale*

C



4 *Taenia solium*

D



O1: 1-D, 2-C, 3-A, 4-B

O2: 1-C, 2-D, 3-A, 4-B

O3: 1-D, 2-C, 3-B, 4-A

O4: 1-C, 2-D, 3-B, 4-A

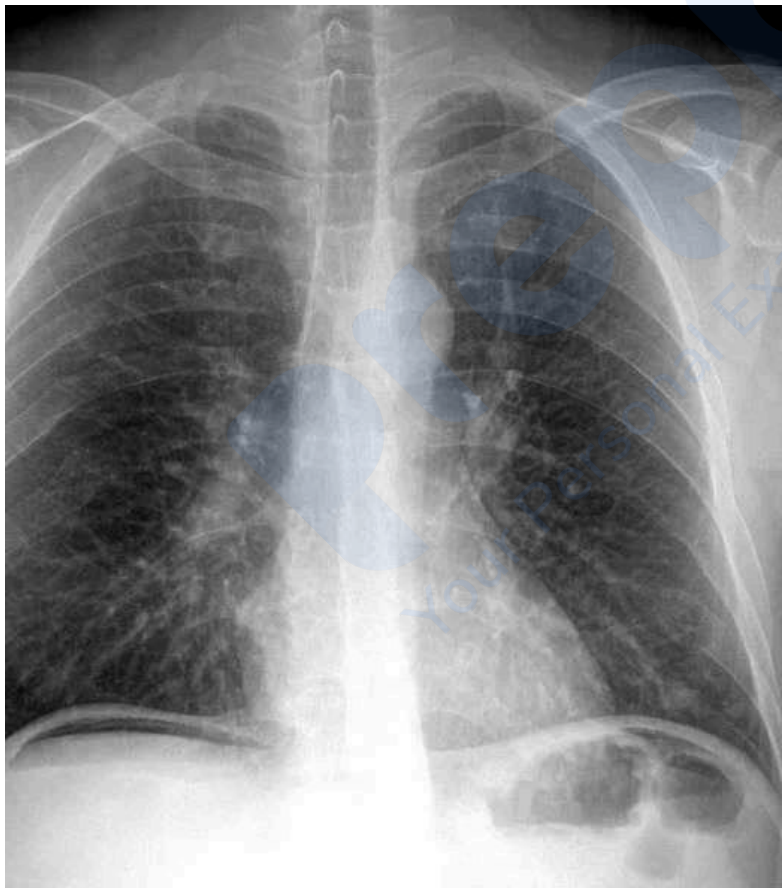
Q.162

Subject: Surgery

Topic: Others

Sub-Topic:

A 26 year old male patient was brought to the emergency department with abdominal pain and obstipation for 3 days. He gives a history of bull gore to the abdomen 3 days back. His X-ray is given below. What is the probable diagnosis?



O1: Hemothorax

O2: Hollow viscus perforation

O3: Pneumothorax

O4: Intestinal obstruction

Q.163

Subject: Anatomy

Topic: Head and Neck

Sub-Topic:

A patient after a road traffic accident presents to the emergency room with difficulty in swallowing and slurred speech. Investigations reveal fractures in the occipitotemporal region. Which of the following areas should be tested in order to find the nerve which is involved?



O1: 1

O2: 2

O3: 3

O4: 4

Q.164

Subject: Surgery

Topic: Endocrine Surgery

Sub-Topic:

Fluorescence in-situ hybridization (FISH) is required in which of the following interpretations of Her2/neu?

O1: 1+

O2: 2+

O3: 3+

O4: All of the above

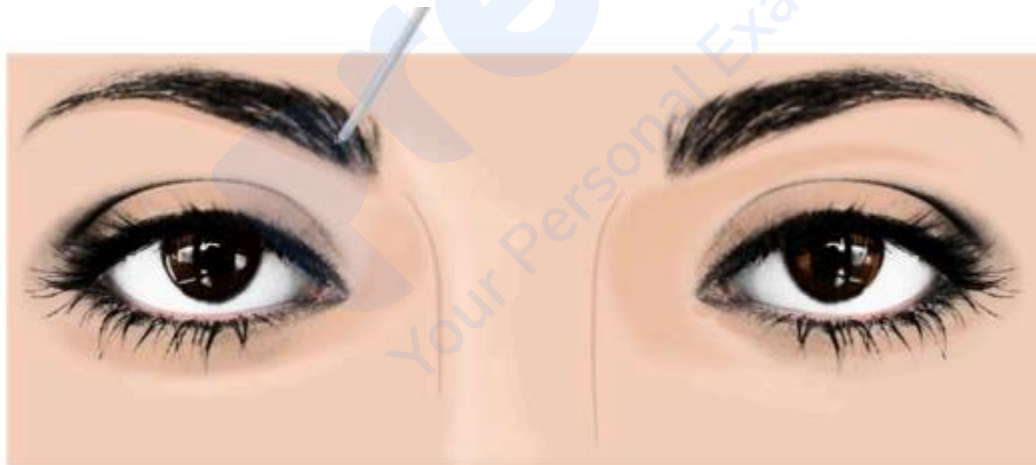
Q.165

Subject: Anaesthesia

Topic: Perioperative Fluids

Sub-Topic:

What is the nerve blocked in the following local anaesthesia technique?



O1: Nasociliary nerve

O2: Anterior ethmoidal nerve

O3: Sphenopalatine nerve

O4: Greater palatine nerve

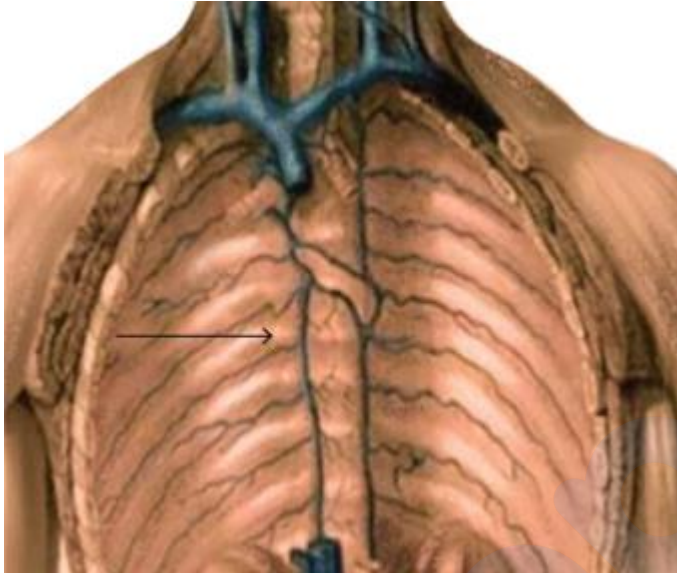
Q.166

Subject: Anatomy

Topic: Abdomen

Sub-Topic:

The marked structure develops from which of the following structures?



O1: Common cardinal vein

O2: Anterior cardinal vein

O3: Supracardinal vein

O4: Subcardinal vein

Q.167

Subject: Surgery

Topic: Urology

Sub-Topic:

A 50 year old male patient came to the outpatient department with complaints of hematuria. A 2x2 cm bladder mass is seen which is low grade transitional cell carcinoma. Which among the following is the ideal management?

O1: Transurethral resection of the tumour

O2: Resection with ileal conduit

O3: Partial cystectomy with bladder reconstruction

O4: Neoadjuvant chemotherapy

Q.168

Subject: Biochemistry

Topic: Genetics

Sub-Topic:

miRNA binds to which part of the mRNA to inhibit translation?

O1: Gene body

O2: Gene promoter

O3: 3'UTR

O4: 5'UTR

Q.169

Subject: Anatomy

Topic: Head and Neck

Sub-Topic:

Inferior thyroid artery supplies which of the following structures?

1. Thyroid

2. Parathyroid

3. Esophagus

4. Thymus

O1: 1,2,3 and 4

O2: 1,2 and 3

O3: 1 and 2 only

O4: 1,2 and 4 only



Q.170

Subject: Surgery

Topic: Endocrine Surgery

Sub-Topic:

Which of the following statements are true?

1. Due to increasing mammography there occurs over diagnosis of breast carcinoma
2. Colon cancer screening is done by digital rectal examination
3. Oral cancer screening is done by visual inspection
4. Cervix cancer screening is done by a pap smear

O1: 2,3,4

O2: 1,2,3,4

O3: 4 only

O4: 1,3,4

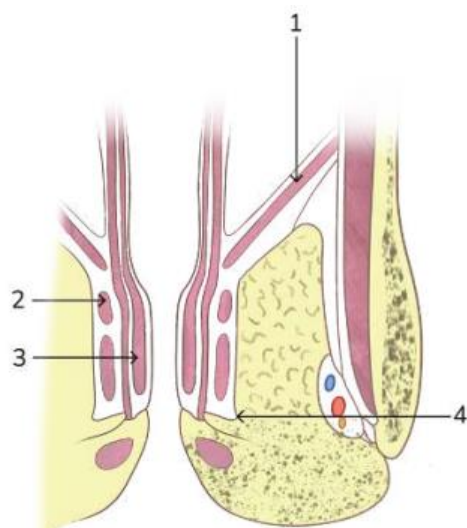
Q.171

Subject: Anatomy

Topic: Lower Limb

Sub-Topic:

Identify the pelvic diaphragm in the picture given below: -





O1: 1

O2: 2

O3: 3

O4: 4

Q.172

Subject: Surgery

Topic: Others

Sub-Topic:

Which of the following is the correct method for measurement of nasogastric tube?

O1: Tip of nose to ear lobule to xiphisternum

O2: Angle of mouth to tragus to xiphisternum

O3: Ala of nose to angle of mandible to xiphisternum

O4: Angle of mouth to ear lobule to umbilicus

Q.173

Subject: Biochemistry

Topic: Amino Acids and Proteins Chemistry

Sub-Topic:

Which of the following methods cannot be used to precipitate proteins?

O1: Alcohol and acetone

O2: Using heavy metal ions

O3: Moving pH away from isoelectric pH

O4: Adding trichloroacetic acid

Q.174

Subject: Pharmacology

Topic: General Pharmacology

Sub-Topic:

What would happen to the half-life and plasma concentration of a drug which follows first-order kinetics, if the dose is doubled?

O1: Half-life doubles and plasma concentration remains the same

O2: Half-life remains the same and plasma concentration doubles

O3: Half-life and plasma concentration remains the same

O4: Half-life and plasma concentration doubles

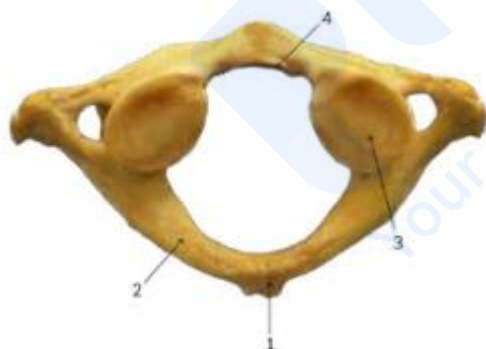
Q.175

Subject: Anatomy

Topic: Thorax

Sub-Topic:

Third part of vertebral artery is related to which of the following?



O1: 4

O2: 3

O3: 2

O4: 1

Q.176

Subject: Surgery

Topic: Gastrointestinal Surgery

Sub-Topic:

A surgeon performs an appendectomy with a grid iron incision. He later converts the incision to Rutherford Morrison incision. Which of the following are cut?

1. External oblique
2. Internal oblique
3. Transversus abdominis
4. Rectus abdominis

O1: 1,3,4

O2: 2,3,4

O3: 1,2,3

O4: 1,2,4

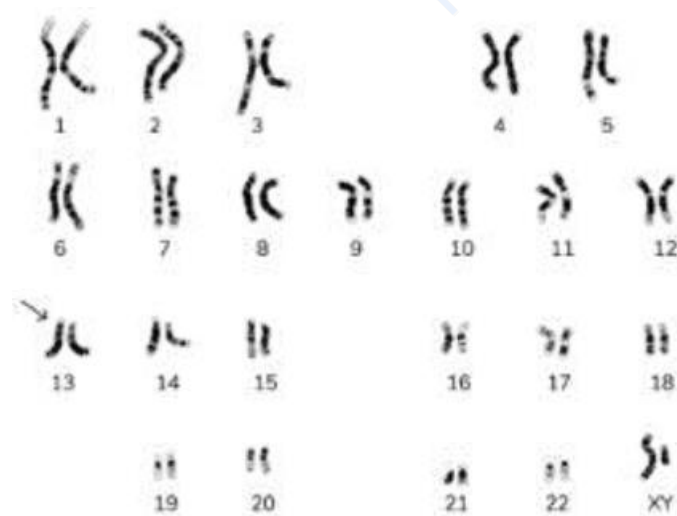
Q.177

Subject: Biochemistry

Topic: Genetics

Sub-Topic:

Identify the type of marked chromosome in the given karyotype.



O1: Acrocentric

O2: Metacentric

O3: Submetacentric

O4: Telocentric

Q.178

Subject: Anatomy

Topic: Neuro Anatomy

Sub-Topic:

Identify the cranial nerve passing through the given structure?



O1: III

O2: V

O3: IV

O4: VI

Q.179

Subject: Pharmacology

Topic: CNS Pharmacology

Sub-Topic:

Which of the following is not an off-label use of risperidone?

O1: OCD

O2: Dementia

O3: PTSD

O4: Bipolar disorder

Q.180

Subject: Medicine

Topic: Neurology

Sub-Topic:

A 45-year-old male patient presented with a history of bilateral lower limb weakness, which progressed to his upper limbs in a year. On examination, he had weakness in both lower limbs and wasting in the left upper limb. Babinski sign was positive and the deep tendon reflexes were absent. He has no sensory loss or any autonomic dysfunction. What is the likely diagnosis?

O1: MS

O2: ALS

O3: GBS

O4: Tropical spastic paraparesis

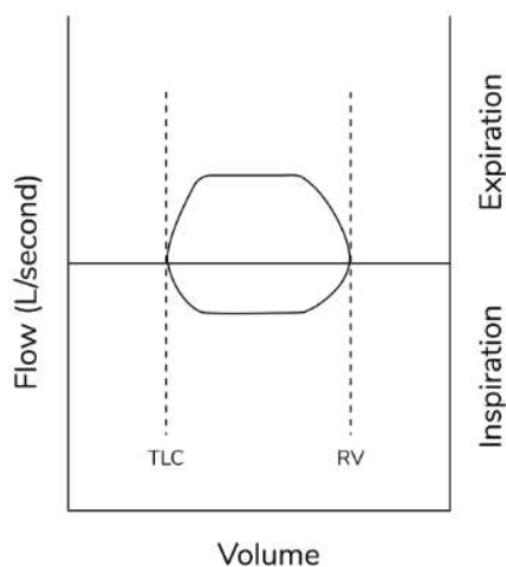
Q.181

Subject: Medicine

Topic: Pulmonology

Sub-Topic:

Identify the pathology from the given flow-volume loop:



- O1: Fixed distal airway obstruction
- O2: Fixed central airway obstruction
- O3: Variable intrathoracic obstruction
- O4: Variable extra thoracic obstruction

Q.182

Subject: Medicine

Topic: Pulmonology

Sub-Topic:

Acid-base imbalance is suspected in a patient. Which of the following would you use to determine it?

1. Arterial pH
2. Venous pH
3. Venous pO<sub>2</sub>
4. Venous pCO<sub>2</sub>

O1: 1,2

O2: 1,2,3

O3: 1,2,4

O4: 1,2,3,4

Q.183

Subject: Pharmacology

Topic: General Pharmacology

Sub-Topic:

A patient is on phenytoin for a seizure disorder. He was prescribed sucralfate 4 times a day for peptic ulcers. What should be the minimum duration of time between consumption of these drugs?

O1: 30 minutes

O2: 60 minutes

O3: 90 minutes

O4: 120 minutes

Q.184

Subject: Pharmacology

Topic: Endocrine Pharmacology

Sub-Topic:

Identify the false statement regarding suicide inhibition.

O1: The inhibitor can bind with any site resulting in suicidal inhibition

O2: The binding of the enzyme to the substrate analogue is irreversible

O3: They are enzyme-specific and used in rational drug design

O4: The inhibitor forms a product with the enzyme and the product inhibits it

Q.185

Subject: Pharmacology

Topic: Endocrine Pharmacology

Sub-Topic:

What is the mechanism of action of remdesivir?

O1: RNA-dependent DNA polymerase inhibition

O2: RNA-dependent RNA polymerase inhibition

O3: Fusion inhibition

O4: Entry inhibition

Q.186

Subject: Pharmacology

Topic: Special Topics

Sub-Topic:

Administration of which of the following drugs would increase the bioavailability of saquinavir?

O1: Ritonavir

O2: Vitamin C

O3: Cimetidine

O4: Ganciclovir

Q.187

Subject: Medicine

Topic: Emergency Medicine

Sub-Topic:

A 62-year-old male patient with heart failure is scheduled for a heart transplant. His renal function test is deranged, and hemoglobin is 6gm%. The physician ordered 2 units of whole blood. Four hours after transfusion, he developed severe respiratory distress. On examination, he is hypoxemic, has tachycardia and his mean arterial pressure is elevated. Which of the following are the best investigations for the above scenario?

1. Chest X-ray
2. Brain natriuretic peptide (BNP) level
3. Absolute neutrophil count
4. Leucocyte antibodies
5. Platelets



O1: 4 and 5

O2: 3 and 5

O3: 1 and 2

O4: 2 only

Q.188

Subject: Pharmacology

Topic: General Pharmacology

Sub-Topic:

What is the mechanism of action of cyclosporine?

O1: Inhibition of calcineurin

O2: AMP kinase stimulation

O3: IMP dehydrogenase inhibition

O4: Dihydro-orotate dehydrogenase inhibition

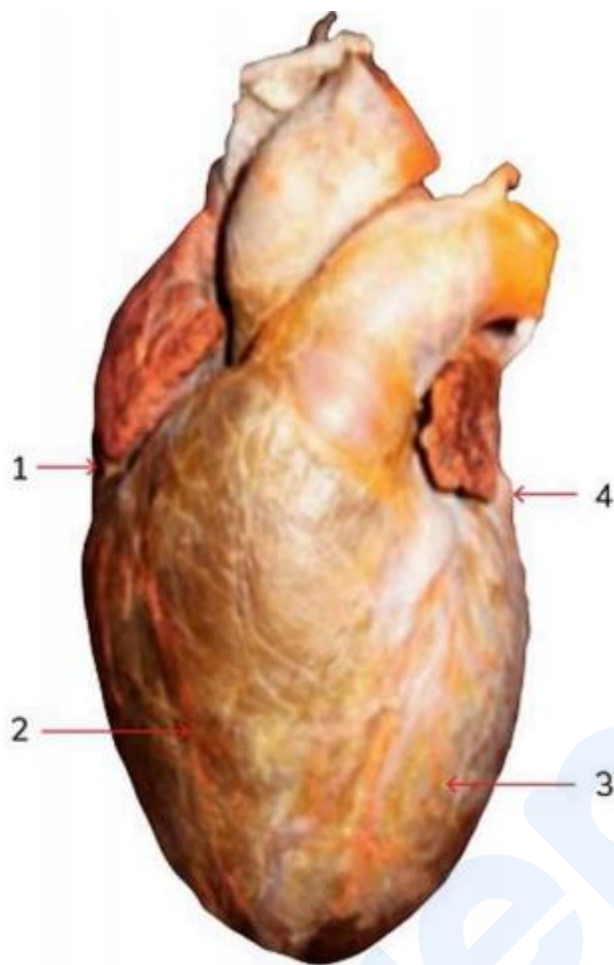
Q.189

Subject: Medicine

Topic: Cardiology

Sub-Topic:

A chronic smoker presented with shortness of breath, bilateral pitting pedal edema, and abdominal distension. On examination, jugular venous pulse was found to be elevated and liver was palpable 8 cm below the costal margin. An abnormality in which of the following structures is responsible for the patient's symptoms?



O1: 1

O2: 2

O3: 3

O4: 4

Q.190

Subject: Pharmacology

Topic: Special Topics

Sub-Topic:

A 14-month-old was diagnosed with *Haemophilus influenza* meningitis. The initial treatment plan was to start on ampicillin but later was shifted to ceftriaxone. What could be the probable reason?

O1: *Haemophilus* alters penicillin binding protein sites, hence resistant to ampicillin

O2: Easier to administer IV ceftriaxone than IV ampicillin

O3: Cotrimoxazole is the drug of choice, but patient is allergic to sulfa drugs

O4: Haemophilus produces beta lactamase, hence resistant to ampicillin

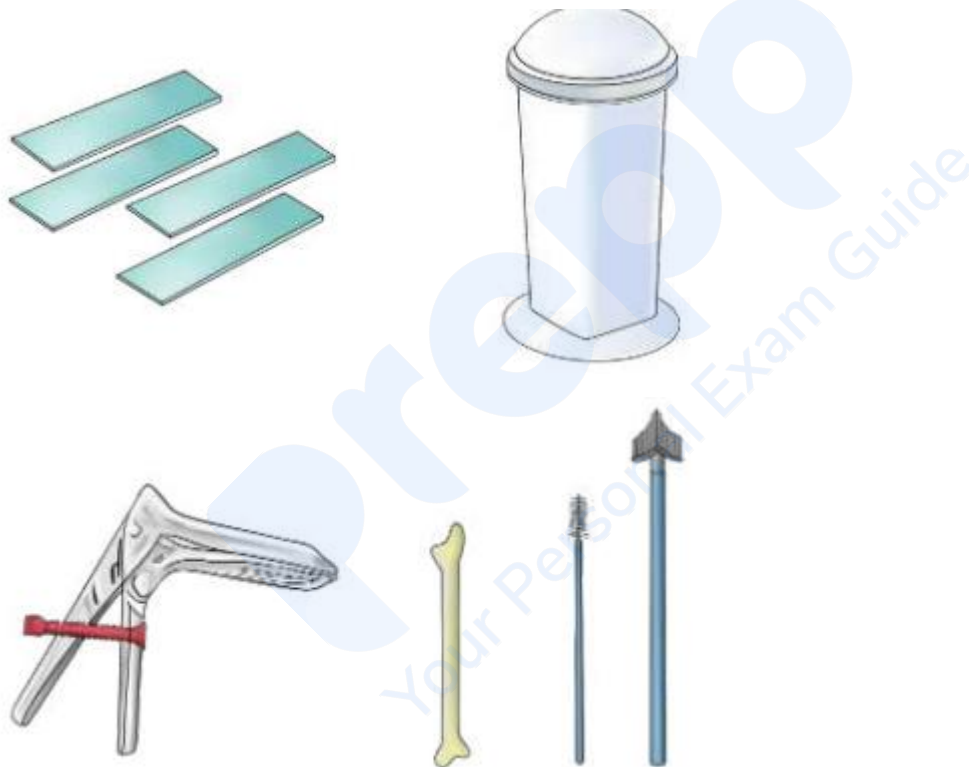
Q.191

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

The following set of instruments are used for which procedure?



O1: Pap smear

O2: Hysteroscopy

O3: Biopsy

O4: Dilatation and curettage

Q.192

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

Which of the following is not a long-acting reversible contraceptive method?

O1: Copper T

O2: Implanon

O3: Laparoscopic tubal ligation

O4: Combined oral contraceptives

Q.193

Subject: Gynaecology & Obstetrics

Topic: Gynecology

Sub-Topic:

A teenage girl presented with irregular cycles and increased facial hair. Her ovaries showed increased volume. Which of the following are used in the first line treatment?

1. Laparoscopic ovarian drilling

2. Anti-androgens

3. Lifestyle modifications

4. Combined oral contraceptive pills

O1: 1, 2, 3

O2: 2, 3, 4

O3: 1, 3, 4

O4: 1, 2, 4

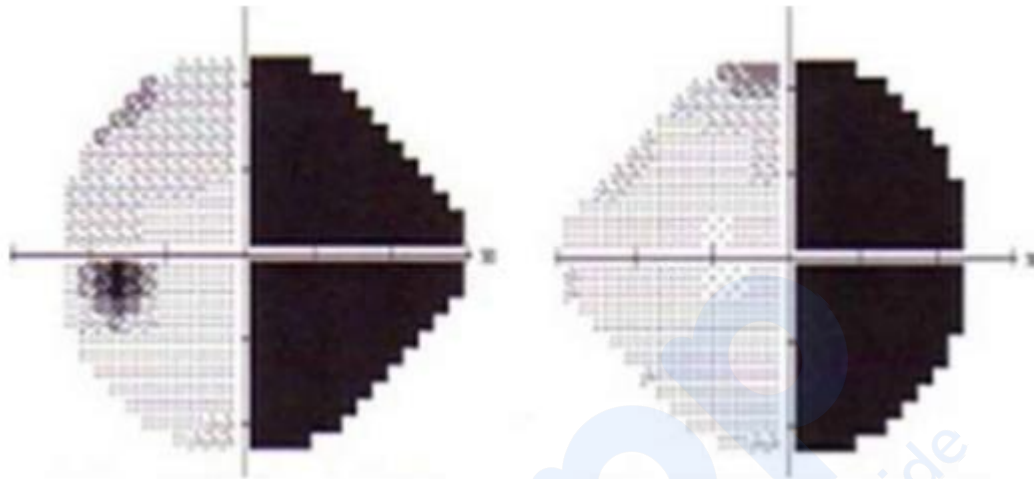
Q.194

Subject: Ophthalmology

Topic: Neuro Ophthalmology

Sub-Topic:

Identify the site of the lesion.



O1: Left occipital lobe

O2: Right occipital lobe

O3: Left geniculate body

O4: Optic chiasma

Q.195

Subject: PSM

Topic: Nutrition and Health

Sub-Topic:

All the following tests are related to pasteurization of milk except

O1: Phosphatase test

O2: Iodine test

O3: Standard plate count

O4: Methylene blue reduction test

Q.196

Subject: PSM

Topic: Preventive Medicine in Obstetrics, Pediatrics and Geriatrics

Sub-Topic:

A new drug has been introduced into the market which was found to decrease mortality but it does not cure the disease. Which of the following is a true statement regarding prevalence and incidence?

O1: Decrease in incidence

O2: Decrease in prevalence

O3: Increase in incidence

O4: Increase in prevalence

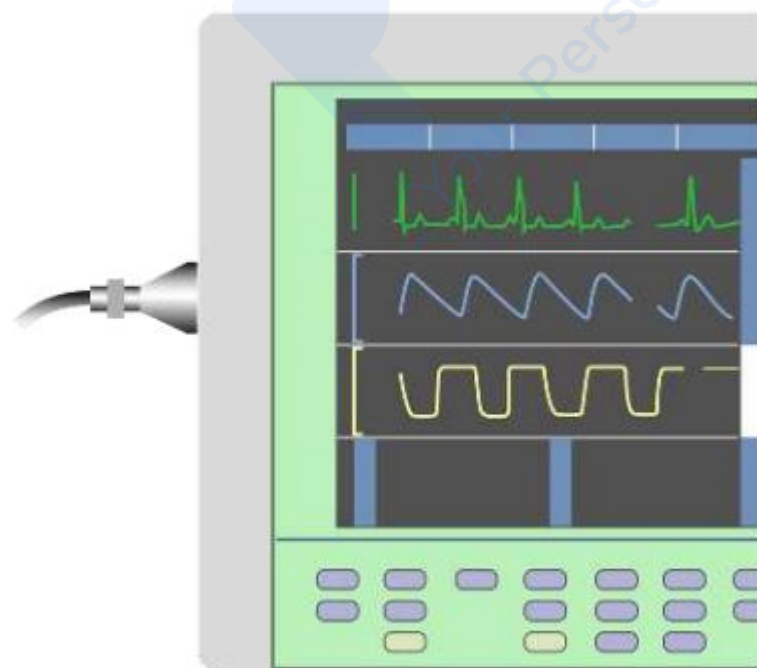
Q.197

Subject: Anaesthesia

Topic: Oxygen Therapy

Sub-Topic:

You are in the operating room and notice the tracing in yellow colour on this device. What does it indicate?



O1: Capnography

O2: Airway pressure

O3: O2 pressure in inhaled air

O4: O2 pressure in exhaled air

Q.198

Subject: Pharmacology

Topic: Antimicrobials : Anti Bacterial Drugs

Sub-Topic:

Which of the following is a novel anti-depressant?

O1: Lurasidone

O2: Vilazodone

O3: Asenapine

O4: Blonanserin

Q.199

Subject: Pharmacology

Topic: CVS Pharmacology

Sub-Topic:

Which of the following is the most effective drug in smoking cessation?

O1: Varenicline

O2: Buspirone SR

O3: Nicotine gum

O4: Rimonabant

Q.200

Subject: Pharmacology

Topic: Special Topics

Sub-Topic:

Which of the following is a centrally acting opioid antitussive?

O1: Ambroxol

O2: Diphenoxylate

O3: Levopropoxyphene

O4: Levorphanol

