Test Preparation and Self Evaluation

# JKPSC

## Medical Officer Quick Review

### High-Yield MCQs, Clinical Scenarios, and Rapid Explanations

Irshad Ahmad
Muneeb-ul-Hassan
Ashfaq-ul-Hassan

- **Curriculum Alignment:** Precisely mapped to the Complete JKPSC Medical Officer Syllabus.
- **Assessment Rigor:** Contains High-Yield MCQs with detailed explanations.
- **Clinical Integration:** Clinical Scenario-Based Questions to enhance diagnostic reasoning.
- **Conceptual Clarity:** Provides Concise, Exam-Oriented Explanations.
- **Structured Efficiency:** Organized meticulously by Topic-wise and System-wise themes.
- **Strategic Focus:** Emphasizes high-weightage subjects, critical emergency conditions, and concepts.
- **Contemporary Relevance:** Aligned with Current Clinical Guidelines & recommendations.
- **Expert Development:** Authored by clinicians with extensive experience in teaching and competitive exam preparation.

# Pediatrics and Neonatology

# 11

**1**

**A New borne child is Brought to PHC. Normally The Chest circumference starts to exceed head circumference after the age of:**

A. 6 months
B. 1 year
C. 2 year
D. 3 year

**Ans B.** 1 year

**Chest circumference overtakes head circumference at 9 months – 1 year age** BUT in malnourished children of poor Indian women it overtakes at 2 – 3 years age.

**2**

**In A Pediatric Unit, the Fetal wellbeing is assessed by all EXCEPT:**

A. Non- stress test
B. Biophysical profile
C. Biometry
D. Fetal kick count

**Ans C.** Biometry

**Tests for Fetal Well being are:**

- Fetal movement count: Done daily by the mother.
- Non stress test: To be done every weekly or twice weekly.
- Contraction stress test/Oxytocin challenge test
- It follows a non reactive NST.
- Biophysical profile
- Amniotic fluid volume by USG
- Doppler study
- Amniocentesis
- Cordocentesis

**3**

**Tetraploidy is a condition whereby cells contain**

A. 36 chromosomes
B. 92 chromosomes
C. 12 chromosomes
D. 48 chromosomes

**Ans B.** 92 chromosomes

Tetraploidy is a rare condition. Here cells contain 92 chromosomes. It results in spontaneous abortion of the conceptus. Tetraploidy occurs as a result of failure of the first cleavage division.

**4**

**A 2 year old child is Brought to PHC. He has signs and symptoms suggestive of mild URI for 2-3 days. Other family members are also suffering from URI. Suddenly the child develops barking cough, hoarseness of voice and inspiratory stridor. Which of the following should be done immediately?**

**141**

**A 44 year old male has hepatomegaly. USG of Abdomen Confirms the same. The Liver is enlarged, pale and rubbery in consistency with homogeneous waxy material within the space of Disse, often being concentrated in the periportal areas. Most Likely cause is:**

A. Abetalipoproteinemia
B. Amyloidosis
C. Automiimune Hepatitis
D. Gaucher's disease

**Ans B. Amyloidosis**

Amyloidosis can present with Hepaomegaly. There would be Amyloid Deposition in liver. Microscopically same can be seen. Amyloidosis often presents as deposition of homogeneous waxy material within the space of Disse.

**142**

**A 45 year old is detected on CT Scan as Cholangiocarcinoma is seen with**

A. Toxocaria
B. Schistosomiasis
C. Clonorchis
D. Trichomonas

**Ans C. Clonorchis**

**Clonorchis sinensis**

- Causes **Clonorchiasis.**
- Characteristics of **Clonorchis sinensis are in trematode** (liver fluke).
- Life cycle: Humans ingest undercooked fish containing encysted larvre (metecercariae). In duodenum, immature flukes enter biliary duct, become adults, and release eggs that are passed in feces. Eggs are eaten by snails; the eggs hatch and form miracidia. These multiply through generations (rediae) and then produce many free-swimming cercariae, which encyst under scales of fish and eaten by humans.
- Laboratory Diagnosis of Clonorchis sinensis is **eggs visible in feces.**

**143**

**A 54 year old Man is Brought to Emergency. The case file of a patient suggests that he is euthyroid, normotensive and a non smoker. Lab values Suggest: Hyperglycemia, acidosis (pH 7.32) and marked dehydration. The history indicates increased blood sugar levels with acute onset of abdominal pain, anorexia, and nausea. There is paralytic ileus with severe Vomiting associated with severe volume depletion. Physical findings include dry skin, hypotension, depressed mental function, and deep and rapid respirations. There is sweet, sickly smell on the patient's breath. Most likely cause is:**

A. Addisons disease
B. Myxedemic coma
C. Thyroid storm
D. Diabetic ketoacidosis

**Ans D. Diabetic ketoacidosis**

Diabetic Acidosis is characterized by Hyperglycemia, acidosis (pH 7.32) and marked dehydration. The Patients present with acute onset of abdominal pain, anorexia, and nausea and may develop paralytic ileus with severe Vomiting and severe volume depletion. Physical findings may include dry skin, hypotension, depressed mental function, and deep and rapid respirations. There is sweet, sickly smell on the patient's breath. This Smell is highly indicative of Ketoacidosis.

# Medicine 10

## HEMATOLOGY

**1**

**A Patient reported to PHC. He has Pallor. A Hematologist is counseling an Anemic Patient. Iron Absorption is facilitated by**

A. Decreased heme iron
B. Decreased animal foods
C. Ferrous iron salts
D. All of Above

**Ans C.** **Ferrous iron salts**

| | Enhanced absorption | Reduced absorption |
|---|---|---|
| Dietary Factors | • Increased heme iron<br>• Increased animal food<br>• **Ferrous iron salts** | • Decreased heme iron<br>• Decreased animal foods<br>• Ferric iron salts |

**2**

**A Patient reported to PHC. He has Polycythemia. Drug/s Used in Treatment of Polycythemia is/are**

A. Anagrelide
B. Pegylated alfa interferon
C. Hydroxyurea
D. All of Above

**Ans D.** **All of Above**

Anagrelide, Pegylated alfa interferon, Hydroxyurea, Low-dose aspirin are used in Treatment of Polycythemia. Additional features of increased level of hemoglobin (Hb of 17.6 g/dl) and an increased hematocrit are highly suggestive of Polycythemia.

**3**

**A Patient was administered Blood. All are transmitted by blood COMMONLY except:**

A. Parvovirus B-19
B. Hepatitis G
C. Epstein Bar virus
D. Cytomegalovirus

**Ans C.** **EBV**

**Viruses associated with blood transfusion:**

- Hepatitis C virus:
- Hepatitis G virus:
- Hepatitis B virus
- HIV type I
- HTLVTypeI
- Cytoegalovirus
- Parvovirus B-19
- **Hepatitis C virus:** Most common cause of transfusion associated viral hepatitis.
- **Hepatitis G virus:** Is a blood borne agent whose modes of transmission have not been defined adequately but tend to parallel those of HCV infection.

**14**

**A 33 year old male Reports to a Physician in CHC and has a Mediastinal mass and generalized weakness. Lab investigations reveal Anti Nicotinic acetyl choline receptor antibodies in the patients blood sample. The mediastinal mass commonly associated is**

A. Aortic Aneurysm
B. Thymic mass
C. Esophgeal cancer
D. Esophageal web

**Ans B.** Thymic mass

MG is an autoimmune disorder characterized by the production of antibodies directed against the acetylcholine receptor on the motor endplates within the synaptic junction. The deficiency of acetylcholine receptor results in episodic muscle weakness and fatigue. Lab investigations reveal Anti – Nicotinic acetyl choline receptor antibodies in these patients. Mediastinal masses especially Thymomas are a frequent association.

**15**

**A 40 year old male Reports to a Physician in CHC with easy fatiguibilty, mild icterus and previously diagnosed with Hemachromatosis was screened for Tumor Markers. His AFP Levels were markedly raised. CEA, VMA and Urine special studies for 5-hydroxyindole-acetic acid are normal. CT scan of the liver demonstrates a 4x5cm lesion in right lobe and a Lower Endoscopy showed a small Polyp in small Intestine. Most likely diagnosis is**

A. Squamous cell carcinoma of the esophagus
B. Mucinous adenocarcinoma of the colon
C. Hepatocellular carcinoma
D. Cholangiocarcinoma

**Ans C.** Hepatocellular carcinoma

Easy fatiguibilty, mild icterus and previously diagnosed with Hemachromatosis with AFP Levels markedly raised with CT scan of the liver demonstrating a 4 x 5cm lesion in right lobe would be Clues enough to establish a simple diagnosis of Hepatocellular carcinoma Distractors need to be Subtracted.

**16**

**A 55-year-old male had pathological fracture neck of femur with a pulsatile mass in the right thigh. He had cough with pleural effusion and earlier had an episode of Hematuria. Most likely cause is:**

A. Prostatic cancer
B. Bladder cancer
C. Clear cell carcinoma
D. Femoral Artery Aneurysm.

**Ans C.** Clear cell carcinoma

Clear cell cancer is the most common type of renal cancer. It is highly vascular and permeates through blood stream to lungs and long bones. Secondaries can be Pulsatile. This is an Advanced Renal Cell cancer.

**17**

**A 22-year-old male whose father died of rectal cancer at the age of 40 years has multiple pigmented macules over the palm and oral mucosa. He also has anaemia and pain in abdomen. The most probable diagnosis is:**

A. Mc Cune Albright's syndrome
B. Nelsons Syndrome
C. FAP
D. Putz-Jeghers syndrome

**Ans D.** Putz-Jeghers syndrome

# Surgery and Surgical Specialities

# 9

**1**

**Nowadays Arterial Stimulation and venous sampling would be an ideal diagnostic modality for diagnosis of:**

A. Lymphoma
B. Teratoma
C. Insulinoma
D. Cholangiocarcinoma

**Ans C.** **Insulinoma**

Insulinomas can be detected by ASVS (Arterial stimulation and venous sampling). Here pancreatic arterial injection of a special secretory substance is done and hepatic venous flow samples are sampled. Sensitivity for detection of insulinomas is high.

**2**

**After mild trauma to a 86 year old man who had mild abdominal discomfort. CT scan demonstrates thickening and calcification of peritoneum associated with jejunal loops with retraction of bowel loops. Most likely disease process is:**

A. Retroperitoneal haematoma
B. Retroperitoneal sarcoma
C. Fibrosing mesentritis
D. Idiopathic retroperitoneal fibrosis

**Ans C.** **Fibrosing mesentritis**

In this patient there is thickening and calcification of mesentry which is the area of peritoneum associated with jejunum and ileum with retraction of bowel loops. This is mesenteric involvement and features suggestive of fibrosis.

**3**

**Which of the following is the most common type of intussusception in children?**

A. Jejunogastric
B. Cecocolic
C. Ileocolic
D. Ileal-ileal-colic (compound type)

**Ans C.** **Ileocolic**

- The most common type of intussusception is ileocolic, especially in infants between 6–9 months of age.
- It typically occurs idiopathically, often following viral infections or during weaning.

**4**

**Which of the following imaging signs is pathognomonic of sigmoid volvulus on barium enema?**

A. Claw sign
B. Meniscus sign
C. Target sign
D. Bird's beak deformity

# Obstetrics 8

**1**

**Biochemical marker increases in open neural tube defects:**

A. Acetyl choline esterase
B. Phosphatidyl choline
C. Glaumine choline estrases
D. Butryl choline esterases

**Ans A.** **Acetyl choline esterase**

**Neural tube defects:**

are second most common anomaly found. due to failure of closure of the neural tube. **Screening is by Maternal Serum Alpha feto protein at 16 wks or by USG in which anencephaly detected at 12 week.**

**Various neural tube defects are:**

- Encephalocele –part of brain meninges bulge outside, of which occipital encephalocele is the most common.
- Spina bifida-Defect in neural arch–exposing normal canal.it is most commonly seen in lumbosacral region
- Two types –open and closed –covered by skin
- Meningocele-protrusion of meninges.
- Myelomeningocele

**Open NTDs include**

- anencephaly,
- spina bifida,
- encephalocele

Maternal serum alpha feto protein at 16-18 weeks was found to be 2.5 times median value in those carrying fetuses with anencephaly orspina bifida.

**Risk factors of NTDS**

Genetic causes:

- family history or previous h/o NTDS,
- Aneuploidy,
- Trisomy 13,18
- Overt diabetes
- Drugs-Valproic, Carbamazapine

Prevention in high risk individuals – 4mg of folic preconceptionally and during 1st trimester.

**2**

**In which of the following condition vaginal delivery is not done:**

A. Big breech
B. Mento anterior
C. mento posterior
D. All of the above

**Ans A.** **Big breech**

Because of the risk involved in vaginal breech delivery there is a tendency to liberate use of caesarean section in breech. The indication ofor use of CS in breech is big breech (Estimated weight of greater than 3.5 kg)

**14**

**Centrochoman is a**

A. Male contraceptive
B. Female contraceptive
C. Tocolytic
D. Abortifacient

**Ans B. Female Contraceptive**

Centochroman is an synthetic non steroidal agent acting on endometrium.

It is developed in india and recently has been also used as post coital contraceptive. oligomenorrhea is a side effect and it is not safe to use in liver disease.

**15**

**A Doctor Prescribes Gosserelin to a Female Patient. It is**

A. GnRH Antagonist
B. GnRH Agonist
C. Anterior Pitutary Extract
D. Posterior Pitutary Extract

**Ans A. GnRH Antagonist**

**GnRH Agonists:**

Normal hypothalamic function requires **pulsed release of GnRH**

**from the arcuate nucleus into the hypophyseal portal system** about

every hour. **GnRH causes release of LH and FSH from the pituitary,**

which stimulate ovarian follicular growth and ovulation GnRH agonists bind to GnRH receptors in the pituitary, and cause competitive inhibition of endogenous GnRH. They are:

- Burerelin
- Gosserelin
- Historelin
- Leuproelin
- Nafarelin
- Triptorelin

**16**

**A 45-year-old woman is diagnosed with AIS (Adenocarcinoma in situ) on cervical biopsy. She wishes to preserve fertility and her surgical margins are clear. What is the next best step?**

A. Total hysterectomy
B. Chemotherapy
C. Conisation with long-term follow-up
D. Radiotherapy

**Ans C. Conisation with long-term follow-up**

- In patients with AIS who desire fertility and have clear margins, conservative management with conisation and long-term surveillance is acceptable.
- However, if fertility is not a concern, hysterectomy is the preferred option due to recurrence risk..

**17**

**Which of the following is a relative contraindication to colposcopy?**

A. Abnormal Pap smear
B. Pregnancy
C. Lower genital tract infection
D. Multiparity

**Ans C. Lower genital tract infection**

Relative contraindications to colposcopy include active genital tract infection, anticoagulant use (if biopsy is planned), severe hypertension, or patient non-cooperation. Colposcopy is safe during pregnancy and in multiparous women.

**18**

**A 52-year-old postmenopausal woman presents with bleeding. TVS shows endometrial thickness of 6 mm. What is the most appropriate next step?**

# Obstretics/Gynaecology 7

**1**

**A female reports to you with Fetal wastage. She tells you that she has had multiple thromboembolic events in the past. She is most likely suffering from a disease which has:**

A. antibody directed to serine protease (proteinase-3).
B. antibody directed to the phospholipid-$\alpha_2$-glycoprotein I complex
C. antibody directed to the epidermal cell desmosome, desmoglein 3
D. antibody directed to Mitochondrial DNA

**Ans B.** **antibody directed to the phospholipid-$\alpha_2$-glycoprotein I complex**

**Antiphospholipid antibodies** are associated with **thromboembolic events** in primary and secondary antiphospholipid syndrome and have also been **associated with fetal wastage**. The major antibody is directed to the **phospholipid-$\alpha_2$-glycoprotein I complex** and appears to exert a **procoagulant effect.**

**In pemphigus vulgaris, autoantibodies bind to a component of the epidermal cell desmosome,** desmoglein 3, and play a role in the induction of the disease. They exert their pathologic effect by disrupting cell-cell junctions through stimulation of the production of epithelial proteases, leading to blister formation.

**Cytoplasmic antineutrophil cytoplasmic antibody (c-ANCA), found in Wegener's granulomatosis,** is an antibody to an intracellular antigen, the 29-kDa serine protease **(proteinase-3).**

**2**

**A Twenty five years aged female comes to you with a history of leucorrhea and amenorrhea of one month in a STD clinic. She has multiple partners. She complains of Dysuria and fever. She gives a history of cough in the past which resolved. You advise him a series of tests out of which most important is:**

A. Leucocyte count
B. USG
C. Urine examination for pus cells
D. Chest X ray

**Ans B.** **USG**

**"A female in reproductive age group with amenorrhea should always be assumed to be pregnant".** Pregnancy should be ruled out first of all.

- So USG is the most important test.
- Leucocytosis is non specific.

**39**

**A 34 year old Patient had Chronic Cough. She was Diagnosed with tuberculosis and treated with multiple drugs ie Isoniazid, Pyrazinamide, Rifampicin (ATT) for past few months. She developed severe neuropathy. Treatment is:**

A. Stop ATT
B. Stop Pyrazinamide and give pyridoxine
C. Stop INH and give pyridoxine
D. Stop Rifampicin and give pyridoxine

**Ans C.** **Stop INH and give pyridoxine**

INH is highly Neurotoxic in causing Peripheral Neuritis which responds to Pyridoxine. Pyridoxine has a role in preventing NeuroToxicity.

**40**

**A ppharmacology resident is asked abjut Which Drug is a Rodentocide with Anticoagulant Properties. The Correct choice is**

A. Protamine Sulfate
B. Brodfacoum
C. Eltrombopag
D. Romiplostim

**Ans B.** **Brodfacoum**

Rodenticides contain long acting anticoagulants like bromadiolone, brodfacoum, diphenadione, chlorphenacinone and pindone.

**41**

**Patients with Anthrax were treated by Pencillins. The Most Likely Mechanism of Action is on:**

A. Cell Membrane
B. N-acetylmuramic acid and N-acetylglucosamine
C. D Ala-D Ala of cell Wall
D. Folic acid

**Ans C.** **D Ala-D Ala of cell Wall**

Penicillin's inhibit bacterial growth by interfering with the bacterial cell wall synthesis and not Cell Membrane. Penicillins work by inhibiting transpeptidase, the enzyme that catalyzes the final crosslinking step in peptidoglycan cell wall formation. Penicillins are structural analogs of D-Ala-D-Ala.

**42**

**A 24 year old female has arthritis and is being investigated. Examinations and investigations reveal low haemoglobin, pleurisy, alopecia and lymphadenopathy. Most likely effective drug would be:**

A. Azathioprine
B. Sulfasalazine
C. Maviroc
D. Chloroquine

**Ans A.** **Azathioprine**

The Clinical features are suggestive of SLE. Fatigue, weight loss, and fever with Skin signs and symptoms like Malar Rash (facial butterfly rash), Photosensitivity and oral ulcers pancytopenia, spleenomegaly and lymphadenopathy malar rash, alopecia and pleurisy can all be a feature. Azathioprine, Corticosteroids and Cysclophosphamide are the Common Drugs used for SLE.

**43**

**A 35 year old female is prescribed Phenobarbitone. She takes it for many years. It would cause:**

A. Hereditary Spherocytosis
B. Megaloblastic anemia
C. Myelopthisic anemia
D. Sidderoblastic anemia

# Pharmacology 6

**1**

**A Physician prescribed Isoniazid to a patient.**

A. It causes cerebellar toxicity that can be prevented and treated by pyridoxine.
B. It causes Lactic acidosis that can be prevented and treated by pyridoxine.
C. It causes Peripheral neuritis that can be prevented and treated by pyridoxine.
D. It causes Anemia that can be prevented and treated by pyridoxine.

**Ans C. It causes Peripheral neuritis that can be prevented and treated by pyridoxine.**

**ISONIAZID (INH)**

- It is a prodrug activated by catalase-peroxidase (coded by KatG).
- Active metabolite inhibits the enzyme ketoenoylreductase (coded by inh A), required for mycolic acid synthesis, an essential component of mycobacterial cell wall. It acts by dependent pathway such as catalase peroxidase reaction.
- It is the single most important drug used in tuberculosis.
- It is bacteriostatic against resting and bactericidal against rapidly multiplying organisms.
- It causes peripheral neuritis that can be prevented and treated by pyridoxine.

**2**

**A Physician in PHC prescribed RIFAMPICIN to a patient who was having Tuberculosis. Which is true of this Drug**

A. It is not effective against intra- and extra-cellular bacilli.
B. It is effective against intra cellular but not extra-cellular bacilli.
C. It is effective against extra cellular but not intra-cellular bacilli.
D. It is equally effective against intra- and extra-cellular bacilli.

**Ans D. It is equally effective against intra- and extra-cellular bacilli.**

**RIFAMPICIN(R)**

- It is a derivative of rifamycin. It is bactericidal against both a dividing and non-dividing mycobacterium and acts by inhibiting DNA dependent RNA polymerase.
- It undergoes enrerohepatic circulation and is partly metabolized in the liver. Metabolites are coloured and can cause orange discolouration of the urine and secretions. It is eliminated mainly in the feces and can be used sak in renal dysfunction. Food interferes with absorption, therefore it must be given empty stomach.

# Statistics 5

**1**

**Normal distribution with a mean of zero and a standard deviation of 1 is also known as the Standard Normal Distribution. One Standard Deviation (1SD) represents:**

A. 68% of values
B. 95% of values
C. 99.7% of values
D. 100% of values

**Ans A. 68% of values**

Normal curve is smooth, bell shaped symmetrical curve with

- **Total area under curve =1**
- **Mean of curve =0**
- **Standard deviation=1**
- **Mean, Median and Mode coincide**

**"A graph representing the density function of the Normal probability distribution is also known as a Normal Curve or a Bell Curve."**

To draw such a curve, one needs to specify two parameters, the mean and the standard deviation.

The graph above has a mean of zero and a standard deviation of 1.

Normal distribution with a mean of zero and a standard deviation of 1 is also known as the Standard Normal Distribution."

**1SD=68% of values**

2SD=95% of values.

3SD=99.7% of values.

**2**

**Which of the following is a non-parametric test used to assess significance between two paired samples?**

A. Student's unpaired t-test
B. Chi-square test
C. McNemar's Chi-square test
D. ANOVA F-test

**Ans C. McNemar's Chi-square test**

McNemar's Chi-square test is a non-parametric test specifically used for paired nominal data (e.g., before and after treatment).

**3**

**Which of the following is a major advantage of the Chi-square ($\chi^2$) test over the standard error of difference between proportions test?**

A. It requires normal distribution
B. It can be used even when expected values are <5
C. It can compare multinomial samples
D. It determines strength of association

**49**

**Carrier state is seen in following, except:**

A. Diphtheria
B. Measles
C. Typhoid
D. Polio

**Ans B. Measles**

Measles is caused by a RNA Paramyxovirus with only one serotype. The only source of infection is a case of measles. Carriers are not known to occur.

**50**

**'Relative risk' is:**

A. Risk among exposed/Risk among non-exposed
B. Risk among exposed/Risk in total population
C. Risk among exposed/Risk among exposed-Risk in new exposed
D. None of the above

**Ans A. Risk among exposed/Risk among non-exposed**

- **Relative risk**: incidence **among exposed/ incidence among non exposed**
- **Attributable risk**: incidence among exposed **minus** incidence among non exposed/ incidence among exposed multiplied by 100.
- **Eg A study showing 80% of lung cancers are due to smoking is an attributable risk.**
- **Population attributable risk**: incidence of disease (or death) In total population minus incidence of disease (or death) among those who were not exposed to suspected casual factor.

**51**

**Earliest feature of vitamin-A deficiency is:**

A. Dryness of conjunctiva
B. Nyctalopia
C. Keratomalacia
D. Hyphema

**Ans A. Dryness of conjunctiva**

**Features of vitamin A deficency:**

- Night blindness conjuctival xerosis (first clinical sign)
- bitots spots
- corneal xerosis
- keratomalacia.

In conjuctival xerosis, conjunctiva becomes dry, non wettable, muddy and wrinkled. Described as" Emerging like sand banks at receeding tide" when the child ceases to cry.

**52**

**Use of one of the following vaccination is absolutely contraindicated in pregnancy:**

A. Hepatitis-B
B. Cholera
C. Rabies
D. Yellow fever

**Ans D. Yellow fever**

- Yellow fever is a zoonotic disease caused by arbo virus. It is prevalent in Africa, America. There is no evidence that it has been present in Asia.
- India is a yellow fever receptive area. That means an area where yellow fever. does not exist but where conditions would permit its development if introduced.
- The main factor/ missing link is the virus of yellow fever which does not seem to occur in india.

# SPM 4

**1**

**Which is Not True of Nipah Virus**

A. Caused Latest Outbreak in Kerala
B. A Deadly virus
C. Highly Pathogenic
D. Non Zoonotic

**Ans D.** **Non Zoonotic**

**Nipah Virus**

- Has Caused Latest Outbreak in Kerala
- A Deadly virus
- Highly Pathogenic
- Zoonosis

**2**

**Navjat Shishu Suraksha Yojna is for whom:**

A. Newborn
B. Lactating Mother
C. Children
D. Infant

**Ans A.** **New Borne**

Navjat Shishu Surakshana Yojna is a programme launched by Ministry of health and family welfare to address important interventions of care at the time of birth.

**3**

**Under RKSK program for children of 9-18 years, the health checkup conduction frequency is:**

A. every month
B. every 3 monthly
C. every 6 monthly
D. every Yearly

**Ans C.** **Every 6 months**

RKSK (Rashtriya Kishore Swasthya Karyakram) is a programme launched by Ministry of health and family welfare to address important interventions of Adolescents. Adolescent health and Developmental needs are a focus. As adolscents form a considerabler population size, for development of country. Effective, appropriate, accessible service packages addressing a range of adolescent health care needs is a focus. Every 6 months health check ups are conducted.

**4**

**Black Sickness is:**

A. Plague
B. Cholera
C. Tetanus
D. Rabies

- Neutrophil leucocytes contain a small nuclear appendage of drumstick form (Davidson body-help in sexing) in upto 6% of cells in the female but is absent in males.

**17**

**A forensic experts wants to detect blood stains in case of a suspected crime. Test for detection of old blood stain is**

A. Precipitin test
B. Benzidine test
C. Absorption elution
D. Gel diffusion

**Ans B.** **Benzidine test**

**Tests for blood stains are:**

- **Magrath test**--If blood is present, luminescence is seen.
- **Takayama's test** – Haemochromogen crystal test, microscopic test. Delicate and reliable test. **Pink, feathery structure.**
- **Tiechmann's test – Haemin crystal test**, mioroscopy test.
- **Precipitin test**--Confirm blood of human origin.
- **Phenolphthalein test** – Kastle- Mayer test – pink-purple, extremely delicate.
- **Benzidine test**--Best preliminary test, blue color.
- **Chromatography** – Absorption spectroscopy is the best test.
- **Guicum test** – Deep blue.
- **Leuco malachite test** - Peacock-blue colour.

**18**

**Pre auricular sulcus is an important forensic entity. It is useful for:**

A. Determination of age
B. Identification of sex
C. Determination of race
D. Cause of death

**Ans B.** **Identification of sex**

- Pre auricular sulcus is present on hip bone (Os innominatum)
- Preauricular sulcus is **narrow, shallow and without marked edges in males.**
- Preauricular sulcus is **broad, deep and in females.**

**19**

**A 33 year old has been suspected as a case of Dhatura poisoning. Features are most likely:**

A. bronchoconstriction, tachycardia
B. bronchodilatation, bradycardia
C. bronchodilatation, tachycardia
D. bronchoconstriction, bradycardia

**Ans C.** **bronchodilatation, tachycardia**

**Atropine or Dhatura poisoning presents usually with**

Anticholinergic symptoms of

- bronchodilatation,
- tachycardia,
- mydriasis and
- blurring of vision
- dryness of skin and mucous membrane
- constipation and urinary retention,
- drowsiness,
- drunken gait and delirium

**20**

**A Forensic Expert wants to confirm Spermin in semen. The Spermin in semen is detected by:**

A. Barberio test
B. Florence test
C. ELISA
D. Gettler's test

**Ans A.** **Barberio test**

# Forensic Medicine 3

**1**

**A 48 year old female is very drowsy and has slurred speech. Patient is not oriented to time, place and person. There is no asterixis. Her rapid glucose test reveals blood sugar level of 130 mg/dl. Her vitals are: BP: 100/60mm Hg PR: 66/mm; RR: 8/mm. She seems to have taken excess of Benzodiazepine. Which of the following medications would be the most appropriate to administer at this time?**

A. Naloxone
B. Propranolol
C. Flumazenil
D. Fluoxetine

**Ans C.** **Flumazenil**

The patient has developed Benzodiazepine intoxication. Considering the patient scenario, the most appropriate treatment is Flumazenil. It is the most appropriate antidote to BZD Overdose.

**2**

**A student asked other forensic student about Medical "Etiquette". The Term is specifically:**

A. Conventional way of courtesy towards professional members
B. Courtesy towards client/patient
C. Courtesy towards female
D. Courtesy towards other members of society.

**Ans A.** **Conventional way of courtesy towards professional members**

**Medical etiquette is** "the code of ethical behavior regarding professional practice or action among the members of a profession in their dealings with each other."

**Medical ethics is** "the subject concerned with the moral principles for the members of the medical profession in their dealings with each other, their patients and the state."

**3**

**A Forensic Expert asks for Marshs Test to be done. It is done in:**

A. Cyanide poisoning
B. Alcoholism
C. Lead poisoning
D. Arsenic poison

**Ans B.** **Alcoholism.**

**Marshs Test is done in Alcoholism.**

**Remember other tests:**

- Arsenic = **Marsh's test, Reinsch's test**
- Opium = **Marquis test**
- Alcohol = **Mc'evan's test**
- Datura = **Mydriatic test**
- Phenol = **Green urine test**

# Physiology 2

**1**

**A 55 year old in a coronary care unit is admitted as he has prosthetic heart valve dysfunction. He is pale. He has Anemia which is Intravascular hemolytic type. What is usually seen in this type of anemia.**

A. Serum free haptoglobin and hemopexin levels are Increased, LDH level is elevated; total and indirect (unconjugated) bilirubin levels are elevated.
B. Serum free haptoglobin and hemopexin levels are decreased, LDH level is decreased; total and indirect (unconjugated) bilirubin levels are elevated
C. Serum free haptoglobin and hemopexin levels are decreased, LDH level is elevated; total and indirect (unconjugated) bilirubin levels are elevated
D. Serum free haptoglobin and hemopexin levels are normal, LDH level is elevated; total and indirect (unconjugated) bilirubin levels are normal

**Ans C.** Serum free haptoglobin and hemopexin levels are decreased, LDH level is elevated; total and indirect (unconjugated) bilirubin levels are elevated

Intravascular hemolytic anemia, General characteristics-

- This type of anemia is caused by acute transfusion reactions (antibody-mediated), prosthetic heart valve dysfunction, cold agglutinin disease, or clostridial infection.
- Patients have signs and symptoms of anemia.

Laboratory findings

- Serum free haptoglobin and hemopexin levels are decreased.
- Plasma and urine hemoglobin levels are elevated; lactate dehydrogenase (LDH) level is elevated; and total and indirect (unconjugated) bilirubin levels are elevated.
- Peripheral smear reveals macrocytic anemia with reticulocytosis, nucleated red blood cells, and cell fragments.

**2**

**Not true of Asthma is:**

A. Asthma is a chronic inflammatory disorder of the airways.
B. Asthma is an allergic disease of the airways
C. There is irreversible airway obstruction.
D. It may be triggered by external inhaled substances.

**Ans C.** There is irreversible airway obstruction

**20**

A 44 year old male who had fluid in pleural cavity is suggested to have Paracentesis thoracis done. This Procedure is safely done in:

A. 4th intercostal space in mid Clavicular line
B. 6th intercostal space in mid axillary line
C. 5th intercostal space in midline
D. 6th intercostal space in erector spinae

**Ans B.** 6th intercostal space in mid axillary line

Paracentesis thoracis and from which site it is done: It is the process of aspiration of any fluid from the pleural cavity. Done in 6th intercostal space in mid axillary line. Precaution should be taken during aspiration from pleural cavity. Needle should be pricked in lower part of intercostal space to avoid injury to intercostal nerves and vessels in costal groove.

**21**

An ENT surgeon describes a nerve as a sensory component of a larger nerve. This Nerve is called as Nerve of Wrisberg. It is a Branch of:

A. Recurrent laryngeal nerve
B. Maxillary Nerve
C. Mandibular nerve
D. Facial nerve

**Ans D.** Facial nerve

The Seventh cranial nerve is the facial nerve. Facial nerve is the mixed nerve. The Sensory component of Facial Nerve is the Nerve of Wrisberg.

**22**

A 66 year old reports pain in his left upper extremity and tingling and numbness in his 4th and 5th digits of his left hand. There is mild swelling of the left hand. The man reports most of his pain and numbness occurs when he is doing electric work with his arms overhead. X-ray reveals the presence of a cervical rib. The artery liable to be compressed is:

A. Axillary
B. Radial
C. Brachial
D. Subclavian

**Ans D.** Subclavian

- A cervical rib may compress the subclavian artery in the thoracic outlet, resulting in ischemic muscle pain in the upper limb.
- Compression on the neurovascular bundle occurs as a result of cervical ribs or abnormal insertions of the anterior and middle scalene muscles.

**23**

A Student is asked about the Phrenic Nerve by his Teacher. Which is true of This Nerve?

A. Is derived from the $C_2$, $C_3$ nerve roots
B. Is derived from the $C_3$, $C_4$ nerve roots
C. Is derived from the $C_5$, $C_6$ nerve roots
D. Is derived from the $C_4$, $C_5$ $C_6$ nerve roots

**Ans B.** Is derived from the $C_3$, $C_4$ nerve roots

The Phrenic nerve is one of the most important nerves involved in Respiration. It is derived from the C3-C5 nerve roots, delivers motor innervation to the diaphragm and additionally carries pain fibers from the diaphragmatic and mediastinal

# Anatomy 1

**1**

Which is Not true of Anatomical Land marks:

A. Xiphoid process at the level of 9th thoracic vertebra.
B. Subcostal plane passes through 3rd lumbar vertebra.
C. Highest point of iliac crest at the level of First lumbar vertebra.
D. Anterior superior iliac spine at the level of sacral promontory

**Ans C.** Highest point of iliac crest at the level of First lumbar vertebra.

Land marks:

- Xiphoid process at the level of 9th thoracic vertebra.
- Pubic symphysis lies at the level of coccyx.
- Subcostal plane passes through 3rd lumbar vertebra.
- Highest point of iliac crest at the level of 4th lumbar vertebra.
- Anterior superior iliac spine at the level of sacral promontory

**2**

On studying various nerve palsies student comes across flattening of the thenar eminence caused as a result of Ape Thumb deformity.

The Characteristic Ape Thumb deformity is caused by damage to:

A. Ulnar nerve
B. Musculocutaneous nerve
C. Median nerve
D. Axillary nerve

**Ans C.** Median Nerve

The Characteristic Ape Thumb deformity is caused by damage to median nerve.

When the "Median nerve is injured proximal to the wrist, the thenar muscles are paralyzed. It leads to flattening of the thenar eminence." The thumb assumes the position in line with other metacarpals. This is called ape thumb deformity.

**3**

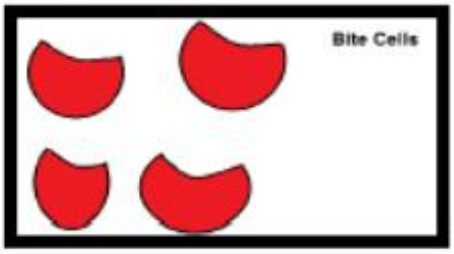
A 35 year old female has pain, numbness, and tingling in the ring and little fingers, followed by loss of sensation and motor weakness. Most likely cause is:

A. Carpal Tunnel Syndrome
B. Cubital tunnel Syndrome
C. Ape thumb Syndrome
D. Guyon's canal syndrome

## 10

**A 6 year old boy has Hb of 9.5 g/dl. He developed jaundice after taking fava beans and Primaquine. His PBF shows cells as seen in figure. Most likely diagnosis is:**

A. Leukemia
B. Pure red cell aplasia
C. G6PD Deficency
D. PNH

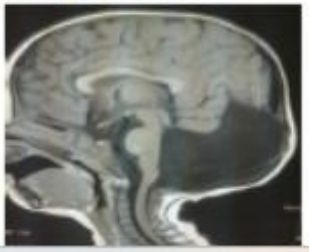



**Ans C.** **G6PD Deficency**

The question has some important leading points. The Figure Shows Bite Cells. They are a feature of G6PD Deficency. African boy and intake of Fava beans and Primaquine. G6PD deficiency is common in African, Mediterrian region. Primaquine, Fava beans, nalidixic acid, nitrofurantoin and illness precipitate Anemia due to G6PD deficiency.

## 11

**A 12 month old boy who has increased head size is brought for a general check up in a pediatric OPD. A pediatrician orders for a CT Scan. The CT scan of a 12 month old is shown. Most likely diagnosis is:**



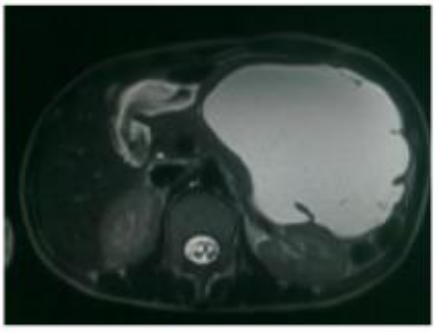
A. Encephalocele
B. Lissencephaly
C. Anencephaly
D. Dandy Walker Syndrome

**Ans D.** **Dandy Walker Syndrome**

The case represents Dandy-Walker malformation. A 12 month old boy (Pediatric age group). Infants present with a rapid increase in head size and a prominent occiput. The Dandy-Walker malformation is a condition characterized by Cystic expansion of the fourth ventricle of brain in the posterior fossa, which results from a developmental failure of the roof of the 4th ventricle during embryogenesis.

## 12

**A middle aged male who drinks Alcohol regularly presented to a Physician with upper abdominal pain, nausea and vomiting, as well as weight loss. Physical examination reveals abdominal tenderness. Laboratory findings reveal mild elevation of serum amylase. A CT scan of the abdomen was done which is shown below. Most Likely diagnosis is:**



A. Pancreatic Cancer
B. Pancreatic Necrosis
C. Pseudocyst formation
D. Retroperitoneal Hematoma

# Image Based Question 12

**1**

**A 55 year old fair skinned Female has irregular lesions near her Eyelids on his face for past 5 months. Most likely Diagnosis is**

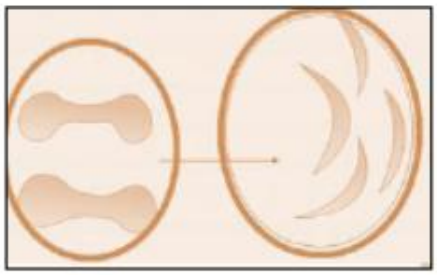
A. Squamous Cell Carcinoma
B. Xanthelesma
C. Dermatofibroma
D. Seborrheic keratoses

**Ans B. Xanthelesma**

- Xanthomas Are focal collections of lipid-containing histiocytes in the dermis and tendon sheaths.
- They appear as yellowish papules (eruptive xanthomas), plaques (xanthelasma), nodules (xanthoma tuberosum), and xanthomas in tendon and tendon sheaths (xanthoma tendinosum).
- Xanthomas often arise in association with inherited hyperlipoproteinemias or in several underlying metabolic diseases that alter lipoprotein metabolism, such as diabetes, hypothyroidism, cholestatic liver disease, pancreatitis, renal disease

**2**

**The Figure below shows Sickle cell Transformation. In Sickle Cell Anemia defect is in which chain:**



A. Alpha chain
B. Beta chain
C. Both the chains
D. None of these

**Ans B. Beta Chain**

# JKPSC

## Medical Officer Quick Review

High-Yield MCQs, Clinical Scenarios, and Rapid Explanations

### COMPREHENSIVE & CURRENT CONTENT

**100% Syllabus Alignment**

Precisely mapped to the complete JKPSC syllabus, covering all required disciplines.

**Updated with Clinical Guidelines**

Content is fully aligned with current and established practice recommendations.


**Developed by Experts**

Authored by clinicians with deep experience in medical teaching and exam preparation.

## Your Ultimate Guide to the JKPSC Medical Offical Officer Exam

### SMART & STRATEGIC PREPARATION

**High-Yield MCQs & Clear Explanations**

Master concepts with exam-pattern questions and concise, focused explanations.

**Real-World Clinical Scenarios**

Enhance diagnostic reasoning and knowledge application with case-based questions.

**Efficient & Focused Revision**

Organized topic-wise to emphasize high-weightage subjects and critical concepts.