

Railway Recruitment Board

RRB

**Laboratory Superintendent
&
Laboratory Assistant Gr. II
Solved Paper
&
Practice Book**

Chief Editor
A.K. Mahajan

Compiled & Written by
Virendra Beniwal, Rishu Pal,

Computer Graphics by
Balkrishna & Pankaj Kushwaha

Editorial Office
12, Church Lane Prayagraj-211002
 **Mob. : 9415650134**
Email : yctap12@gmail.com

website : www.yctbooks.com/www.yctfastbook.com/www.yctbooksprime.com

© All Rights Reserved with Publisher



Publisher Declaration

Edited and Published by A.K. Mahajan for YCT Publications Pvt. Ltd.

and Printed by Digital In order to Publish the book,
full care has been taken by the Editor and the Publisher,
still your suggestions and queries are welcomed.

₹ : 395/-

In case of any dispute, the judicial area will be Prayagraj.

INDEX

सॉल्ड पेपर

■ RRB Pharmacist Lab Technician (Solved Paper) Exam Date : 10.06.2015 ----- 3-18

प्रैक्टिस सेट

■ Practice Set-1 -----	19-29
■ Practice Set -2 -----	30-41
■ Practice Set -3 -----	42-53
■ Practice Set -4 -----	54-65
■ Practice Set -5 -----	66-77
■ Practice Set -6 -----	78-89
■ Practice Set -7 -----	90-101
■ Practice Set -8 -----	102-113
■ Practice Set -9 -----	114-124
■ Practice Set 10 -----	125-135
■ Practice Set -11 -----	136-146
■ Practice Set -12 -----	147-158
■ Practice Set -13 -----	159-169
■ Practice Set -14 -----	170-181
■ Practice Set -15 -----	182-192

RRB PARAMEDICAL VARIOUS CATEGORIES SYLLABUS AND EXAM PATTERN

Post	Syllabus
Laboratory Superintendent	Sociology & Psychology, PHYSIOLOGY, Basic Chemistry and Biochemistry, General Methodology, PHYSICS, Histopathology and cytology techniques, Clinical pathology & basic haematology, PARASITOLOGY & ENTOMOLOGY, Clinical biochemistry, Coagulation & transfusion medicine, Immunohaematology, VIROLOGY, MYCOLOGY, ADVANCED SEROLOGY
Laboratory Assistant Grade II	Anatomy, Physiology, Biochemistry, Fundamentals of Medical laboratory Technology, Microbiology, Clinical biochemistry, Pathology & Histopathology, Haematology and Blood and bank

COMMON FOR ALL POSTS

Sl.No.	Subject	Syllabus
1	General Arithmetics/ सामान्य अंकगणित	Number systems BODMAS, Decimals, Fractions, LCM and HCF, Ratio and Proportion, Percentages, Mensuration, Time and Work, Time and Distance, Simple and Compound Interest, Profit and Loss, Algebra, Geometry, Trigonometry, Elementary Statistics, Square Root, Age Calculations, Calendar & Clock, Pipes & Cistern
2.	General Intelligence and Reasoning /सामान्य बुद्धिमता और तर्क	Analogies, Alphabetical and Number Series, Coding and Decoding, Mathematical operations, Relationships, Syllogism, Jumbling, Venn Diagram, Data Interpretation and Sufficiency, Conclusions and Decision Making, Similarities and Differences, Analytical reasoning, Classification, Directions, Statement - Arguments and Assumptions etc.
3.	General Awareness /सामान्य जागरूकता	Knowledge of Current affairs, Indian geography, culture and history of India including freedom struggle, Indian Polity and constitution, Indian Economy, Environmental issues concerning India and the World, Sports, General scientific and technological developments etc.
4.	General Science Physics/सामान्य विज्ञान	Chemistry and Life Sciences (up to 10th Standard CBSE syllabus).

Railway Recruitment Board 2015

Pharmacist Lab Technician

(Question Paper with Explanation)

[Date-10.06.2015]

1. Mode of transmission of Pertussis:

पर्टुसिस के संचरण का तरीका :

- (a) Vector transmission/वेक्टर ट्रांसमिशन
- (b) Through contaminated water
दूषित पानी के माध्यम से
- (c) Droplet infection/बूँदों का संक्रमण
- (d) Faeco oral/फेकोरल

Ans. (c) : Pertussis , also known as whooping cough ,is a highly contagious respiratory infection caused by the bacterium *Bordetella pertussis* . Pertussis spreads easily from person to person mainly through droplets produced by coughing or sneezing these droplets don't travel very far through the air and usually only infect persons nearby.

Vaccination is the best way to prevent pertussis vaccination against pertussis is the part of the regularly recommended childhood vaccines. A pertussis vaccine booster is also recommended for adolescents and adults.

2. Time required to measure the Mantoux test.

मंटोक्स यांत्रिकीय को मापने के लिए आवश्यक समय:

- (a) 24 to 48 hrs/24 से 48 घंटे
- (b) 48 to 72 hrs/48 से 72 घंटे
- (c) 10 to 12 hrs/10 से 12 घंटे
- (d) 2 to 4 hrs/2 से 4 घंटे

Ans. (b) : Time required to measure the Mantoux test is 48 to 72 hours.

The Mantoux test was first developed and described by the German physician Felix Meldal in 1908 . It is named after Charles Mantoux. The Mantoux test is a tool for screening for tuberculosis (TB) and for tuberculosis diagnosis . This also known as Mantoux screening test, tuberculin sensitivity test, pirquet test or Purified protein derivative (PPD) test.

3. Name of the oral Polio Vaccine.

ओरल पोलियो वैक्सीन का नाम:

- (a) BCG/बी.सी.जी.
- (b) TAB/टैब
- (c) Salk/सल्क
- (d) Sabin/साबिन

Ans. (d) : Name of the oral Polio Vaccine is Trivalent oral poliovirus vaccine (topv) . It is also called Sabin vaccine.

Polio vaccines are vaccines used to prevent poliomyelitis. OPV produces antibodies in the blood to all three types of poliovirus, and in the event of

infection, this protects the individual against polio paralysis by preventing the spread of poliovirus to the nervous system.

- BCG (Bacillus Calmette - Guerin) is a vaccine for tuberculosis (TB) disease.

4. The following are the standard tuberculosis drug except.

निम्नलिखित को छोड़कर मानक तपेदिक दवा है:

- (a) Chloromycin/क्लोरोमाइसिन
- (b) Streptomycin/स्ट्रेप्टोमाइसिन
- (c) INH/आई.एन.एच.
- (d) PAS/पी.ए.एस.

Ans. (a) : Chloromycin is not a standard tuberculosis drug, which is helpful in the treatment of many types of bacterial infections.

- Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*. the basic symptoms of tuberculosis are cough for more than three weeks, fever, fatigue, chest pain etc.

5. Combination of Triple Antigen:

ट्रिप्ल एंटीजन का संयोजन :

(a) DPT/डी.पी.टी.	(b) BCG/बी.सी.जी.
(c) TAB/टैब	(d) ECG/ई.सी.जी.

Ans. (a) : DPT is a combination of triple antigen. The triple antigen DPT vaccine protects against 3 diseases, diphtheria, tetanus and pertussis (or whooping cough). Diphtheria and tetanus are caused by bacterial toxins, inactivation of bacterial toxins produce to toxoids that are no longer toxic but maintain the antigenic property and are used as a vaccine.

BCG (Bacillus Calmette -Guerin) is a vaccine for tuberculosis (TB) disease. TB is a combined vaccine used to produce immunity against the diseases typhoid, paratyphoid A and paratyphoid B

6. The time interval between infection of suspected person and the appearance of signs and symptom of the disease is called

संदिध व्यक्ति के संक्रमण और रोग के संकेतों और लक्षणों के प्रकट होने के बीच के समय अंतराल को कहा जाता है।

- (a) Quarantine/संगरोग
- (b) Recovery period/वसूली अवधि
- (c) Incubation/ऊष्मायान
- (d) Isolation period/अलगाव अवधि

Ans. (c) : The time interval b/w infection of suspected person and the appearance of signs and symptom of the disease is called incubation. The incubation period is also called the latency period. The first known use of the term incubation period was in 1879.

Example :- The incubation period for chickenpox is 14 to 16 days. The time period for a chicken egg to hatch is the incubation period.

7. Route of transmission of Hepatitis B :

हेपेटाइटिस बी के संचरण का मार्ग

- (a) Oral/ओरल
- (b) Potential/पोटेंशियल
- (c) Faeco oral/फेको ओरल
- (d) Contaminated water/दूषित पानी

Ans. (b) : Route of transmission of hepatitis B is potential. Hepatitis B is the most common liver infection in the world. It is transmitted by blood through unprotected sex and during pregnancy or childbirth.

Hepatitis B sign and symptoms may include: Dark urine, Abdominal pain, fever, loss of appetite, Nausea and vomiting etc.

It is caused by the hepatitis B virus (HBV) the hepatitis B vaccine is typically given as two injection separated by a month or three or four injections over six months depending on which vaccine is given.

8. Mode of transmission of typhoid fever:

टाइफाइड बुखार के संचरण का तरीका

- (a) Intravenous/अंतःशिरा
- (b) Faecal/फैकल
- (c) Respiratory/श्वसन
- (d) Droplet/छोटीबूँद

Ans. (b) : Typhoid and paratyphoid fevers are caused by the bacteria *Salmonella Typhi* and *Salmonella Paratyphi* respectively. typhoid and paratyphoid fevers are transmitted via faecal - oral route. the causative bacteria are passed in the faeces and urine of infected people, which may contaminate food , water or beverages and cause infection in the consumer of such contaminated food .

Typhoid fever, also called enteric fever.

The two main symptoms of typhoid are fever and rash and other symptoms are diarrhea, nausea, bloating, weakness, headaches etc. The only effective treatment for typhoid is antibiotics.

9. Causative organism of diphtheria

डिफ्टीरिया का कारण जीव :

- (a) Mycobacteria/माइकोबैक्टीरिया
- (b) Streptococcus /स्ट्रेप्टोकोकस
- (c) Coryne Bacterium diphtheriae
कार्नी बैक्टीरिया डिफ्टीरिया
- (d) Staphylococcus/स्टैफिलोकोकस

Ans. (c) : Diphtheria is a serious infection caused by strains of bacteria called *Corynebacterium diphtheriae* that make a toxin . It is the toxin that can cause people to get very sick. Diphtheria bacteria spread from person to person, usually through respiratory droplets, like from coughing or sneezing. This disease is more common in children.

Running nose, sore throat, fever are the symptoms of Diphtheria but the formation of membranes in the throat is the main symptom. DPT vaccine is available to prevent this disease.

10. Incubation period of measles :

खसरे का ऊप्पायन अवधि होती है।

- (a) 1-7 days/दिन
- (b) 7-14 days/दिन
- (c) 14-21 days/दिन
- (d) 21-28 days/दिन

Ans. (b) : The incubation period of measles 7 to 14 days. The incubation period of a disease refers to the time b/w contact with a carrier of the disease and development of symptoms.

Measles is an infectious disease caused by virus. It spreads easily from one person to another. It is also called Rubella. It can be divided into four phases - Incubation phase, prodromal (catarrhal) phase, rash phase and recovery phase.

11. Site for Mantoux Test

मैन्टॉक्स परीक्षण का स्थान है:

- (a) Outer and upper quadrant of gluteus maximus/ग्लूटस मैक्सिमस का बाहरी तथा ऊपरी छौथाई भाग
- (b) Deltoid region /डेल्टोयड बांयी क्षेत्र
- (c) Posterior left forearm/पिछला बांयी बॉह
- (d) Anterior left forearm/अग्र बांयी बॉह

Ans. (d) : Mantoux test is also known as Tuberculosis skin test and PPD test. It is used to diagnose the latent / asymptomatic Tuberculosis (TB) causing bacteria the Mantoux test is usually applied on the middle third of the flexor surface of the fore arm, as a reaction may be weaker near the wrist or the elbow joint. It is usually applied on the left forearm. use a 1 ml syringe to inject 0.1 ml of PPD - Purified Protein Derivative.

12. Media of transmission of bovine type of tubercle bacilli:

ट्युबर्कल बैसिल्ली का गोजातीय प्रकार का संचरण माध्यम होता है:

- (a) Milk/दूध
- (b) Water/जल
- (c) Air/वायु
- (d) Food/भोजन

Ans. (a) : Media of transmission to bovine type of tubercle bacilli is milk .

• Bovine tuberculosis (TB) is a type of TB that can affect animals such as cattle and Deer, and some exotic animals, such as Rhinoceros and non-human primates . Bovine TB is caused by the bacterium *mycobacterium bovis* which is very similar to the bacterium that usually causes human tuberculosis Bovine TB can also affect humans.

Transmission of bovine TB from infected cattle to humans occurs primarily through consumption of raw (unpasteurized) milk or raw milk products containing the bacteria. Transmission can also occur through prolonged exposure to bacteria in the air in the immediate vicinity of live infected cattle or their carcasses.

13. Painful Micturition :

पीड़ायुक्त पेशाब का होना (Micturition) होता है:

- Eneuresis/शाय्या मूत्रण
- Dysuria /पेशाब में जलन
- Retention of urine/पेशाब का अवरोध
- Diarrhoea/अतिसार

Ans. (b) : Dysuria is the cause of painful urine. It is the medical term for pain or discomfort when urinating. Often described as a burning sensation, dysuria most commonly is caused by bacterial infections of the urinary tract.

Depending on the cause of dysuria, there may be other symptoms are painful urinary incontinence, strain while urinating etc.

Dysuria is a disease in any woman and man, the risk of getting infected with is equal. If dysuria is due to some type of infection then antibiotics are used in this situation

14. Amount of solution used for evacuant enema is adults :

वयस्कों में उत्सर्जक एनिमा (evacuant enema) के लिए प्रयोग किया जाने वाले विलयन की मात्रा होती है:

- 100-250 ml
- 250-350 ml
- 500-1000 ml
- 1000-1500 ml

Ans. (c) : Amount of solution used for evacuant enema in adults is 500 to 1000 ml. An enema is a liquid preparation that is introduced into the body via the rectum for the purpose of producing a bowel movement or administering medication. Enema is classified into evacuant enema and retained enema. Evacuant enema is used to eliminate different gaseous distension and also to increase the water content which is present in the stool and Retention enema is usually used in shock collapse and some poisoning cases.

15. Drugs used to relieve pain:

दर्द निवारण के लिए उपयोग की जाने वाली दवा है:

- Anti inflammatory/सूजनराधी
- Antipyretics /ज्वर नाशक
- Antibiotics/प्रतिजीविक
- Analgesics/दर्द निवारक

Ans. (d) : Analgesics are medicines that are used to relieve pain. They are also known as painkillers or pain relievers. Analgesics drugs can be sold as an over the counter (OTC) or prescription drug. Analgesic drugs can be classified as nonopiod drugs, Opioid drugs and coanalgesic drugs.

- Nonopiod analgesic drugs include acetaminophen and NSAIDs.
- Opioids, also known as " narcotics" , include natural substances, e.g. morphine, semi-synthetic etc.
- Coanalgesic medication are drugs that have primary use other than pain relief. but also help improve analgesia for some painful conditions.

16. Hormone secreted by the testes :

वृष्ण से हार्मोन स्वावित होता है:

- Oestrogen/एस्ट्रोजन
- Pitocin/पिटोसिन
- Androgens/एन्ड्रोजन
- Progesterone/प्रोजेस्ट्रोन

Ans. (c) : The principle hormones secreted by the testes is known as androgen. Androgen is of two types namely testosterone and androstenedione. In mammals, testosterone is responsible for the production of primary and secondary sex characters and helps in the development of seminiferous tubules. From ovary, various hormones are secreted namely estrogen, progesterone, and relaxin. Estrogen helps in secondary sex character development ; whereas , progesterone facilitates the development of secondary sex characteristics, and maintain pregnancy and gestation period. Relaxin relaxes public ligaments and favors parturition.

17. One tea spoon contains ml.

एक चम्मच में मिली. रहता है:

- 2 ml
- 5 ml
- 10 ml
- 15 ml

Ans. (b) : The amount of 1 teaspoon is equal to 4.92 ml (5 ml approx).

This amount is subjected to a standard set of value. A teaspoon is a unit of volume measurement that is equal to 1/3 teaspoon. this is equal to exactly 5 ml. and also 1 level teaspoon equals 5 ml. and that 1/2 a teaspoon equals 2.5 ml.

$$\text{Milliliters} = \text{teaspoons} \times 4.928922$$

18. One ml contains drops.

एक मिली. में बूँद होता है।

- 5 drops /5 बूँद
- 10 drops/10 बूँद
- 15 drops/15 बूँद
- 20 drops/20 बूँद

Ans. (c) : The drop is an approximated unit of measure of volume , the amount dispensed as one drop from a dropper or drip chamber . It is often used in giving quantities of liquid drugs to patients, and occasionally in cooking and in organic synthesis. If we are measuring an oil-based liquid like olive oil 15 drops per ml is typically recommended. However if you are measuring a water based liquid like juice, 20 drops per ml is usually recommended.

One ml is approximately equal to 20 drops of liquid. This estimation can vary depending on the type of liquid and size of the dropper. For instance, a large dropper might create large drops than a small dropper, making 1 ml equal to 15 drops.

19. Average weight of a new born baby

नवजात शिशु का औसत भार होता है:

- 2 kg/2 किग्रा
- 4 kg/4 किग्रा
- 3 kg/3 किग्रा
- 5 kg/5 किग्रा

Ans. (c) : Average weight of a new born baby is 3 kg In India, the normal weight of a newborn male baby is up to 2.8 to 3.2 Kg. at the time of birth. whereas in the case of a newborn female baby it is up to 2.7 to 3.1 kg at the time of birth . Most of the time it is seen that the mother's weight is very important in improving the weight of their newborn baby.

20. How much salt must be added to one liter of water to make a solutions of normal saline?
सामान्य लवणीय विलयन को बनाने के लिए एक लीटर जल में कितना मिलाया जायेगा?
(a) 2 grams/2 ग्राम (b) 5 grams/5 ग्राम
(c) 6 grams/6 ग्राम (d) 9 grams/9 ग्राम

Ans. (d) : 9 grams salt must be added to one liter of water to make a solutions of normal saline. Saline (also known as saline solution) is a mixture of sodium chloride (salt) and water. It has a number of uses in medicine including cleaning wounds, removal and storage of contact lenses, and help with dry eyes.

21. Number of vertebra in the sacrum :

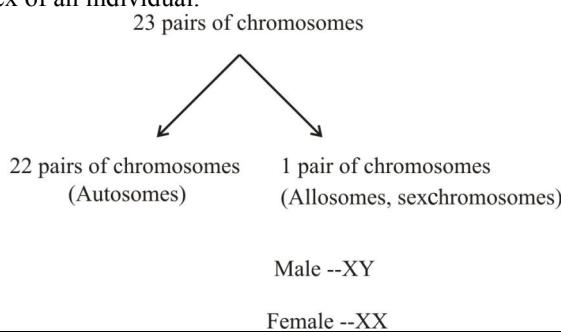
सैक्रम में कशेरुक की संख्या होती है:
(a) 5 (b) 3
(c) 4 (d) 1

Ans. (a) : The sacrum is made of five fused vertebrae configured as an inverted triangular bone that is concave anteriorly and convex posteriorly. Vertebrae are the 33 individual bones that interlock with each other to form the spinal column. The vertebrae are numbered and divided into regions : cervical, thoracic, lumbar, sacrum and coccyx . only the top 24 bones are moveable ; the vertebrae of the sacrum and coccyx

22. Number of chromosome in a cell;
एक कोशिका क्रोमोसोम की संख्या होती है।

(a) 23 (b) 44
(c) 46 (d) 40

Ans. (c) : The chromosome number in humans is 23 pairs. Normally , there are 46 chromosomes in total in each cell in humans. Twenty-two of these 23 pairs are referred to as autosomes and are the same in both males and females. However , the difference is in the last pair of chromosome - 23 rd pair. It differs in females and males. They are the sex chromosomes determining the sex of an individual.



23. Atrial septal defect occurs due to the persistence of :

नियम पट दोष के बने रहने के कारण होता है:
(a) Formen ovale/फोरेमन ओवेल
(b) Ductus arteriosus/डक्टस आर्टेरियोसिस
(c) Ductus venosus/डक्टस वेनोसस
(d) Mitral valve/माइट्रल वाल्व

Ans. (a) : Atrial septal defect is one of the most common types of congenital heart defects, occurring in about 25% of children. An atrial septal defect occurs

when there is a failure to close the communication b/w the right and left atria. The secundun atrial septal defect usually arises from an enlarged foramen ovale, inadequate growth of the septum secundum, or excessive absorption of the septum primum.

24. is a water soluble vitamin.

जल में घुलनशीनल विटामिन है:

(a) Vitamin- A/विटामिन- A
(b) Vitamin- K/विटामिन- K
(c) Vitamin- B/विटामिन- B
(d) Vitamin- D/विटामिन- D

Ans. (c) : Vitamin-B is a water soluble vitamin .

Vitamins are organic substances that are generally classified as either fat soluble or water soluble.

- Casimir Funk discovered the vitamins in 1912.
- Fat-soluble vitamins :- A, D, E & K.

Water-soluble vitamins :- B & C

The scientific Name of vitamin B is Thiamine. Vitamins naturally occur in food and are needed in very small amounts for various bodily function such as energy production and making red blood cells .

Types of vitamin B is B₁, B₂ , B₃ , B₅ , B₆ , B₇ , B₉ & B₁₂

25. Quickening means

क्विकनिंग का आशय है:

(a) Hearing of the fetal heart sound
भ्रूण हृदय ध्वनि का सुनना
(b) Sudden Cessation of Menstruation
महावारी का अचानक समाप्त
(c) The movement of the feuts in the uterus felt by the mother/गर्भाशय में भ्रूण की हलचल माँ को महसूस होती है।
(d) Nausea and vomiting in the morning
सुबह के समय जी-मचलना तथा उल्टी आना

Ans. (c) : Quickening is when a pregnant women feels the first movement of her baby in her uterus (womb) . It feels like flutters, bubbles or ting pulses. Quickening happens. around 16 to 20 weeks is pregnancy, but some people may feel it sooner or later

26. Cholera is caused by a kind of bacterium called:

हैजा एक प्रकार के जीवाणु से होता है, उसे कहते हैं:

(a) Tubercl bacillus/ट्यूबरकल बैसिल्स
(b) Vibrio cholerae/विब्रियो कॉलेरी
(c) Protozoa/प्रोटोजोआ
(d) Entamoeba histolytica/एंटमोबा हिस्टोलिटिका

Ans. (b): Cholera is caused by a kind of bacterium called Vibrio cholerae. Cholera, known as the Asiatic pandemic . It causes severe watery diarrhoea which can lead to dehydration and even death if untreated ; It is caused by eating food or drinking water contaminated with bacteria.

27. Drinking of alcohol will severely affect the:

शराब पीने से गंभीर प्रभाव पड़ता है

(a) Kidney/वृक्क (b) Brain/मस्तिष्क
(c) Stomach/आमाशय (d) Liver/यकृत

Ans. (d) : Drinking of alcohol will severely affect the liver. The liver breaks down most of the alcohol you drink so that it can be removed from the body. This process creates substances that are more harmful than alcohol. Large amount of these substances can damage liver cells and cause serious liver disease. Alcohol causes 4 out of 5 deaths from liver disease.

- The liver is also responsible for cleaning our blood, producing bile for digestion, and storing glycogen for energy. Types of liver disease caused by alcohol include fatty liver, inflammation of liver, acute alcoholic hepatitis, scarring of the liver and liver failure.

28. The disease in which the patient's blood does not clot easily is :

वह रोग जिसमें रोगी का रक्त आसानी से नहीं जमता है:

- Sickle cell anaemia/कणिका की कर्मी
- Haemophilia/हीमोफीलिया
- Rabies/रेबीज
- Diabetes/मधुमेह

Ans. (b) : Haemophilia is usually an inherited bleeding disorder in which the blood does not clot properly. This can lead to spontaneous bleeding as well as bleeding following injuries of surgery. Blood contains many proteins called clotting factors that can help to stop bleeding. People with haemophilia have low levels of either factor VIII or factor IX. The severity of haemophilia that a person has determined by the amount of factor in the blood. The lower amount of the factor, the more likely it is that bleeding will occur which can lead to serious health problem.

29. Discolouration of teeth is caused by a kind of antibiotics called

दाँत का मलिनकरण एक प्रकार के प्रतिजैविक के कारण होता है, उसे कहते हैं

- Streptomycin/स्ट्रेप्टोमायसिन
- Neomycin/नियोमायसिन
- Tetracycline/टेट्रासायक्लिन
- Penicillin/पेनिसिलीन

Ans. (c) : Discolouration of teeth is caused by a kind of antibiotics called Tetracycline. Tooth discolouration is abnormal tooth color, translucency. External discolouration is accumulation of stains on the tooth surface. Internal discolouration is due to absorption of pigment particles into tooth structure. Some times there are several different co-existent factors responsible for discolouration. Tetracycline is a broad spectrum antibiotic, and its derivative minocycline is common in the treatment of acne.

30. is caused by the fungus.

कवक के कारण होता है।

- Malaria/मलेरिया
- Athletes foot/एथलीट्स फूट
- Filariasis/फाइलरियासिस
- Typhus fever/टाइफस ज्वर

Ans. (b): Athlete's foot, known medically as tinea pedis, is a common skin infection of the feet caused by a fungus. It can also spread to the toe nails and the hands. The fungal infection is called athlete's foot because it's commonly seen in athletes and the fungus that causes athlete's foot is called trichophyton and is commonly found on floors and in clothing. It usually causes burning, stinging, redness and itching. It can be treated with topical or oral antifungal medication. Ex. terbinafine, Fluconazole, itraconazole, miconazole etc.

31. The Filariasis is transmitted by

फाइलरियासिस से फैलता है।

- Anopheles female mosquito/एनाफिलीज मादा मच्छर
- Anopheles male mosquito/एनाफिलीज नर मच्छर
- Culex female mosquito/क्यूलेक्स मादा मच्छर
- Culex male mosquito/क्यूलेक्स नर मच्छर

Ans. (c) : The filariasis is transmitted by culex female mosquito. Filariasis is an infectious tropical disease caused by parasites filarial nematodes. They are transmitted to humans through the bite of the female culex mosquitoes. These are pseudocoelomate and they are triploblastic in nature. It is commonly known as elephantiasis.

32. The blood group contain no antibodies.

वह रक्त समूह जिसमें एंटीबॉडी नहीं रहती है:

- A
- B
- O
- AB

Ans. (d) : The AB blood group system consists of 4 types of blood group - A, B, AB and O and is mainly based on the presence or absence of antigens on RBC and antibodies in the plasma. A person with blood group AB has Antigen A and Antigen B on RBC and no antibodies in plasma. As there are no antibodies in the plasma therefore individuals with blood group AB are considered universal recipients. Hence AB blood group has both A & B antigens but no antibodies.

- Group A : The surface of the RBC contains A antigen and the plasma has anti -B antibody.
- Group B : The surface of the RBC contains 'B' antigen, and the plasma has anti -A antibody.
- Group O : The plasma contains both anti -A and anti -B antibodies, but the surface of the RBC does not contain any A or B antigens so it is called the universal donor blood group.

33. The disease that spread through sexual contact is

वह रोग जो यौन सम्बन्ध से फैलता है

- Leprosy/कुछ
- AIDS/एड्स
- Itches/खुजली
- Scabies/खाज

Ans. (b) : AIDS is disease that spread through sexual contact the full form of AIDS is Acquired Immune Deficiency Syndrome. It is spread by the HIV (Human Immunodeficiency Virus) virus. The first case of AIDS in India was detected in 1986 in Chennai. HIV virus is an RNA virus which belongs to the Retroviridae family. There are two types of HIV that is HIV virus

human immunity decreases, this condition is called AIDS. This virus spreads through sexual contact, using an infected needle and in the child growing in the womb of an infected mother.

Prevention of AIDS :- I can use strategies such as abstinence (not having sex) never sharing needles and using condoms , the right way every time you have sex.

34. **Typhoid is transmitted through-**

टायफाइड के माध्यम से फैलता है-

- (a) Water and food/जल और भोजन
- (b) Air /वायु
- (c) Touch/स्पर्श
- (d) Personal contact/व्यक्तिगत संपर्क

Ans. (a) : Typhoid is spread by sewage contamination of food or water, or through person -to -person contact typhoid is also called intermittent fever or enteric fever. It is spread by a bacterium called Salmonella typhi . People who are infected with typhoid pass the salmonella typhi bacteria in their faeces and occasionally in their urine . You can get typhoid if you eat food or drink a beverage that has been touched by a person who is infected with the typhoid bacteria and has not washed their hands properly after going to the bathroom . Contamination can also occur when changing the nappy of a child with the infection. The main symptoms of typhoid are high fever, weakness, headache and abdominal pain.

35. is example for the disease caused by bacteria:

जीवाणु के कारण होने वाले रोग का उदाहरण है:

- (a) Cold/शीत
- (b) Typhoid/टायफाइड
- (c) Typhus fever/टायफस ज्वर
- (d) Chicken pox/चेचक

Ans. (b) : Typhoid is an infection caused by the bacterium salmonella typhi . It is spread through food , drink , and drinking water that are contaminated with infected fecal matter. washing fruit and vegetables can spread it as well if the water is contaminated . It is also called intermittent fever or enteric fever. . The main symptoms of typhoid are high fever , weakness , headache and abdominal pain.

The only effective treatment for typhoid is antibiotics.

36. is the immunity get by the body after the first attack of disease.

रोग के प्रथम हमले के बाद शरीर द्वारा प्राप्त की जाने वाली रोग प्रतिरोधक क्षमता (Immunity) होती है।

- (a) Natural immunity
प्राकृतिक रोग प्रतिरोधकता क्षमता
- (b) Passive immunity
निष्क्रिय रोग प्रतिरोधकता क्षमता
- (c) Artificial immunity
मानवीकृत रोग प्रतिरोधकता क्षमता
- (d) Acquired immunity/अर्जित रोग प्रतिरोधकता क्षमता

Ans. (d) : A type of immunity that develops when a person's immune system responds to a foreign substance or microorganism , or that occurs after a person receives antibodies from another source. Acquired immunity are two types as active and passive immunity. for example :- vaccines expose our immune system to small amount of pathogens that won't make us sick.

37. The cells that are responsible for the production of antibodies are

वह कोशिका जो एंटीबॉडी के उत्पादन के लिए उत्तरदायी है:

- (a) Red blood cells/लाल रुधिर कणिका
- (b) Platelets/प्लेटलेट्स
- (c) Plasma/प्लाज्मा
- (d) White blood cells/श्वेत रुधिर कणिका

Ans. (d): White blood cells (WBCs) is a type of blood cell that is made in the bone marrow and found in the blood and lymph tissue. WBCs are the part of the body's immune system. They help the body fight infection and other diseases . Types of WBCs are granulocytes (neutrophils , eosinophils, and basophils) , monocytes , and lymphocytes. White blood cells , are also called leukocytes or leucocytes. It makes up approximately 1% of the total blood volume in a healthy adult.

- RBCs also known as erythrocytes, deliver oxygen to the tissues in our body. Oxygen turns into energy and our tissues release CO₂ . our RBCs also transport CO₂ to our lungs for us to exhale
- Platelets are pieces of very large cells in the bone marrow called megakaryocytes.

38. A healthy person can donate blood or times a year.

एक स्वस्थ्य व्यक्ति एक वर्ष में या बार रक्त दान कर सकता है।

- (a) Six or seven/छः या सात
- (b) Five or six/पाँच या छः
- (c) Three or four/तीन या चार
- (d) Two or three/दो या तीन

Ans. (c) : A healthy person can donate blood three or four times a year.

A blood donation occurs when a person voluntarily has blood drawn and used for transfusions and /or made into biopharmaceutical medications by a process called fractionation . Donation may be of whole blood, or of specific components directly. Types of blood donations are whole blood donation, power red donation, platelet donation, and plasma donation. Regular blood donation is linked to lower blood pressure and a lower risk for heart attacks. Donors are usually kept at the donation site for 10-15 minutes after donating since most adverse reactions take place during or immediately after the donation.

39. Radio active cobalt and radium are used for the treatment of -diseases.

रेडियो सक्रिय कोबाल्ट तथा रेडियम रोग के इलाज के लिए उपयोग किया जाता है।

of children like expected height and weight at a certain point of life. As the child ages the weight increase is as follows :

- x weight at Birth
- 2x at 5 months
- 3x at 1 year
- 4x at 2 year
- 6x at 5 year
- 7x at 7 year
- 10x at 10 years

46. Infancy period is from शैशवास्था अवधि होती है

- (a) Birth to one month/जन्म से एक माह
- (b) One month to 1 year/1 माह से 1 वर्ष
- (c) 1 year to 3 year/1 वर्ष से 3 वर्ष
- (d) 3 year to 5 year/3 से 5 वर्ष

Ans. (b) : Development refers to an increase in structure for better and enhanced functioning of organs.

The development of human being is divided into different stages such as Infancy, Childhood (Early & Late childhood) Adolescence, and Adulthood .

Infancy refers to 1 month to 1 year of a child's development in which the child grows rapidly after birth . It is a crucial period of development in which the child learns to sit, crawl, stand etc.

Development in infancy : Language development , Emotional development, Social development , Physical development, Cognitive development etc.

- Pre-childhood stage : It refers to the age of 2 to 6 years.
- Post-childhood stage : It refers to the age of 6 to 12 years.

47. The following are the signs of dehydration except:

निम्नलिखित में से छोड़कर निर्जलीकरण का संकेत है:

- (a) Sunken tearless eyes धंसी हुई आश्रुहीन आँखें
- (b) Loss of skin elasticity त्वचा लचीलापन कम होना
- (c) Diuresis/अति पेशाब होना
- (d) Depressed Fintenelle/डिप्रेस्ड फिनटेनेल

Ans. (c): Diuresis in the following is not a symptom of dehydration. Diuresis means polyuria, Making too much urine in the body. The first symptom of diuresis is excessive urination. In this condition, the kidney filters an excessive amount of fluid from the body because of this , the patient passes urine frequently and in large quantities. Excessive urination from diuresis can lead to dehydration.

48. The following are the contents of ORS except. निम्नलिखित में से किसको छोड़कर अन्य सभी ORS के अवयव हैं?

- (a) Sodium chloride/सोडियम क्लोराइड
- (b) Sugar/चीनी
- (c) Potassium chloride/पोटैशियम क्लोराइड
- (d) Calcium carbonate/कैल्शियम कार्बोनेट

Ans. (d) : Calcium carbonate is not a component of ORS. The full form of ORS is Oral Rehydration solution. In ORS, contains various types of electrolytes and sugar. the mixture of electrolytes and sugar is absorbed from the intestine , so it prevents dehydration in condition like diarrhoea and vomiting also cause the salt deficiency.

Calcium carbonate is an odourless chemical compound It is a common substance found in rocks as the minerals calcite and aragonite.

49. The most common from of malnutrition are the following except.

निम्नलिखित में से छोड़कर कुपोषण का सबसे सामान्य रूप है।

- (a) Beri-beri/बेरी-बेरी
- (b) Protein energy main nutrition प्रोटीन ऊर्जा कुपोषण
- (c) Marasmus/मरास्मस
- (d) Kwashiorkor/क्वाशिर्कोर

Ans. (a) : Beri-beri is a disease caused by a vitamin B₁ deficiency, also known as thiamine deficiency. It often occurs in developing countries among people with a diet that consist mostly of white rice or highly refined carbohydrates these are two types of the disease :

- Wet beriberi:- It affects the heart and circulatory system.
- Dry beriberi:- It damages the nerves and can lead to decreased muscle strength and eventually muscle paralysis .

In extreme cases, beriberi is associated with Wernicke korsakoff syndrome.

- Beriberi is easily treated with thiamine supplements.

50. The first course of oral pills should be started on the day of menstrual cycle.

मौखिक गोलियों की प्रथम अवधि को मासिक चक्र केदिन शुरू करनी चाहिए।

- (a) 2nd/2 दूसरा
- (b) 7th/7वाँ
- (c) 5th/5वाँ
- (d) 10th/10वाँ

Ans. (c) : The first course of oral pills should be started on the 5th day of menstrual cycle.

Menstruation is the monthly shedding of the lining of your uterus. Menstruation is also known by the term menses, menstrual period , menstrual cycle or period. menstrual blood -which is partly blood and partly tissue from the inside of your uterus- flows from your uterus through your cervix and out of your body through your vagina. Menstruation is deriving by hormones. there are two types of combined oral pills available for contraception.

mala -d & Mala -n

- A pack of combined oral pills contains 28 pills out of which 21 oral contraceptive pills while the remaining seven are iron supplements.
- Phases of Menstruation cycle :
- Menstruation 1- 5 days
- follicular phase 6-13 days
- Ovulation 14-21 days
- Luteal phase or secretary phase

51. The following are the natural of contraception except:

निम्नलिखित को छोड़कर गर्भनिरोधक की प्राकृतिक विधि है

- (a) Foam tablet/फेम गोलियाँ
- (b) Basal metabolic temperature
बेसल दैहिक तापमान
- (c) Rhythm method/रीदम विधि
- (d) Safe period/सुरक्षित अवधि

Ans. (a) : Foam tablet is not a method of natural contraception. There are the following methods of natural contraception.

- Safe Period
- Coitus interruptus
- Lactation amenorrhea
- Abstinence
- Withdrawal
- Calendar rhythm method

52. is the permanent method of sterilization.

बंध्याकरण की स्थायी विधि है।

- (a) MTP /सगर्भता का चिकित्सीय समापन
- (b) Diaphragm /डायफ्राम
- (c) Tubectomy/महिला नसबंदी
- (d) D & C/ D और C

Ans. (c) : Sterilization is a permanent method of a birth control. sterilization procedures for women are called tubal sterilization tubectomy female sterilization & the procedure for men is called vasectomy.

tubectomy is a major surgical procedure that refers to blocking of the female fallopian tubes, procedure the eggs from reaching the uterus for implantation.

• Vasectomy is considered better than tubectomy because vasectomy is a simple and safe procedure as it does not include any cuts/stitches.

53. The following organs are situated in the abdominal cavity except.

निम्नलिखित अंग को छोड़कर उदरगुहा में स्थित होता है।

- (a) Stomach/आमाशय
- (b) Oesophagus/ग्रासनली
- (c) Liver/यकृत
- (d) Spleen/प्लीहा

Ans. (b) : The abdomen contains many vital organs : the stomach , the small intestine , the liver, the spleen, gallbladder, kidneys etc.

The esophagus or oesophagus , non - technically known also as the food pipe or gullet, is an organ in vertebrates through which food passes, aided by peristaltic contractions from the pharynx to the stomach the esophagus is a fibromuscular tube, about 25 cm long in adults, that travels behind the trachea and heart, passes through the diaphragm and empties into the uppermost region to the stomach.

54. The system of body which helps for the removal of waste matter from body.

शरीर की वह प्रणाली जो शरीर में अपशिष्ट पदार्थ को बाहर निकालने के लिए सहायता करता है:

- (a) Digestive system/पाचन प्रणाली

(b) Endocrine system/अंतःस्नावी प्रणाली

(c) Respiratory system/श्वसन प्रणाली

(d) Excretory system/उत्सर्जन तंत्र

Ans. (d) : Excretory system is the system of the body which helps in removing the waste material from the body.

• The removal of waste products and excess salts form the body as a result of metabolic process is called excretion.

The excretory organs are collectively called the excretory system. In human , following excretory organs are founds kidneys, ureters , Urinary bladder, urinary tract, lungs, alimentary canal, skin etc.

55. Total number of bones in human body.

मानव शरीर में हड्डियों की कुल संख्या है:

- (a) 306
- (b) 206
- (c) 106
- (d) 406

Ans. (b) : The total number of bones in the human body is 206 . the study of bones is called osteology . The largest bone of the body is in our thighs which is called the femur and the smallest bone of the body is in our ear which is called stapes .

56. Eruption of teeth starts at the age of month.

दाँत के निकलने की शुरुआतमहीने में होती है।

- (a) 4 months/4 माह
- (b) 6 months/6 माह
- (c) 8 months/8 माह
- (d) 10 months/10 माह

Ans. (b) : Eruption of teeth starts at the age of 6 months It is currently believed that the periodontal ligament plays an important role in the teeth. The first to emerge in children are called deciduous (primary) teeth these are also called milk teeth.

57. The nerve which carries messages from the brain and the spinal cord muscles and glands.

वह तंत्रिका जो मस्तिष्क तथा मेरुदण्ड और ग्रन्थियों के से संदेश पहुँचाता है:

- (a) Motor nerve/प्रेरक तंत्रिका
- (b) Sensory nerve/संवेदी तंत्रिका
- (c) Mixed nerve/संयुक्त तंत्रिका
- (d) Autonomic nerve/स्वायत्त तंत्रिका

Ans. (a) : Motor nerve carries messages from the brain and the spinal cord muscles and glands. There are three types of nerves in the body :

- Autonomic nerves : these nerves control the involuntary activities of our body, including heart rate, blood pressure , digestion and temperature regulation.
- Motor nerves : A motor nerve is a nerve that transmits motor signals from the CNS to the muscles of the body.
- Sensory nerves : These nerves carry signals to our brain through the help of touch , taste smell and see.

58. **Speech centre is situated in :**

- (a) Parietal lobe/पारिएल भाग
- (b) Frontal lobe/ललाटखण्ड
- (c) Occipital lobe/पश्चकपाल पालि
- (d) Temporal lobe/शंख खण्ड

Ans. (d): Speech Centre—is situated in frontal and temporal lobe of brain.

- Broca's area, controls motor speech, which is located in frontal lobe.
- Wernicks's area, central sensory speech which is located in temporal lobe.

59. **Largest gland in the body.**

शरीर में सबसे बड़ी ग्रंथि है:

- (a) Pituitary gland/पीयूष ग्रंथि
- (b) Adrenal gland/एड्रीनल ग्रंथि
- (c) Liver/यकृत
- (d) Gall bladder/पित्ताशय

Ans. (c) : Liver is the largest gland in the human body and is an accessory organ of the digestive system it is situated on the right side of the abdomen.

- The pituitary gland or hypophysis is the smallest gland in the human body.
- The pancreas is the largest endocrine gland in the body
- The skin is the body's largest organ in the body.

60. **Head control of the infant occurs at age of month**

शिशु का सिर का नियंत्रण महीने की आयु में प्राप्त करता है।

- (a) 2
- (b) 3
- (c) 5
- (d) 6

Ans. (c) : Generally new born babies learn to support the head gradually from the first month and after the first month the development of the neck muscles of the baby starts (in one to two months) and during three to four months the neck the muscles become strong. During 5 to 6 months the muscles of the neck are fully development and the baby can sit without any support and control his head easily.

61. **Puerperium is the period begins.**

सुतिकावस्था अवधि की शुरुआत होती है:

- (a) As soon as the placenta is expelled and last for 6 to 8 weeks/जैसे ही प्लेसेटा बाहर निकलता है और 6 से 8 सप्ताह तक बहता है।
- (b) As soon as the baby is expelled and last for 6 to 8 weeks/जैसे ही बच्चे को बाहर निकाला जाता है और 6 से 8 सप्ताह तक रहता है।
- (c) As soon as the membrane ruptures and last for 6 to 8 weeks/जैसे ही झिल्ली फट जाती है और 6 से 8 सप्ताह तक रहती है।
- (d) As soon as the placenta is expelled and last for 10 to 12 weeks/जैसे ही प्लेसेटा बाहर निकल जाती है और 10 से 12 सप्ताह तक रहता है।

Ans. (a) : The period of Puerperium begins as soon as the placenta is expelled and last for 6 to 8 weeks to 42 days.

- Puerperium period begins after the end of the gestation period
- Puerperium period is also called the postpartum period.

62. **When the umbilical cord lies in front of the presenting part and the membranes are intact it is known as :**

जब गर्भनाल प्रस्तुत करने वाले भाग के सामने होती है और डिल्लियाँ बरकरार होती हैं तो इसे कहा जाता है।

- (a) Cord prolapse/कार्ड प्रोलैप्स
- (b) Cord presentation/कार्ड प्रस्तुति
- (c) Cord pulsation/कार्ड स्पंदन
- (d) Card delivery/कार्ड डिलीवरी

Ans. (b): Cord presentation occurs when there is the presence of the umbilical cord b/w the cervix and the fetal presenting part with or without intact membranes. Cord prolapsed occurs where there is decent of the umbilical cord through the cervix, either Along side the presenting part (occult cord prolapsed) or past the presenting part (overt cord prolapsed) in the presence of rupture membranes.

- Cord presentation or cord prolapsed can occur in any situation where the presenting part does not fit well into the maternal pelvis.
- Cord prolapsed is a life threatening Obstetric emergency that may result in fetal asphyxia or death.
- Cord pulsation :- Determine the stage of labour by vaginal examination . Management will depend on the stage of labour or cervical dilatation.

63. **Starting of menstrual cycle is called.**

मासिक चक्र की शुरुआत को कहा जाता है:

- (a) Ovulation/अण्डोत्सर्ग
- (b) Menstruation/महावारी
- (c) Menarche/रजोदर्शन
- (d) Menopause/रजोनिवृत्ति

Ans. (c) : Starting of menstrual cycle is called menarche. The average age of menarche is 12 to 15 year But it may start earlier or later . Signs of menarche include light bleeding, cramping and mood swings. Menarche marks an important milestone during puberty when females are capable of becoming pregnant.

- Menstruation is the regular discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina and the menstrual cycle is characterized by the rise and fall of hormones.
- Ovulation is the process in which a mature egg is released from the ovary. After it's released the egg moves down the fallopian tube and stays there for 12 to 24 hours, where it can be fertilized.
- Menopause is when your periods stop due to lower hormone level this usually happens between the a age of 45 to 50.

64. Normal blood urea level is :

सामान्य रक्त में युरिया स्तर होता है:

- (a) 40-60 mg% (b) 20-40 mg%
- (c) 10-20 mg% (d) 80-120 mg%

Ans. (b) : Urea is a waste product of many living organisms, and is the major organic component of human urine.

• We know that mg% (Milligram percent) is equal to mg/dl (milligram/deciliter) So the normal blood urea level is 20 to 40 mg % or 20 to 40 mg/dl.

• **BUN (Blood Urea Nitrogen) :**

- * Normal BUN = 10 to 20 mg/dL
- * Child (BUN) = 5 to 18 mg/dL
- * Infants = 5 to 18 mg/dL
- * Newborn = 3 to 12 mg/dL
- * Cord blood = 21 to 40 mg/dL.

* Older people may have a higher level than adults.

65. One gram of carbohydrate yields:

एक ग्राम कार्बोहाइड्रेट देता है:

- (a) 4 calories/4 कैलोरी
- (b) 8 calories/8 कैलोरी
- (c) 9 calories/9 कैलोरी
- (d) 1 calories/1 कैलोरी

Ans. (a): One gram of carbohydrates yields 4 calories. Carbohydrates, Proteins and fats are the main types of macronutrients in the food. They supply 90% of the dry weight of the diet and 100% of its energy. All three provide energy, but the amount of energy in gram differs

1 gm of carbohydrates - 4 Kcal

1 gm of protein - 4 Kcal

1 gm of fats - 9 Kcal

Three types of simple carbohydrates include :

- Monosaccharides : Ex - Glucose, fructose and galactose
- Disaccharides : are formed by condensation where there is linking of two monosaccharides.
- Polysaccharides : is a large molecule made of many smaller monosaccharides.

66. A method of making the victim to breath passively.

पीड़ित व्यक्ति को निष्क्रिय रूप से सांस लेने की विधि है:

- (a) Artificial respiration/कृत्रिम श्वसन
- (b) Spontaneous respiration/स्वैच्छिक श्वसन
- (c) Deep breathing/गहरी सांस
- (d) Kusmal breathing/कुसमौल सांस

Ans. (a) : Artificial respiration is also known as artificial ventilation. This is a metabolic process that stimulates or assists respiration. This is a process where a complete exchange of gases is observed via external respiration, internal respiration, and pulmonary ventilation, this process is based on facilitating manual air to a person who is not able to breathe or sufficient respiration efforts can not be handled by him.

67. Minute, blood vessels between the ends of the arteries and beginning of veins is called

धमनियों के अन्त तथा शिराओं के प्रारम्भ के बीच की स्थित सूक्ष्म रक्त बहिकाएँ कहलाती हैं-

- (a) Arteries/धमनियाँ (b) Veins/शिराएँ
- (c) Capillaries/केशिकाओं (d) Alveoli/वायुकोषिका

Ans. (c) : Minute, blood vessels b/w the ends of the arteries and beginning of veins is called capillaries.

Three kinds of blood vessels found in human beings are arteries, veins and capillaries.

• **Capillaries :** It are the very tiny blood vessels so small that a single RBC can barely fit through them. They allow oxygen and nutrients to flow to nearby tissue. The wall of the capillaries are very thin and are one cell deep.

• **Arteries** carry oxygenated blood from the heart to the various parts of the body. Arteries are strong, flexible blood vessels that are able to expand and contract and have thick and more muscular walls. The blood flows with jerks and under great force.

• **Veins** carry deoxygenated blood from our body to our heart and less flexible than arteries. and also have a thin and less muscular walls. The blood flows smoothly and under little pressure

68. A waste gas produced by the body and exhaled through the lungs is :

शरीर द्वारा उत्पन्न दूषित गैस जिसे फेफड़े से बाहर निकाला जाता है:

- (a) Carbon dioxide/कार्बन डाइऑक्साइड
- (b) Carbon monoxide/ कार्बन मोनोऑक्साइड
- (c) Nitrogen peroxide/नाइट्रोजन परॉक्साइड
- (d) Oxygen/ऑक्सीजन

Ans. (a) : A waste gas produced by the body and exhaled through the lungs is carbon dioxide (CO_2). During the process of exhalation, the diaphragm and rib muscles relax which causes the lungs to decrease and expiration occurs. Breathing is the process of moving air into and out of the lungs which results in gaseous exchange with the internal environment of the organism, mostly by entering oxygen and removal of CO_2 .

69. A condition characterized by moving of bones out joint :

हड्डियों के जोड़ से बाहर निकले की विशेष अवस्था होती है:

- (a) Fracture/फैक्चर (b) Sprain/मोच
- (c) Strain/तनाव (d) Dislocation/संधि भंग

Ans. (d) : A condition characterized by displacement of bones at the joint is called dislocation. This condition occurs when there is a blow to the joint of our body or a collision with an object, then our bones move out of the joint in such a situation, with the help of plaster, we bring the bone back to the same position.

70. A tube of muscular tissue carrying ingested food from the mouth to stomach.

मॉसल ऊतक की एक नलिका को ग्रहण किये गये भोजन को मुख से आमाशय तक पहुँचाता है:

(a) Oesophagus/ग्रासनली (b) Duodenum/ग्रहणी
(c) Trachea/श्वासनली (d) Pharynx/ग्रसनी

Ans. (a) : A tube of muscular tissue that carries ingested food from mouth to stomach is called esophagus. Esophagus is a long pipe that starts from our mouth and goes to the anus. In the middle of it all our digestive system is found , and our food digestion takes place.

71. A red pigment in the blood cells which combines with oxygen and carbon dioxide for carrying them.

रुधिर कणिक में एक रंगवर्णक जो उसकों ऑक्सीजन तथा कार्बन डाईऑक्साइड वहन के लिए जोड़ती है।

(a) Red blood cells/लाल रुधि कणिक
(b) Haemoglobin/हीमोग्लोबिन
(c) Platelet/प्लेटलेट्स
(d) Plasma/प्लाज्मा

Ans. (b) : Haemoglobin is a protein in our RBCs that carries oxygen to our body's organs and tissues and transports, CO_2 from our organs and tissues back to our lungs. The amount of haemoglobin in whole blood is expressed in grams per deciliter (gm/dl). the normal Hb level for males in 14 to 18 g/dl ; that for females is 12 to 16 g/dl. When the haemoglobin level is low , the patient has anemia and cancer. The molecular weight of haemoglobin is approximately 64,500 daltons. High levels of hemoglobin can also be a sign of a serious health condition

72. Information given by the sufferer about his illness.

पीड़ित द्वारा उसकी बीमारी के बारे में दी जाने वाली जानकारी होती है:

(a) Sign/संकेत
(b) Symptom/लक्षण
(c) Observation/अवलोकन
(d) Diagnosis/निदान

Ans. (b) : A symptom is a medical sign indicating the nature of the disease. It is usually subjective, observed by the patient, and not measured. Anxiety, low back pain, and fatigue are all symptoms.

- A sign is noticed by the doctor or others and can be measured by checking temperature, taking x-rays, blood test and more. Cancer, AIDS, TB which health care professionals can specifically diagnose.
- Observation is an act or instance of noticing or perceiving and the acquisition of information from a primary source.
- Diagnosis, the process of determining the nature of a disease or disorder and distinguishing it from other possible conditions. The term comes from the Greek gnosis, meaning knowledge.

73. Normal respiratory rate in adults is

बयास्कों में सामान्य श्वसन दर होती है:

(a) 20-40 min/20-40 मिनट
(b) 40-60 min/40-60 मिनट
(c) 16-20 min/16-20 मिनट
(d) 10-15 min/10-15 मिनट

Ans. (c) : The normal respiratory rate in adults in 16-20 minutes. A person's respiratory rate is the number of breaths we take per minute. A respiration rate under 12 or over 25 breaths per minute while resting is considered abnormal.

- During exercise, the breathing rate becomes 21-24 times to supply more and more oxygen.
- The normal respiratory rate for children varies by age.

Age	Rate (in breaths' per minutes)
Birth to 6 months	30 to 60
6 months to year	30 to 50
1 to 3 years	24 to 40
3 to 5 years	22 to 34
5 to 12 years	16 to 30
12 to 18 years	12 to 20

74. The normal body temperature °C.

सामान्य शरीर तापमान °C होता है।

(a) 35°C (b) 37°C
(c) 40°C (d) 42°C

Ans. (b) : Normal body temperature varies by person , age , activity, and time of day. The average normal body temperature is generally accepted as 37°C (98.6 °F) . Some studies have shown that the "normal" body temperature can have a wide range, from 98.6 °F (36. °C) to 99 °F (37.2 °C) . A temperature over 100.4 °F (38 °C) most often means we have a fever caused by an infection or illness.

75. Characteristic of the blood flow due to arterial bleeding is the following except.

निम्नलिखित को छोड़कर धमनीय रक्तस्राव के कारण रक्त प्रवाह विशेषता है।

(a) Bright red in colour/चमकदार लाल रंग
(b) Spurts at each cartrachian of the heart
हृदय के प्रत्येक पर कार्ट्राशियन पर घूमता है।
(c) Flow is pulsatile/प्रवाह स्पंदनशील होता है।
(d) Dark red in colour/गहरा लाल रंग

Ans. (d) : Arterial bleeding , also called pulsatile bleeding is the most serious type of bleeding. It is usually caused by major injuries. Since arterial blood flows from the heart, it's oxygenated and bright red. It will also shoot out with each heartbeat in a rhythmic pattern. This pressure can make the blood spurt at to several feet. Compared to venous bleeding , arterial bleeding is more difficult to control.

- Venous bleeding occurs when a vein is torn or cut. The blood will look dark red and ooze out of the body, moving steadily and slowly. It would not shoot out like arterial blood.

76. An agent that has power to kill Micro-organism:

एक एजेंट जिसमें सूक्ष्म जीव को मारने की शक्ति होती है:

- (a) Bacteriostat/बैक्टीरियोस्टेट
- (b) Bactericide/बैक्टीरियोसाइड
- (c) Antiseptic/एंटीसेप्टिक
- (d) Bacteriostasis/बैक्टीरियो स्टेसिस

Ans. (b) : An agent that has power to kill Micro-organism is called bactericide or bactericide. Bactericide are disinfectants, antiseptics, or antibiotics.

- Bactericide is sometimes abbreviated Bactericidal.
- Bactericide can also be used to help control bacteria growth in water and corrosion of tanks and piping.

77. Strength of savlon for cleaning of wounds.

घावों को साफ करने के लिए सेवलॉन की सामर्थ्य होती है:

- (a) 1 : 10
- (b) 1 : 100
- (c) 1 : 1000
- (d) 1 : 10000

Ans. (a) : Strength of savlon for cleaning of wounds is 1 : 10 Savlon is a strong antiseptic fluid for first aid treatment , Savlon is used for cleaning and preventing infection in skin wounds which includes small cuts, blisters and minor burns. It kills up to 99.9% germs in only 10 seconds, making it an effective disinfectant. It is comprises of chlorhexidine gluconate and cetrimide.

78. Inflammation of the tongue :

जीभ की सूजन होती है:

- (a) Glossitis/ग्लोसाइटिस
- (b) Gingivitis/जिनजिवाइटिस
- (c) Stomatitis/स्टोमैटाइटिस
- (d) Parotitis/पैरोटाइटिस

Ans. (a) : Inflammation of the tongue is called Glossitis. Inflammation of the tongue can lead to damage of the taste buds, tiny sensors on the surface of the tongue. Some of the more common causes of sore or painful tongue include canker sores, cold sores, bite injuries and burns. Pain in the tongue known as glossodynia.

Prescribe oral medication such as antibiotics, antivirals or antifungal to treat glossitis.

Type of glossitis is given bellow -

Acute glossitis, Chronic glossitis & Atrophic glossitis.

79. Following are predisposing cause for bedsore except :

निम्नलिखित को छोड़कर बेडसोर का प्रमुख कारण होता है:

- (a) Impaired circulation/खराब परिसंचरण
- (b) Lowered vitality/कम जीवन शक्ति
- (c) Emaciation/दुर्बलता
- (d) Anorexia/क्षुधा आभाव

Ans. (d) : Bedsores are also known as pressure sores or decubitus ulcers. It form when our bone squeezes our skin and tissue against an outside surface, usually on

weight bearing parts of our body where the bones are near the skin. It is usually develop below our waist if we are bedridden, although it can occur almost any where on our body. Anorexia is an eating disorder characterized by an abnormally low body weight, an intense fear of gaining weight and a distorted perception of weight.

- Emaciation is defined as the state of extreme thinness from absence of body fat and muscle wasting usually resulting from malnutrition.

80. Inability to sleep is termed as :

सोने की अक्षमता को कहा जाता है।

- (a) Dyspepsia/अपच/अर्जीण/बदहजमी
- (b) Dyspnea/डास्पनिया
- (c) Anorexia/एनोरिक्सिया
- (d) Insomania/इंसुमेनिया

Ans. (d) : In ability to sleep is called insomnia. Insomnia is a sleep disorder that makes it difficult to fall asleep or stay asleep. A person may also wake up too early and not be able to get back to sleep Doctors classify it by cause :

- Primary insomnia
- Secondary insomnia

81. Tobacco contains a poisonous substance called तम्बाकू में रहने वाले विषेले पदार्थ को कहते हैं:

- (a) Nicotine/निकोटीन
- (b) Narcotics/नार्कोटिक्स
- (c) Alcohol/एल्कोहॉल
- (d) Caffeine/कैफीन

Ans. (a) : Tobacco contains a poisonous substance called nicotine.

Nicotine is a naturally produced alkaloid in the nightshade family of plants and is widely used recreationally as a stimulant and anxiolytic . As a pharmaceutical drug, it is use for smoking cessation to relieve withdrawal symptoms.

Chemical formula : $C_{10}H_{14}N_2$

- Nicotine is most popularly known for its use in cigarettes and tobacco products, but is has some other uses.

82. A disease caused by allergic disease is called:

एलर्जी रोग के कारण होने वाले रोग को कहते हैं:

- (a) Asthma/अस्थमा
- (b) Tuberculosis/तपेदिक
- (c) Cancer/कैंसर
- (d) Gastroenteritis/गैस्ट्रोएंट्रैटाइटिस

Ans. (a) : A disease caused by allergic disease is called Asthma. Asthma is a chronic (Long-term) lung disease. It affects our airway, the tubes that carry air in and out of our lungs. When we have asthma, our airways can become inflamed and narrowed. This can cause wheezing, coughing, and tightness in our chest. when these symptoms get worse than usual it is called an asthma attack or flare up. The exact cause of asthma is unknown.

83. An adult has litres of blood in his body.

एक वयस्क के शरीर में लीटर रक्त होता है:

- (a) 7-8
- (b) 5-6
- (c) 9-10
- (d) 2-3

Ans. (b) : An adult has 5 to 6 litres of blood in his body. Blood is a fluid connective tissue that consists of plasma, blood cells and platelets. It circulates throughout our body delivering oxygen and nutrients to various cells and tissues. It makes up 8% of our body weight.

The volume of blood is approximately 5.5 liters in each adult male and 4.5 liters in female.

- 70 ml of blood is pumped per heart beat or per minute.
- Deficiency of blood is caused anemia
- There are four types of blood groups A, B, AB, O are found in the body of human .

84. Several persons in town got the attack of leukemia. Which of the following can be possible reason for that ?

एक मोहल्ले में कई लोगों को ल्यूकेमिया का दौरा पड़ा। निम्नलिखित में से कौन सा इसका संभावित कारण हो सकता है?

- (a) Exposed to radiation/विकिरण से हुआ है।
- (b) Drinking polluted water/दूषित पेयजल
- (c) Smoking/धूम्रपान
- (d) Breathing in impure air/अशुद्ध वायु में सॉस लेना

Ans. (a) : Leukemia is a type of blood cancer that usually involves the WBCs which normally grows and divides in an orderly way, as per our body requirement. But in people with Leukemia, the bone marrow produces abnormal WBCs , Which do not function properly. There are four types of leukemia which then classified into two categories:

- Acute : It progresses more rapidly and involves the immature cells, called stem cells.
- Chronic : It gradually worsens and develops in mature cells. types of Leukemia are given below :
- Acute lymphocytic leukemia (ALL) : It is also called Lymphoblastic Leukemia .
- Acute Myelogenous Leukemia (AML): It is also called Myeloid leukemia.
- Chronic Lymphocytic Leukemia (CLL) : It does not show any symptoms until years after cancer starts.
- Chronic Myelogenous Leukemia (CML): It starts in myeloid cells but the abnormal cells grow slowly.
- Chronic leukemia is rare in children.

85. The energy value of is more than that of others.

..... का ऊर्जा मान अन्य से अधिक होता है।

- (a) Fats/वसा
- (b) Starch/स्टार्च
- (c) Protein/प्रोटीन
- (d) Sugar/शर्करा

Ans. (a) : The energy value of fats is more than that of starch, proteins, sugar etc.

Food contains mainly protein, carbohydrates, fats, Vitamins, minerals, dietary fiber, and water.

- Fat provides the body with roughly 9.5 Kcal/g .
- Carbohydrates & proteins have the same amount of energy, which is 4Kcal/g.
- Fat is digested by the lipase enzyme.
- It is obtained from both meat and vegetable groups.

86. The product formed when amino acid molecules combine together is called
अमीनों अम्ल के अणु आपस में मिलने पर बनने वाले उत्पाद को कहते हैं।

- (a) Nucleic acid/न्यूक्लिक एसिड
- (b) Starch/स्टार्च
- (c) Carbohydrate/कार्बोहाइड्रेट
- (d) Proteins/प्रोटीन

Ans. (d) : The product formed when amino acid molecules combine together with peptide bonds is called protein.

Proteins are large, complex molecules that play many critical roles in the body. They do most of the work in cells and are required for the structure, function and regulation of the body's tissues and organs.

Protein is made from twenty plus basic building blocks called amino acids.

87. Women having normal limbs may sometimes give birth to babies with deformed limbs. This must be due to:

सामान्य अंगों (Limbs) वाली महिला कभी-कभी विकृति अंग (Limbs) वाले बच्चे को जन्म देती है। इसका कारण है:

- (a) Spontaneous generation/सहज पीढ़ी
- (b) Mutation/उत्परिवर्तन
- (c) Inheritance of acquired character
वंशानुगति अर्जित गुण
- (d) Natural selection/प्राकृतिक चयन

Ans. (b) : Due to mutation Women having normal limbs may sometimes give birth to babies with deformed limbs. A mutation is a change in the DNA sequence of an organism. It can result from errors in DNA replication during cell division, exposure to mutagens or a viral infection. Certain mutations may lead to cancer or other diseases & It is sometimes called a variant. It can be harmful, beneficial or have no effect.

88. Hormones are transported to all parts of the body through the
हार्मोन शरीर के सभी भागों में किसके माध्यम से संचारित होता है:

- (a) Nerves/तंत्रिका
- (b) Blood/रुधि
- (c) Lymph/लसीका
- (d) Muscles/मांसपेशी

Ans. (b) : Hormones are transported to all parts of the body through the blood . Each hormone acts upon only those cells which have specific receptors. The cells which are acted upon by hormones are called target cells . Hormones synthesized by the endocrine glands It is typically secreted into systemic circulation. Hormonal imbalance can cause stress, irritability, decreased sexual desire, impotence, increased or decreased growth of beard facial hair etc. Problems are seen.

89. Deficiency of in food cause simple goiter.
..... भोजन में कमी के कारण साधारण घघा रोग होता है।

- (a) Sodium/ सोडियम
- (b) Iron/ आयरन
- (c) Iodine/ आयोडीन
- (d) Calcium/ कैल्शियम