

2025

ENGLISH & HINDI MEDIUM

LAB ATTENDANT/ASSISTANT

Chapterwise Solved Papers

**Youth
Competition
Times**

NVS **CG-VYAPAM/EMRS/RSMSSB/DMLT
BIHAR S.H.S.B./AIIMS/DSSSB/RRB**

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LAB

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PREVIOUS YEARS

66 QUESTION PAPERS

Chapterwise

EXPLAINER

**SOLVED
PAPERS**

5875
OBJECTIVE QUESTIONS

Also useful for B.Sc Nursing
(Paramedical) Entrance Examination

ANSWERS WITH DETAIL ANALYTICAL EXPLANATION & BASED ON REVISED ANSWER-KEY

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Chapter-1

Biological Evolution & Economic Importance of Animals

1. What type of organism is Euglena and what method of digestion does it use ?

यूग्लीना किस प्रकार का जीव है और यह पाचन के लिए किस विधि का उपयोग करता है ?

- (a) Plant-like organism, photosynthesis/पौधे जैसा जीव, प्रकाश संश्लेषण
- (b) Animal-like organism, phagocytosis/पशु जैसा जीव, फैगोसाइटोसिस
- (c) Both plant and animal organisms, photosynthesis and phagocytosis /पौधे और पशु दोनों जैसा जीव, प्रकाश संश्लेषण और फैगोसाइटोसिस
- (d) Fungus-like organism, saprophytic nutrition/कवक जैसा जीव, सैप्रोफ़िटिक पोषण

CG-FSL-Lab-Attendant-2024

Ans. (c) : Euglena is a unicellular organism that exhibits both plant-like and animal-like characteristics. It can perform photosynthesis to produce its own food and also engage in phagocytosis to consume organic matter for nutrition.

Therefore it is a combination of a plant and animal organism, utilizing both photosynthesis and phagocytosis for digestion.

2. In candle jar method, which gas is produced inside the candle jar which stimulate the growth of bacteria?/कण्डल जार पद्धति में, कण्डल में कौन सी गैस उत्पन्न होती है जो जीवाणु की वृद्धि को उद्दीपित करती है?

- (a) Hydrogen/हाइड्रोजन
- (b) Nitrogen/नाइट्रोजन
- (c) Carbon dioxide/कार्बन डाइऑक्साइड
- (d) Oxygen/ऑक्सीजन

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (c) In the candle jar method, the gas produced inside the jar that stimulates the growth of bacteria is carbon dioxide. The burning candle consumes oxygen and produces carbon dioxide creating an environment that is more favorable for the growth of certain bacteria.

3. Chemoautotrophs derive their energy from रसो-स्वपोषी अपनी ऊर्जा प्राप्त करते हैं

- (a) Sun/सूर्य से
- (b) Inorganic chemicals/अकार्बनिक रसायनों से
- (c) Dead organisms/मृत जीवों से
- (d) Living organisms/सजीवों से

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (b) Chemoautotrophs are organisms that obtain their energy from chemical reaction, such as bacteria and archaea. They use organic compounds as the main source of carbon while inorganic compound used for Fe, S, Mg.

4. In birds, the type of cleavage is :

पक्षियों में विदलन का प्रकार है :

- (a) Discoidal/डिस्कोआइडल
- (b) Holoblastic/होलोब्लास्टिक
- (c) Superficial/सुपरफिशियल
- (d) Meridional/मेरीडिओनल

UKSSSC Lab Assistant (19.05.2019)

Ans. (a) Cleavage is a word for a kind of splitting or separation of cell after fertilization. When a cell of embryo starts developing into a multicellular organism.

• During cleavage the cell divide without an increase in mass. Like fish eggs, the yolky eggs of birds undergo discoidal meroblastic cleavage.

5. Who gave theory of Natural selection?

प्राकृतिक वरण सिद्धांत किसने प्रतिपादित किया है?

- (a) Charles Darwin/चार्ल्स डार्विन
- (b) De Lamarck/डी लैमार्क
- (c) Weismann/बीजमैन
- (d) Wallace/वैलेस

RSMSSB Lab Assistant (29.06.2022)

Ans. (a) Natural selection proposed by Charles Darwin. It is a process through which populations of living organisms adapt and change. It is a way of selecting organism with certain traits that's driven completely by nature.

6. What is the Evolution?/उद्विकास क्या होता है?

- (a) Development of a species/प्रजातियों का विकास
- (b) History and Development of a race/जाति के विकास का इतिहास प्रजातियों का विकास
- (c) History of a race/जाति के इतिहास
- (d) History and development of race along with variations/विभिन्नता के साथ जाति के विकास का इतिहास

MP VYAPAM Lab Technician (17.10.2015)

Ans. (d) Evolution is a process that result in changes in genetic material of a population over time.

Evolution refers to the process where organism develops and diversity form earlier forms through out history, often involving genetic material.

7. What is the study of fossils called?

जीवाष्म के अध्ययन को क्या कहते हैं?

- (a) Pomology/पोमोलाजी
- (b) Phycology/फाइकोलाजी
- (c) Paleontology/पैलिओन्टोलॉजी
- (d) Psychiatry/साइक्रियट्री

MP VYAPAM Lab Technician (17.10.2015)

Ans. (c) Paleontology is a branch of science in which scientific study of life of the geologic past that involves the analysis of plant and animal fossils.

8. **Non-polar amino acid residues are found mostly/अधुवी अमीनो अम्ल अवशिष्ट मुख्यतः पाए जाते हैं**

- (a) in the core of proteins/प्रोटीन के कोर में
- (b) on the surface of proteins/प्रोटीन की सतह पर
- (c) on alpha helices/अल्फा हेलिक्स पर
- (d) in non-specific region/अविशिष्ट क्षेत्र में

HPSSC Laboratory Assistant (10.07.2021)

Ans. (a) Non-polar amino acids have either an aliphatic or aromatic group which show hydrophobic nature. Proteins have a folded compact structure in which non-polar amino-acids residues are located in the interior of molecule.

9. **An alpha helix represents अल्फा हेलिक्स प्रदर्शित करता है-**

- (a) primary structure of a protein/प्रोटीन की प्राथमिक संरचना
- (b) secondary structure of a protein/प्रोटीन की द्वितीयक संरचना
- (c) tertiary structure of a protein/प्रोटीन की तृतीयक संरचना
- (d) aggregation of proteins/प्रोटीन का समुच्चय

HPSSC Laboratory Assistant (10.07.2021)

Ans. (b) The α helix is a structural feature of polypeptides which represents the secondary structure of a protein which shows intra-molecular H-bonding β - helix forms a right handed helix.

10. **Phylogenetic relationship can be shown by जातिवृत्तीय सम्बन्ध दर्शाया जा सकता है-**

- (a) Dendrogram/डेन्डोग्राम द्वारा
- (b) Gene Bank/जीन बैंक द्वारा
- (c) Data retrieving tool/डेटा रिट्राइविंग द्वारा
- (d) Data search tool/डेटा सर्च टूल द्वारा

HPSSC Laboratory Assistant (10.07.2021)

Ans. (a) The dendrogram used to classify taxonomic relationship. Which consists of stacked branches that break down into smaller branches dendrogram is a broad term used to represent a phylogenetic tree.

11. **Anticoagulant hirudin is found in प्रतिस्कंदक हिरूडिन पाया जाता है**

- (a) Snake/साँप में
- (b) Lizard/छिपकली में
- (c) Leech/जोंक में
- (d) Scorpion/बिच्छू में

HPSSC Laboratory Assistant(11.02.2021)

Ans.(c) Hirudin is a natural peptide in salivary glands of leech and mosquito which help in blood sucking due to having anticoagulant property.

• Hirudin is most potent natural inhibitor of thrombin.

12. **Munga silk is obtained from which insect? मूंगा सिल्क किस कीट से प्राप्त होता है ?**

- (a) Philosamia ricini/फिलोसामिया रीसिनी
- (b) Antheraea assama/एन्थीरीया असामा
- (c) Antheraea paphia/एन्थीरीया पैफिया
- (d) Bombyx mori/बॉम्बिक्स मोराई

RSMSSB Lab Assistant (03.02.2019)

Ans. (b) Sericulture is the process of cultivating silkworms and extracting silk.

Munga silkworm is obtained from *Antheraea assamensis* which is endemic to Assam and adjoining areas in north eastern India.

• Munga silk is semi-cultivated silkworms and are the strongest natural fibers.

13. **Select the correct set of homologous organs- समजात अंगों के सही सेट का चयन कीजिये-**

- (a) Forelimb of man, wings of birds and flippers of whale/मानव के अग्रपाद, पक्षी के पंख तथा व्हेल के मीनपक्ष
- (b) Forelimb of man, wings of insects and wings of birds/मानव के अग्रपाद, कीट के पंख तथा पक्षी के पंख
- (c) Forelimb of man, hind legs of horse, wings of birds/मानव के अग्रपाद, घोड़े के पश्चपाद, पक्षी के पंख
- (d) Forelimb of man, tail of horse, wings of bat/मानव के अग्रपाद, घोड़े की पुच्छ, चमगादड़ के पंख

RSMSSB Lab Assistant (03.02.2019)

Ans. (a) The organs which have the anatomically and structurally same but performs different function called homologous organisms.

Example – Forelimb of man, wings of birds, and flippers of whale.

14. **The term biocoenosis was coined by- शब्द बायोसिनोसिस किसने प्रतिपादित किया ?**

- (a) Tansley/टान्सले
- (b) Carl Mobius/कार्ल मोबियस
- (c) Warming/वार्मिंग
- (d) R. Mishra/आर. मिश्रा

RSMSSB Lab Assistant (03.02.2019)

Ans. (b) Biocoenosis is the interacting organisms living together in a habitat and consist of a community of living organisms and their habitat. The term Biocoenosis was given by Karl Mobius in 1877.

15. **A multicellular organism grows by बहुकोशिकीय जीव वृद्धि करते हैं**

- (a) Cell addition /कोशिका संकलन
- (b) Cell explosion /कोशिका प्रस्फोटन
- (c) Cell division /कोशिका विभाजन
- (d) None of these /इनमें से कोई नहीं

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (c) Cell division is a process in which parent cell divides form two daughter cells. This process occurs mainly in larger cell of cell cycle in which cell grows and replicates its chromosome before dividing.

16. **Point mutation involves बिंदु उत्परिवर्तन में सम्मिलित है**

- (a) Insertion/निवेशन
- (b) Duplication/अनुलिपिकरण
- (c) Deletion/लोप
- (d) Change in single base pair/एकल मूल युग्म में परिवर्तन

HPSSC Lab Assistant(30.09.2018)

Ans. (d) Any change in the DNA sequence of a cell. In point mutation a single nucleotide base in changed by addition or deletion.

Chapter-2

Reproductive System in Humans & Human Diseases

1. Infective stage of *Entamoeba histolytica* for human is :
- मनुष्य के लिये एन्टामीबा हिस्टोलिटिका की संक्रामक अवस्था है :
- Uninucleate cyst/यूनिन्यूक्लियेट सिस्ट
 - Binucleate cyst/बाइन्यूक्लियेट सिस्ट
 - Quadrinucleate cyst/क्वार्ड्रिन्यूक्लियेट सिस्ट
 - Trophozoite cyst/ट्रोफोज्वाइट सिस्ट

CG Lab Assistant-2019

Ans. (a) : The infective stage of *Entamoeba histolytica* for human is uninucleate cyst. These cysts are resistant forms that allow transmission through contaminated food or water leading to infection in the intestines.

2. Kala-azar is caused by:
- काला-अजार किसके कारण होता है?
- Plasmodium vivax*/प्लाजमोडियम वाइवेक्स
 - Leishmania donovani*/लीशमानिया डोनोवानी
 - Trypanosoma gambiense*/ट्रिपेनोसोमा गैम्बीयन्स
 - Wuchereria bancrofti*/वाउचेरिया बैंक्रॉफ्टी

CG Lab Assistant-2019

Ans. (b) : Kala-azar is caused by *Leishmania donovani*. It is a parasitic disease transmitted by the bite of infected female sand flies, leading to symptoms like fever, weight loss and an enlarged spleen and liver.

3. Quickening means
- क्विकनिंग का आशय है:
- Hearing of the fetal heart sound
भ्रूण हृदय ध्वनि का सुनना
 - Sudden Cessation of Menstruation
महावारी का अचानक समापन
 - The movement of the feuts in the uterus felt by the mother/गर्भाशय में भ्रूण की हलचल माँ को महसूस होती हैं।
 - Nausea and vomiting in the morning
सुबह के समय जी-मचलना तथा उल्टी आना

RRB Lab Technician (10.06.2015)

Ans. (c) Quickening is when a pregnant woman feels the fetus's movements in her uterus, typically occurring around the fourth month of pregnancy, indicating the body's growth and activity.

4. What is the retention of larva embryonic character in adults called?
- वयस्क में अवधारणित लार्वा भ्रूण गुण को क्या कहते हैं?

- Neoteny/नियोटेनी
- Gastrulation/गैस्ट्रुलेशन
- Gametogenesis/गेमेटोजेनेसिस
- Blastula/ब्लास्टुला

MP VYAPAM Lab Technician (17.10.2015)

Ans. (a) Neoteny refers to the retention of juvenile traits into adulthood. In this context, it means that adult organisms display characteristics typically seen in the larval or embryonic stage.

5. Placenta is made up of which two tissues?
- नाल किन दो ऊतकों से बनती है?
- Adipose and Paternal tissue/वसा एवं पैतृक ऊतक
 - Adipose and Maternal tissues/वसा एवं मातृ ऊतक
 - Maternal and Foetal tissues/मातृ एवं भ्रूण ऊतक
 - Maternal and Paternal tissues/मातृ एवं पैतृक ऊतक

MP VYAPAM Lab Technician (17.10.2015)

Ans. (c) The placenta is composed of maternal uterine tissue and foetal chorionic tissue. It nourishes the fetus, exchanges gases, nutrients and waste and facilitates the transmission of material antibodies to the fetus.

6. Food for the developing foetus is supplied by the
- विकासशील गर्भ को आहार उसके द्वारा दिया जाता है
- Uterus/गर्भाशय
 - Placenta/प्लेसेंटा
 - Ovary/अण्डाशय
 - Allantosis/अपरापोषिका

HPSSC Laboratory Assistant (21.08.2022)

Ans. (b) The placenta supplies nutrients and oxygen to the developing foetus from the mother's bloodstream and removes waste products. It acts as a vital interface for nutrient exchange during pregnancy.

7. Serum Alkaline Phosphatase levels are elevated in all of the following except
निम्न सभी में सीरम एल्केलाइन फॉस्फेटेज के स्तर उच्च रहते हैं, सिवाय
- Rickets/रिकेट्स
 - Infective hepatitis/संक्रमित हेपेटाइटिस
 - Obstructive jaundice/प्रतिरोधी पीलिया
 - Heart disease/हृदय रोग

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (d) Serum alkaline phosphatase levels are elevated in all i.e. rickets, infective hepatitis, obstructive jaundice except heart disease.

An alkaline phosphatase (ALP) test measures the amount of ALP in the blood.

8. Colour-blindness is due to defect in वर्णान्धता इसमें दोष के कारण होता है
- Cones/शंकु
 - Rods/शलाका
 - Both (A) and (B)/ (A) और (B) दोनों
 - Rhodopsin/रोडॉप्सिन

HPSSC Laboratory Assistant(11.02.2021)

Ans.(a) Colour blindness is caused by abnormalities in the cone of the eyes. The pigments porphyropsin, cyanopsin, and iodopsin are found in the photoreceptor cells referred to as cones. The eye's capacity to perceive colour during the day is correlated with these cells.

9. Which of the following causes abortion in ladies ?
निम्नलिखित में से कौन सा महिलाओं में गर्भपात का कारण है?
- Viruses/विषाणु
 - Bacteria/जीवाणु
 - Mycoplasma/माइकोप्लाज्मा
 - None of these/इनमें से कोई नहीं

HPSSC Laboratory Technician (27.09.2020)

Ans. (c) Mycoplasma specifically *Mycoplasma genitalium* can be a contributing factor to abortion in women, causing infection like pelvic inflammatory disease leading to complications.

10. AIDS is caused by HIV that principally infects एड्स, एच.आई.वी. द्वारा होता है, जो मुख्यतः प्रभावित करता है
- All lymphocytes/सभी लिम्फोसाइट्स
 - Activator B-cells/सक्रिय B - कोशिकाएँ
 - T₄-lymphocytes/ T₄- लिम्फोसाइट्स
 - Cytotoxic T-cells/साइटोटॉक्सिक T - कोशिकाएँ

HPSSC Laboratory Technician (27.09.2020)

Ans. (c) AIDS is caused by HIV which primarily infects CD4 positive T-lymphocytes (T-helper cells) macrophages and dendritic cells.

11. HIV is transmitted by all of the following except :
HIV इन सभी से संचरित होता है, सिवाय
- Infected mother to baby/संक्रमित माता से शिशु
 - Sexual contact/यौन सम्पर्क
 - Contaminated needle/दूषित सूई
 - Insect bite/कीट काटने से

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (d) HIV (Human Immunodeficiency Virus) is primarily transmitted through specific bodily fluids including blood, semen, vaginal fluids and breast milk. It is not transmitted through insect bites.

12. African sleeping sickness is caused by species of अफ्रीकी नींद रोग _____ की प्रजाति द्वारा होता है।
- Plasmodium/प्लाज्मोडियम
 - Trichomonas/ट्राइकोमोनास
 - Trypanosoma/ट्राइपैनोसोम
 - None of the above/उक्त में से कोई नहीं

DSSSB Laboratory Technician (2012)

Ans. (c) African sleeping sickness also known as African trypanosomiasis is caused by species of the protozoan parasite Trypanosoma, particularly *Trypanosoma brucei gambiense* and *Trypanosoma brucei rhodesiense*. These parasites are transmitted to human through the bite of infected tse-tse flies.

13. Causative agent of bacillary dysentery: बैसिलरी अतिसार का रोगकारक है :
- Shigella/शिगेला (a)
 - E.coli/ई-कोली (b)
 - Proteus/प्रोटिअस (c)
 - Vibrio/विब्रियो (d)

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (a) The causative agents of bacillary dysentery, Shigella, is a genus of gram-negative bacteria known for causing severe intestinal infection.

14. Common cold, Influenza, Chickenpox and Measles are caused due to the attack of :
किन के आक्रमण के कारण आम सर्दी जुकाम चेचक और खसरा होता है?
- Virus only/केवल विषाणु
 - Bacteria only/केवल जीवाणु
 - Protozoa only/केवल प्रजीवगण
 - Both virus and bacteria/विषाणु और जीवाणु

MP VYAPAM Lab Technician (17.10.2015)

Ans. (a) The common cold, influenza (flu), chickenpox and measles are all caused by virus. They infect the respiratory system and spread through droplets, causing various symptoms characteristics of each illness.

15. Average weight of a new born baby नवजात शिशु का औसत भार होता है:
- 2 kg/2 किग्रा (a)
 - 4 kg/4 किग्रा (b)
 - 3 kg/3 किग्रा (c)
 - 5 kg/5 किग्रा (d)

RRB Lab Technician (10.06.2015)

Ans. (c) The average weight of a newborn baby varies but generally, it is around 3 kilogram (approximately 6.6 pounds). This weight can vary slightly depending on various factors such as gestational age, maternal health and genetics, but 3 kg is a commonly accepted average.

16. Protein requirement for a pregnant woman per day:

गर्भवती महिला को प्रतिदिन प्रोटीन की आवश्यकता होती है:

- (a) 50 grams/50 ग्राम (b) 55 grams/55 ग्राम
(c) 60 grams/60 ग्राम (d) 65 grams/65 ग्राम

RRB Lab Technician (10.06.2015)

Ans. (c) During pregnancy, a woman needs approximately 60 grams of protein per day to support the growth and development of the fetus, as well as to meet her own nutritional needs.

17. The fundus is at the level of umbilicus during week pregnancy.

..... सप्ताह की गर्भावस्था के दौरान नाभि के स्तर पर फण्डस होता है:

- (a) 16 (b) 20
(c) 24 (d) 28

RRB Lab Technician (10.06.2015)

Ans. (c) By 24 weeks of pregnancy, the fundus of the uterus reaches the level of the umbilicus. This milestone indicates the advancing growth and development of the fetus within the mother's womb.

18. Total weight gain during pregnancy is गर्भावस्था के समय कुल भार प्राप्त होता है:

- (a) 7-8 kg/7-8 किग्रा.
(b) 10-11 kg/10-11 किग्रा.
(c) 13-14 kg/13-14 किग्रा.
(d) 15-16 kg/15-16 किग्रा.

RRB Lab Technician (10.06.2015)

Ans. (b) During pregnancy, a woman typically gains around 10-11 kg (22-24 pounds) of weight. This weight gain is essential for the healthy development of the body and maternal well-being.

19. The birth weight of the baby doubles at the age of

किस आयु में बच्चे के शरीर का भार जन्म के भार का दोगुना हो जाता है:

- (a) 3 months/3 महीना (b) 6 months/6 महीना
(c) 9 months/9 महीना (d) 12 months/12 महीना

RRB Lab Technician (10.06.2015)

Ans. (b) By the age of 6 months, a baby's birth weight usually doubles. This doubling reflects healthy growth and development, indicating proper nutrition and care during the first year of life.

20. Infancy period is from शैशवावस्था 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

RRB Lab Technician (10.06.2015)

Ans. (b) The infancy period spans from one month to one year after birth. During this time, infants undergo rapid growth and development, transitioning from newborns to toddlers, acquiring essential skills and abilities.

21. 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

RRB Lab Technician (10.06.2015)

Ans. (c) The first course of oral contraceptive pills is often started on the 5th day of the menstrual cycle. This timing aligns with the natural hormonal changes and helps regulate the menstrual cycle.

22. 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

RRB Lab Technician (10.06.2015)

Ans. (c) Infants typically achieve head control around five months of age. This milestone indicates strengthening of neck muscles, allowing the baby to hold their head steady while sitting or supported upright.

23. Puerperium is the period begins.

सूतिकावस्था अवधि की शुरुआत होती है:

- (a) As soon as the placenta is expelled and last for 6 to 8 weeks/जैसे ही प्लेसेंटा 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 प्लेसेंटा बाहर निकल जाती है और 10 से 12 सप्ताह तक रहता है।

RRB Lab Technician (10.06.2015)

Ans. (a) The puerperium or postpartum period, beings as soon as the placenta is expelled and lasts for 6 to 8 weeks. During this time, the mother's body undergoes recovery and adaptation after childbirth.

24. 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 झिल्लियाँ बरकरार होती है 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

RRB Lab Technician (10.06.2015)

Ans. (b) Cord presentation refers to the condition where the umbilical cord is positioned between presenting part of the fetus and the cervix while the amniotic membranes are still intact. This is different from cord prolapse, where the umbilical cord slips down into the birth canal after the membranes have ruptured. Cord presentation can be identified before the membranes break and requires careful monitoring to prevent complication during delivery.

25. 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

RRB Lab Technician (10.06.2015)

Ans. (c) Menarche refers to the onset of the menstrual cycle in females, typically occurring during puberty. It marks the first menstrual period and signifies the beginning of reproductive capability.

26. Seminiferous tubules are a part of

शुक्रजनक नलिका किसका भाग है?

- (a) Kidney/गुर्दा
- (b) Bronchial tree/श्वसनी वृक्ष
- (c) Brain/दिमाग
- (d) None of the above/इनमें से एक भी नहीं

HPSSC Laboratory Technician (26-06-2017)

Ans. (d) Seminiferous tubules are part of the male reproductive system, found in the testes, where sperm production occurs. Hence, they are not associated with the kidney, bronchial tree or brain.

27. Bacterial diseases in man are-

मनुष्य में जीवाणवीय रोग है -

- (a) Typhoid, plague, malaria/टाइफॉइड, प्लेग, मलेरिया
- (b) Typhoid, plague, typhus/ टाइफॉइड, प्लेग, टाइफस
- (c) Diphtheria, pneumonia, influenza/डिफ्थीरिया, न्युमोनिया, एन्फ्लूएंजा
- (d) Plague, malaria, typhoid/प्लेग, मलेरिया, टाइफॉइड

RSMSSB Lab Assistant (03.02.2019)

Ans. (b) Typhoid, plague and typhus are all infectious diseases caused by bacteria.

• Typhoid fever is caused by the bacterium *Salmonella typhi*.

• Bubonic plague also known as the black death is caused by the bacterium *Yersinia pestis*.

• Typhus is a group of infectious disease caused by Rickettsia bacteria.

28. Match the Syndrome in column-I with Karyotype in column-II and select the answer which is not correct :

स्तम्भ -I में दिये सिन्ड्रोम को स्तम्भ -II में दिये केरिओटाइप से मेल करते हुए उत्तर का चयन कीजिये जो सही नहीं है:

	column-I/ स्तम्भ -I	column-II/ स्तम्भ -II
(a)	Edward's Syndrome/एडवर्ड्स सिन्ड्रोम	Trisomy 18/ट्राइसोमी 18
(b)	Patau's Syndrome/पटारू सिन्ड्रोम	Trisomy 13/ट्राइसोमी 13
(c)	Turner's Syndrome/टर्नर सिन्ड्रोम	Trisomy 21/ट्राइसोमी 21
(d)	Klinefelter's Syndrome/क्लाइनफेल्डर सिन्ड्रोम	XXY

RSMSSB Lab Assistant (03.02.2019)

Ans. (c) The correct karyotype for Turner's syndrome should be 45, X, not trisomy 21, which is the karyotype for down syndrome. Turner syndrome is a genetic disorder in females causing one x-chromosome to be missing or incomplete.

29. Filariasis is caused through the bite of किसके काटने से फाइलेरिएसिस होता है?

- (a) Culex/क्यूलेक्स
- (b) Anopheles/एनॉफिलिस
- (c) Sand fly/सैंड फ्लाई
- (d) Both (A) and (B)/(A) तथा (B) दोनों

HPSSC Lab Assistant(30.09.2018)

Ans. (a) Filariasis is transmitted through the bites of infected mosquitoes, but several mosquito genera can carry the parasite. Culex mosquitoes are common vectors in many areas, particularly urban and semi-urban ones.

30. Cellular totipotency is demonstrated by कोशिकीय पूर्णशक्तता किसके द्वारा प्रदर्शित की जाती है?

- (a) Only bacterial cells/केवल जीवाणु कोशिकाओं द्वारा
- (b) Only gymnosperm cells/केवल अनावृतबीजी कोशिकाओं द्वारा
- (c) Only angiosperm cells/केवल आवृतबीजी कोशिकाओं द्वारा
- (d) All plant cells/सभी पादप कोशिकाओं द्वारा

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (d) Cellular totipotency, the ability of a cell to develop into a complete plant. This potential is inherent in all plant cells, not just specific groups like gymnosperms or angiosperms.

31. In animals, cellular totipotency has been restricted only to प्राणियों में कोशिकीय पूर्णशक्तता केवल तक प्रतिबन्धित होती है।

- (a) Germinal cells/जनन कोशिका
- (b) Epithelial cells/उपकला कोशिकाएँ
- (c) Zygote/युग्मज
- (d) Zygote and early blastomeres/युग्मनज और पहले ब्लास्टोमियर

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (d) In animals, totipotency, the ability to develop into any cell type is limited to the zygote and early blastomeres, which can differentiate into any cell type forming a complete organism.

32. Give principle of serum Widal test used for diagnosis of enteric fever. आंत्रज्वर का निदान के लिए उपयोग किया जाने वाला सीरम विडाल परीक्षण का नियम दीजिए।

- (a) Precipitation/अवक्षेप
- (b) Agglutination/संश्लेषण
- (c) Complement Fixation/पूरक स्थिरण
- (d) Enzyme Immune Assay/एंजाइम इम्यून एस्से

GSSSB Laboratory Technician(30.11.2019)

Ans. (b) The widal test is an agglutination test where the patient's serum is mixed with antigen suspensions of salmonella if the patient has antibodies against these antigens, visible clumping known as agglutination will occur.

33. Which one is DNA virus? कौन-सा एक DNA विसाणु है?

- (a) Hepatitis A/हेपेटाइटिस A
- (b) Hepatitis B/हेपेटाइटिस B
- (c) Hepatitis C/हेपेटाइटिस C
- (d) Hepatitis D/हेपेटाइटिस D

GSSSB Laboratory Technician(30.11.2019)

Ans. (b) The hepatitis B is a small DNA virus made of circular DNA, but it is unusual because the DNA is not fully double stranded, hepatitis B virus causes the disease hepatitis B in which liver are affected that's easily prevented by vaccine.

34. A Child born in 2010 will not be vaccinated againstas part of the child immunization program./2010 में जन्म लेने वाले बच्चे को बाल टीकाकरण कार्यक्रम के भाग के रूप में _____ का टीका नहीं लगेगा।

- (a) Measles /खसरा
- (b) Diphtheria/डिप्थीरिया
- (c) Polio /पोलियो
- (d) Small pox /छोटी माता

NVS Lab Attendant(09.03.2022)

Ans. (d) A child born in 2010 will not be vaccinated against smallpox as part of the child immunization program. Smallpox was eradicated globally by 1980, and routine vaccination for it ceased in most countries. However, vaccinations for measles, diphtheria and polio are typically included in childhood immunization program to prevent these diseases and protect public health.

35. The transmission of HIV infection in human being generally not occurs/मनुष्य में HIV संक्रमण का प्रसार सामान्यतः नहीं होता है।

- (a) By sharing infected injection needles/संक्रमित इंजेक्शन की सुई के साझेदारी से
- (b) From infected mother to her child/संक्रमित माँ से उसके बच्चे से
- (c) By drinking water using the same glass/समान ग्लास का उपयोग करके पानी-पीने से
- (d) By sexual contact with infected person/संक्रमित व्यक्ति के साथ यौन सम्बन्ध से

Kerala PSC Lab Technician(21.01.2023)

Ans. (c) The transmission of HIV infection generally occurs through sharing infected injection needles, from an infected mother to her child, and by sexual contact with a infected person. HIV is not transmitted through drinking water using the same glass.

36. The parasite of benign tertian malaria is वांछित क्षेत्रीय मलेरिया का परजीवी होते हैं :

- (a) P. ovale /पी. ओवेल
- (b) P. vivax /पी. विवैक्स
- (c) P. falciparum/पी. फाल्सीपेरम
- (d) P. malariae /पी. मलेरियाई

Kerala PSC Lab Technician(21.01.2023)

Ans. (b) Benign tertian malaria caused by *Plasmodium vivax*. It is the most widespread disease, benign tertian malaria is characterized by fever that occurs every third day and it has traditionally been considered to have a benign course without complication or death.

37. In P. malariae infection, infected RBC shows पी. मलेरियाई संक्रमण में, संक्रमित RBC प्रदर्शित होता है :

- (a) Jame's dots /जेम्स-डॉट्स
- (b) Maurer's dots /मौरर-डॉट्स
- (c) Ziemann's dots /जिमान-डॉट्स
- (d) Schuffner's dots /सूफनर-डॉट्स

Kerala PSC Lab Technician(21.01.2023)

Ans. (c) *Plasmodium malariae* is a parasitic protozoan that causes malaria in human by biting of infected mosquitoes.

P. malariae infects old RBC. Infected RBC are normal or small sized and rarely Ziemann's stippling may be seen.

38. VDRL test is done for the diagnosis of VDRL परीक्षण इसके रोग निदान में की आती है

- (a) Syphilis/साइफिलिस
- (b) Q Fever/ ज्वर
- (c) Influenza/इनफ्लुएंजा
- (d) Meningitis/तानिका-शोथ(मेंनिनजाइटिस)

DSSSB Lab Assistant (10.05.2015)

Ans. (a) VDRL test used to diagnose the syphilis by detecting antibodies produced by body due to presences of bacteria which cause syphilis.

• The venereal disease research laboratory test (VDRL) is a blood test that detect the syphilis infection.

39. Which type of Hypersensitivity is called as Atopy एटोपी किस प्रकार के अतिसंवेदनशीलता को कहते हैं?

- (a) Type I/टाइप I
- (b) Type II/ टाइप II
- (c) Type III/ टाइप III
- (d) Type IV/ टाइप IV

DSSSB Lab Assistant (10.05.2015)

Ans. (a) Atopy is a typically associated with heightened immune responses to common allergens. Atopy is on exaggerated IgE mediated immune response all atopic disorders are type I hypersensitivity disorder.

40. Which of the following is an example of auto immune disease? स्वयं प्रतिरक्षित रोग (ऑटो इम्यून रोग) का उदाहरण निम्न में से कौन-सा है?

- (a) Myasthenia Gravis/मायस्थेनिया ग्रेविस
- (b) Addison's Disease/एडीसन रोग
- (c) Pernicious anemia/पर्नीसियस एनीमिया
- (d) All of the above/उपर्युक्त सभी

DSSSB Lab Assistant (10.05.2015)

Ans. (d) Autoimmune diseases occur when the immune system attack the body's own tissues, mistaking them for harmful invaders. Ex. Myasthenia Gravis, Addison disease, Pernicious anemia. So all of the above are autoimmune disease.

41. The mosquito which acts as vector for dengue fever?

डेंग्यू बुखार के लिए रोगवाहक मच्छर है

- (a) Culex/क्यूलेक्स
- (b) Aedes/एडिस
- (c) Anopheles/एनॉफिलिस
- (d) All of the above/ऊपरी सभी

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Dengue is viral infection that spread from Aedes mosquitoes to people mainly in tropical and subtropical climates mild dengue fever causes a high fever and flue like symptoms.

42. Which test is used for Leprosy Patient?

कुछ मरीज के लिए कौन-सा परीक्षण उपयोगी है?

- (a) Shick test /शिक परीक्षण
- (b) Frer's test/फ्रैर्स परीक्षण
- (c) Mantoux test/मॅन्टौक्स परीक्षण
- (d) Lepromin test/लीप्रोमिन परीक्षण

DSSSB Lab Assistant (10.05.2015)

Ans. (d) Lepromin skin test used to determine the leprosy. Leprosy is caused by the organism *Mycobacterium leprae*. It is a chronic curable infection mainly causing skin lesions and nerve damage as well as affects the skin eyes, nose, and peripheral nerves.

43. The Incubation period for hepatitis B Virus is हेपेटिटिस B वाइरस के लिए उद्भवन अवधि है

- (a) 1 - 6 weeks/1 - 6 हफ्ते
- (b) 1 - 6 months/1 - 6 महीने
- (c) 6 - 12 weeks/6 - 12 हफ्ते
- (d) 6 - 12 months/6 - 12 महीने

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Hepatitis B is a serious liver infection caused by Hepatitis B virus. This virus passed from person to person through blood-semen of other body fluids. Acute symptom of hepatitis B range from mild to severe. They usually appear about 1-6 months after infection.

44. Amoebic Dysentery is caused by which parasite? अमीबी पेचिश किस परजीवी से होती है?

- (a) E. histolytica/ई. हिस्टोलिटिका
- (b) Giardia lamblia/जिआर्डिया लैम्ब्लिया
- (c) E. Coli/ई-कोलाई
- (d) B. Coli/बी-कोलाई

DSSSB Lab Assistant (10.05.2015)

Ans. (a) Amoebic Dysentery, also known as amoebiasis, is caused by a parasite called *Entamoeba histolytica*. It is an intestinal infection that can result in severe diarrhoea with abdominal pain and can lead to more serious complications if left untreated.

45. Ribbon like Helminth Parasite are known as रिबन जैसे हेलमिन्थ परजीवी को कहते हैं

- (a) Tapeworms/टेपवार्म्स
- (b) Flukes/फ्लूक्स
- (c) roundworms/गोल-कृमि
- (d) Amoeba/अमीबा

DSSSB Lab Assistant (10.05.2015)

Ans. (a) Tapeworm belongs to phylum platyhelminthes and known as flatworm. Tapeworm, resembling a tape measuring ribbon. Multisegmented that dwell as adults entirely in the human small intestines causes a disease called taeniasis.

46. Chicken-Pox is caused by छोटी माता का कारण है:

- (a) Herpes simplex/हर्पेस सिम्पलेक्स
- (b) Varicella/वेरिसेला
- (c) Adenovirus/एडेनो वाइरस
- (d) Carno virus/कारनो वाइरस

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Chicken is a viral disease caused by *Varicella-zoster* virus belongs to the herpes virus family. In which itchy blister like rash appears all over body during illness. The rash turns into fluid filled blisters that burst to crust over.

47. Nosocomial infection is caused by which species of pseudomonas

नोसोकोमियल संक्रमण *Pseudomonas* के किस जाति से होना है?

- (a) *Pseudomallei*/स्यूडोमेलैलाई
- (b) *Aeruginosa*/एरूगिनोसा
- (c) *Mallei*/मेललाई
- (d) All of the above/उपर्युक्त सभी

DSSSB Lab Assistant (10.05.2015)

Ans. (b) The species of *Pseudomonas* that is commonly associated with nosocomial infections is *Pseudomonas aeruginosa*. It is a gram-negative bacteria which is very common in hospitalized patient that hospitalized longer than 1 week.

48. Tetanus is caused by Clostridium धनुस्तंभ (टिटैनस) का कारण क्लोस्ट्रीडियम है

- (a) *Perfringens*/परफ्रिजेन्स
- (b) *Botulinum*/बॉट्यूलिनम
- (c) *Difficile*/डिफिसाइल
- (d) *Tetani*/टिटैनी

DSSSB Lab Assistant (10.05.2015)

Ans. (d) Tetanus is caused by the bacterium *Clostridium tetani*, which produces a potent neurotoxin. This bacterium is commonly found in soil, dust and animal feces.

Infection occurs when the spores enter the body through wounds, leading to muscle stiffness and contractions, particularly in the jaw, a condition known as lockjaw.

49. Bacillary Dysentery is caused by दण्डाणुज पेचिश का कारण है

- (a) *Shigella*/शिगेला
- (b) *Salmonella*/सालमोनेला
- (c) *Proteus species*/प्रोटियस जाति
- (d) *Citrobacter*/साइट्रोबैक्टर

DSSSB Lab Assistant (10.05.2015)

Ans. (a) Bacillary dysentery is a bacterial infection in which intestine is infected by a group of shigella bacteria that found in human gut.

50. Which specimen is more appropriate for culture of bacteria in the 1st week of typhoid? टाइफाइड के पहले हफ्ते में बैक्टीरिया संवर्धन के लिए कौनसा नमूना अधिक योग्य होगा?

- (a) Faeces/मल
- (b) Urine/मूत्र
- (c) Blood/रक्त
- (d) CSF/सीएसएफ

DSSSB Lab Assistant (10.05.2015)

Ans. (c) Typhoid fever is a bacterial infection that spreads through contaminated H₂O and food typhoid fever is an illness you get from *Salmonella typhi* causes a high fever, flu like symptoms and diarrhoea.

Typhoid symptoms starts appear from 5-14 days after infection in this week bacteria moves into blood.

51. Resting membrane potential of a living cell is: एक जीवित कोशिका की विश्राम झिल्ली क्षमता है-

- (a) +70 mV
- (b) -70 mV
- (c) +120 mV
- (d) -120 mV

Kerala PSC Laboratory Assistant (28.03.2015)

Ans. (b) A resting neuron has a voltage across its membrane called the resting membrane potential. This is developed due to the unequal distribution of ions across the membrane. In most neurons the resting potential has a value of approximately -70 mV.

52. Which among the following is used for the detection of malarial parasite?

मलेरिया परजीवी को ढूंढने में निम्न में से किसका उपयोग किया जाता है?

- (a) Platelets/बिम्बाणु
- (b) Packed Red Cells/पैक्ड लाल कोशिका
- (c) Serum/सीरम
- (d) Plasma/प्लाज्मा (पलाविका)

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Blood tests for malaria involve examining blood films and utilizing complete blood count tests to detect the presence of the parasite. These tests often include examining both thick and thin blood smear under a microscope to identify malarial parasites.

53. Vaginal smear are valuable for the assessment of

योनी धब्बा इसके निर्धारण में मूल्यवान है

- (a) Malignancy/दुर्दम्यता
- (b) Endocrine disorders/अंतःस्त्रावी बिमारी
- (c) Hormonal function/हार्मोनल कार्य
- (d) UTI

DSSSB Lab Assistant (10.05.2015)

Ans. (c) A vaginal smear assesses hormonal function by examining cell changes due to hormonal fluctuations, useful for tracking menstrual cycles, menopause and detecting hormonal imbalances and endocrine disorders.

54. The Alzheimer disease in humans is linked with the deficiency of _____.

मनुष्यों में अलजाइमर रोग की कमी से जुड़ा हुआ है।

- (a) Dopamine/डोपामाइन
- (b) Glutamic acid/ग्लूटामिक अम्ल
- (c) Gamma amino butyric acid/गामा-एमाइनो बायूटरिक अम्ल
- (d) Acetylcholine/एसिटिलकोलिन

DSSSB Laboratory Assistant (28.08.2021)

Ans. (d) Alzheimer disease is a progressive disease that destroys memory and other important mental functions. Alzheimer disease is caused by a combination of genetic life style and environmental factors that affect the brain. Acetylcholine are particularly low in the brains of people with Alzheimer's disease.

55. _____ is not a part of human female external genitalia.

..... मानव मादा बाहरी जननांग का भाग नहीं है।

- (a) Mons pubis/मोंस पुबिस
- (b) Labia minora/लेबीअ मिनोरा
- (c) Antrum/ऐन्ट्रम
- (d) Hymen/योनिच्छद

DSSSB Laboratory Assistant (28.08.2021)

Ans. (c) Antrum is a general term for cavity or chamber which is a fluid filled space that develop among the follicle cells. It is not part of external genitalia. The other options listed mons pubis, labia minora and hymen formed external genitalia of female.

56. Chorionic gonadotropin produced by biotechnology can be used to:

जैवप्रौद्योगिकी द्वारा उत्पादित कोरियोनिक गोनाडोट्रोपिन का उपयोग निम्न के लिए किया जा सकता है:

- (a) Halt the progress of rickets./सूखा रोग की प्रगति को रोकना।
- (b) Treat infertility in women./महिलाओं में अनुर्वरता का उपचार करना।
- (c) Dissolve blood clots in stroke patients./स्ट्रोक के रोगियों में रक्त के थक्कों को घोलना।
- (d) Enhance immunity in infants./शिशुओं में रोग प्रतिरोधक क्षमता बढ़ाना।

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) Biotechnologically produced chorionic gonadotropin is used to treat infertility in women by stimulating ovulation, enhancing the chances of conception in those struggling to conceive naturally.

57. Which microbe is not used for the industrial production of organic acids?

किस सूक्ष्म जीव का उपयोग कार्बनिक अम्लों के औद्योगिक उत्पादन के लिए नहीं किया जाता है?

- (a) Vibrio cholerae /विब्रियो कॉलेरी
- (b) Spargillus Niger /ऐस्पेर्जिलस नाइजर
- (c) Acetobacter acute /एसीटोबैक्टर एक्यूट
- (d) Lactobacillus /लैक्टोबैसिलस

DSSSB Laboratory Assistant (28.08.2021)

Ans. (a) Vibrio cholerae is a pathogenic bacterium associated with causing cholera and is not used in the industrial production of organic acids.

58. Who gave the first conclusive evidence on the role of bacteria in human diseases?

किसने मानव रोगों में जीवाणुओं की भूमिका पर पहला निर्णायक प्रमाण दिया?

- (a) Francesco Redi/फ्रांसेस्को रेडि
- (b) Robert Koch/रॉबर्ट कोच
- (c) Antony Van Leeuwenhoek/एंटोनी वॉन ल्यूवेनहॉक
- (d) Louis Pasteur/लुईस पास्चर

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) Robert Koch provided the first conclusive evidence on the role of bacteria in human diseases through his development of Koch's postulates, linking specific bacteria to specific diseases, solidifying germ theory.

59. What is Koch's 4th postulate ?

कोच की चौथी अभिधारणा क्या है?

- (a) The microorganism must be present in every case of the disease but absent from healthy organisms/रोग के हर मामले में सूक्ष्मजीव मौजूद होना चाहिए लेकिन स्वस्थ जीवों से अनुपस्थित होना चाहिए।
- (b) The suspected micro-organisms must be isolated and grown in a pure culture/संदिग्ध सूक्ष्मजीवों को अलग किया जाना चाहिए और शुद्ध संस्कृति में उगाया जाना चाहिए।

- (c) The same disease must result when the isolated micro-organism is inoculated into a healthy host/एक ही बीमारी का परिणाम तब होता है जब पृथक सूक्ष्मजीव को स्वस्थ मेजबान में लगाया जाता है।
- (d) The same micro-organisms must be isolated again from the diseased host/एक ही सूक्ष्मजीवों को रोगग्रस्त मेजबान से फिर से अलग किया जाना चाहिए।

UPSSSC Laboratory Assistant (26.03.2023)

Ans. (d) Koch's 4th postulate states that the micro-organism should be re-isolated from the inoculated, diseased experimental host and identified as being identical to the original specific causative agent.

60. _____ theory was created by Pasteur.
-----सिद्धांत पाश्चर द्वारा बनाया गया था।

- (a) Agriculture/कृषि
(b) Germ/रोगाणु
(c) Life evolution/जीवन विकास
(d) Soil Microbes/मृदा जीवाणु

UPSSSC Laboratory Assistant (26.03.2023)

Ans.(b) Germ theory states that specific microorganism are the cause of specific disease. This theory published by Louis Pasteur these diseases are caused by the growth and replication of microorganisms.

61. Tuberculosis disease is caused by which organism?

क्षय रोग किस जीव से होता है?

- (a) Mycobacterium tuberculosis/माइकोबैक्टीरियम ट्यूबरकुलोसिस
(b) Mycobacterium bovis/माइकोबैक्टीरियम बोविस
(c) Mycobacterium africanum/माइकोबैक्टीरियम अफ्रीकानम
(d) All of these/ये सभी

UPSSSC Laboratory Assistant (26.03.2023)

Ans. (a) Tuberculosis is a bacterial disease that mainly affects the lungs and can also affect any part of the body and caused by *Mycobacterium tuberculosis*. They are spread from person to person through air. Robert Koch announced the discovery of mycobacterium tuberculosis.

62. Common cold is caused by which micro-organisms?

किस सूक्ष्मजीवों से जुखाम होता है?

- (a) Bacteria/जीवाणु
(b) Fungus/कवक
(c) Virus/वायरस
(d) Algae/शैवाल

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) Common cold is a viral infection of upper respiratory tract with nose that causes inflammation of the membranes that line the nose and throat. Many types of virus can cause a cold but the most common viruses from the Rhinovirus family.

63. Bacterial chromosome is:

जीवाणु क्रोमोसोम क्या है?

- (a) Single stranded and circular/एकल स्ट्रैंडेड और गोलाकार
(b) Double stranded and circular/दोहरे स्ट्रैंडेड और गोलाकार
(c) Single stranded and linear/एकल स्ट्रैंडेड और रेखीय
(d) Double stranded and linear/दोहरे स्ट्रैंडेड और रेखीय

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) Bacterial chromosomes are located in a nucleoid in which double stranded DNA is coated with histone like protein. Bacteria usually have one circular chromosome called nucleotide it is an irregularly shaped of contains genetic material

64. Which of the following organisms causes AIDS?/निम्नलिखित में से कौन से जीव AIDS का कारण होते हैं?

- (a) HIV
(b) HLV
(c) Staphylococcus/स्टेफिलोकोकस
(d) Pneumococci/न्यूमोकोकाई

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) HIV (Human immunodeficiency virus) cause AIDS (Acquired immunodeficiency syndrome) disease in which immune system destroyed by HIV retrovirus causing health decline and the onset of AIDS. The virus can be transmitted through contact with infected blood, semen or vaginal fluid.

65. BCG vaccine is used to cure:

_____ के इलाज हेतु BCG वैक्सिन का प्रयोग किया जाता है।

- (a) Pneumonia/निमोनिया
(b) Tuberculosis/ट्यूबरकुलोसिस
(c) Polio/पोलियो
(d) Amoebiasis/अमिबियासिस

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) The BCG (Bacillus Calmette-Guerin) vaccine is primarily administered to prevent tuberculosis (TB) by reducing its severity and preventing complications, rather than treating or curing an existing TB infection.

66. Which of the following is communicable disease?

निम्नलिखित में से कौन सा एक संक्रामक रोग है?

- (a) Malaria/मलेरिया
- (b) Diabetes/मधुमेह
- (c) Hypertension/उच्च रक्तचाप
- (d) Hyperlipidemia/हाइपरलिपिडेमिया

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) Malaria is a communicable disease which is caused by a plasmodium parasite transmitted by the bite of infected mosquitoes (female anopheles).

67. What is the mode of transmission of mumps?

गलसुआ किस माध्यम से फैलता है?

- (a) Consumption of contaminated water/प्रदूषित पानी के उपयोग से
- (b) Droplet/छोटी बूंद से
- (c) food-borne/खाद्य पदार्थ से
- (d) Insect bite/कीट दंश से

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) Mumps is a contagious disease caused by the mumps virus. It primarily spread through direct contact with saliva or respiratory droplets from the mouth, nose, or throat of an infected person.

68. An insect which transmits a disease is called a/an:

वह कीड़ा जिसमें रोग फैलता है, उसे क्या कहते हैं?

- (a) Intermediate host/इंटरमीडिएट होस्ट
- (b) Parasite/पैरासाइट
- (c) Vector/वेक्टर
- (d) Prey/प्रे

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) An insect that transmits a disease from one organism to another is called a vector. Vectors are organisms that do not cause disease themselves but spread infection by conveying pathogens from one host to another. Species of mosquito, for example, serve as a vectors for the malaria parasite, plasmodium, by spreading it to humans.

69. Which of the following diseases spreads via air?

निम्नलिखित में से कौन सी बीमारी हवा से फैलती है?

- (a) Swine/स्वाइन फ्लू
- (b) Typhoid/टाइफाइड
- (c) Cholera/कॉलेरा
- (d) Malaria/मलेरिया

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) Swine flu caused by the H1N1 influenza virus, can spread through the air via respiratory droplets when an infected person coughs, sneezes or talks, making it highly contagious in crowded spaces.

70. Incubation period of Chickenpox ranges between:

चेचक (चिकनपॉक्स) की ऊष्मायन (इन्क्यूबेशन) अवधि क्या है?

- (a) 7 – 17 days/7 – 17 दिन
- (b) 10 – 21 days/10 – 21 दिन
- (c) 14 – 28/14 – 28 दिन
- (d) Within 7 days/7 दिनों के अंदर

Bihar SHSB Lab Technician (19.03.2016)

Gujarat VMC Lab Technician (28.03.2021)

Ans.(b) Chicken pox is contagious viral infection which causes an itchy blister like rash on the skin. The rash usually appears 10 to 21 days after first being exposed to someone who has chickenpox rash usually first appears on the chest back or face.

71. One of the main symptoms of cholera is:

कॉलेरा रोग के प्रमुख लक्षणों में से एक _____ है।

- (a) High blood sugar/उच्च रक्त शर्करा
- (b) Hypertension/उच्च रक्तचाप
- (c) Diarrhoea/दस्त
- (d) Migraine/माइग्रेन

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) Cholera is a bacterial disease usually spread through contaminated water. It causes severe diarrhoea and dehydration. Oral or intravenous hydration is the primary treatment of cholera.

72. Chikungunya fever is transmitted by:

चिकनगुन्या बीमारी _____ से फैलती है।

- (a) Culicine mosquito/कुलिसिन मच्छर
- (b) Culex mosquito/क्यूलेक्स मच्छर
- (c) Aedes mosquito/ऐडिस मच्छर
- (d) Mansonia mosquito/मन्सोनिया मच्छर

Bihar SHSB Lab Technician (19.03.2016)

Gujarat VMC Lab Technician (28.03.2021)

Ans.(c) Chikungunya is a viral infection that is transmitted by Aedes mosquito and the most common symptoms are fever and joint pain the virus may circulate within a number of animals including birds and rodents.

73. Malaria is caused by which microbe?

किस कीटाणु से मलेरिया होता है?

- (a) Protozoan/प्रोटोज़ोआन
- (b) Fungi/कवक
- (c) Virus/विषाणु
- (d) Bacteria/जीवाणु

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) Malaria is a protozoan disease which is transmitted by infected female anopheles. Blood transfusion and contaminated needles may also transmit malaria it's treated with antimalarial medicines.

74. Amoebiasis can occur:
अमिबियासिस किसमे हो सकता है?

- (a) In children/बच्चों में
- (b) At any age/किसी भी आयु में
- (c) In adults/वयस्कों में
- (d) In infants/दूध पीते बच्चों में

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) Amoebiasis is an intestinal disease. It is most common in tropical areas with untreated water. Amoebic dysentery is a severe form of Amoebiasis Associated with stomach pain. It mostly affects young adult and is rare below age group of 5 years.

75. Which of the following is eradicated in India?
निम्नलिखित में से किस रोग को भारत में पूर्ण रूप से मिटाया जा चुका है?

- (a) Small pox/ शीतला (स्मॉल पॉक्स)
- (b) Cholera/ कॉलेरा
- (c) Chicken pox/ चेचक (चिकन पॉक्स)
- (d) Diphtheria/डिप्थीरिया

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) Small pox was declared eradicated globally by the world health organization (WHO) in 1980, following an intensive global vaccination campaign. India was a significant part of this success, having eliminated small pox within its borders prior to the global declaration.

76. DOTS Programme is associated with:
DOTS कार्यक्रम _____ से संबंधित है।

- (a) Diphtheria/डिप्थीरिया
- (b) Typhoid/टाइफाइड
- (c) Tuberculosis/ ट्यूबरकुलोसिस
- (d) Malaria/मलेरिया

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) DOTS (Directly observed therapy) is also known as TB-DOTS. Dots is a strategy used to guide the treatment of pulmonary tuberculosis, DOTS helps patients to achieve successful TB treatment outcomes by shortening treatment duration and improving its quality.

77. Another name for whooping cough is:
काली खांसी का दूसरा नाम क्या है?

- (a) Poliomyelitis/पोलियोमईलिटिस
- (b) Japanese encephalitis/जापानी एन्सिफेलिटिस
- (c) Yellow fever/पीला ज्वर
- (d) Pertussis/पर्टुसिस

Bihar SHSB Lab Technician (19.03.2016)

Ans.(d) Whooping cough (Pertussis) is a highly contagious respiratory tract infection that is easily preventable by vaccine. It causes long stretches of severe cough that some time end with a whooping sound. It is a bacterial infection.

78. Wilson's disease occurs due to the accumulation of _____ in the tissues.

टिश्यू में _____ के संचयन से विल्सन रोग होता है।

- (a) Zinc/ज़िंक
- (b) Copper/कॉपर
- (c) Magnesium/मैग्नीशियम
- (d) Calcium/कैल्शियम

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) Wilson's disease is characterized by the accumulation of copper in the tissues. It is a rare genetic disorder that prevents the body from eliminating excess copper, leading to its buildup, particularly in the liver, brain and eyes.

79. Spermatogenic cells are located in which part of the testis?
वृषण के किस भाग में शुक्रजननीय कोशिकाएँ स्थित हैं?

- (a) Rete testis/वृषण जालिका
- (b) Seminiferous tubules/शुक्रजनक नलिका
- (c) Tunica albuginea/श्वेत कंचुक (ट्युनिका एल्बुजीनिया)
- (d) Interstitium/अंतराली

HPSSC Laboratory Technician (26-06-2017)

Ans. (b) Spermatogenesis is the process by which sperm cell production occurs: the germ cells give rise to the haploid spermatozoa. Sperm production takes place inside the seminiferous tubules. which is convoluted cluster of tubes located inside the testes.

80. Method of stimulating adaptive immune response and memory against known infectious agent is called

ज्ञात संक्रामक वाहक के विरुद्ध एडाप्टिव इम्यून रिस्पॉन्स और स्मरण शक्ति को उद्दीप्त करने की विधि को कहते हैं।

- (a) Grafting/रोपण
- (b) Natural Resistance/प्राकृतिक प्रतिरोध
- (c) Vaccination/टीकाकरण
- (d) Susceptibility/चुंबकीय प्रवृत्ति

HPSSC Laboratory Technician (26-06-2017)

Ans. (c) Vaccines help immune system fight infections faster and more effectively and becomes protected against a disease through vaccination which provide Adaptive immunity. Adaptive immunity is initiated when an innate immune response fail to eliminate a new infection.

81. Which herpes virus causes oral infection or keratitis?

कौन सा परिसर्प (हर्पिज़) विषाणु मुख संक्रमण या केराटाइटीस का कारण बनता है?

- (a) Herpes simplex virus/हर्पिज़ सिम्प्लेक्स विषाणु
- (b) Epstein-Barr virus/ऐपस्टीन बार विषाणु
- (c) Varicella Zoster virus/वैरीसेला जोस्टर विषाणु
- (d) All of the above/उपरोक्त सभी

HPSSC Laboratory Technician (26-06-2017)

Ans. (a) Herpes simplex virus spread through skin contact or sexual transmission most people with oral herpes were infected during childhood or as young adult from non-sexual contact with infected saliva.

82. The larva of *Taenia solium* causes which of disease?

टीनियासोलियम का डिम्ब किस रोग का कारण बनता है?

- (a) Coenocerosis/सीनोसेरोसिस
- (b) Fatal infection/जीवलेण संक्रमण
- (c) Cysticercosis/पुटिपुच्छता
- (d) Cancer/कैंसर

HPSSC Laboratory Technician (26-06-2017)

Ans. (c) Cysticercosis is a parasitic tissue infection caused by larval cysts of the tapeworm. *Taenia solium* that affects the brain, muscles and other tissue.

Cysticercosis is usually acquired by eating food, water contaminated by tapeworm's eggs.

83. Whooping cough is caused by which species of Bordetella?

किस जाति के बोर्डेटेला काली खाँसी की वजह है?

- (a) B. Pertussis/बी. पर्ट्यूसिस
- (b) B. Parapertussis/बी. पैरापर्ट्यूसिस
- (c) B. Bronchisepta/बी. ब्रोन्कीसेप्टा
- (d) All option/ये सभी

HPSSC Laboratory Technician (26-06-2017)

Ans. (a) Whooping cough is a highly contagious respiratory tract infection which is also known as Pertussis is caused by a bacteria Bordetella pertussis.

84. Down Syndrome is related to

डाउन सिंड्रोम संबंधित है:

- (a) Nullisomy/नलिसोमी
- (b) Monosomy/मोनोसोमी
- (c) Trisomy/ट्राइसोमी
- (d) Tetrasomy/टेट्रासोमी

Kerala PSC Jr. Laboratory Asst. (07.07.2018)

Ans. (c) Down syndrome is a example of trisomy is a genetic disorder caused by the presence of all or part of a third copy of chromosome 21 due to unequal cell division.

85. Diabetes insipidus is caused due to

डायबिटीज इन्सिपिडस किसके कारण होता है?

- (a) Deficiency of insulin/इंसुलिन की कमी
- (b) Excess of insulin/इंसुलिन की अधिकता
- (c) Hyposecretion of ADH / ADH का हाइपोस्राव
- (d) Hypersecretion of ADH / ADH का अत्यधिक स्राव

Kerala PSC Jr. Laboratory Asst. (07.07.2018)

Ans. (c) Diabetes insipidus is caused by problems with a vassopressin hormone which is also known as antidiuretic hormone (ADH). Which are not properly retain water from urine and kidneys do not work properly to keep enough water in the body.

86. Ideal time for collecting blood sample for detection of filarial worm is

फाइलेरिया कृमि का पता लगाने के लिए रक्त का नमूना एकत्र करनेका आदर्श समय है?

- (a) 2 pm – 4 pm
- (b) 10 pm – 2 am
- (c) 6 am – 8 am
- (d) 10 am – 2 pm

Kerala PSC Jr. Laboratory Asst. (07.07.2018)

Ans. (b) The filarial are thread like parasitic nematodes that transmitted by arthropod vectors. The microfilaria that cause lymphatic filariasis circulated into blood at night and the blood should be collected between 10 pm and 2 am.

87. Characters of acquired immunity are

अर्जित प्रतिरक्षा के लक्षण हैं

- (a) Specificity/विशिष्टता
- (b) Retains memory/स्मृति प्रतिधारण
- (c) Differentiate between self and non-self/स्व और गैर-स्व में अन्तर
- (d) All of these/यह सभी

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (d) Acquired immunity is characterized by specificity to pathogens, retention of memory for faster response upon re-exposure and the ability to distinguish between self and non-self cells.

Hence, all features apply.

88. An antibiotic is

एक ऐन्टिबायोटिक है

- (a) Chloramphenicol/क्लोरेम्फेनिकॉल
- (b) Ethephon/इथेफॉन
- (c) Phosphon-D/फॉस्फोन-D
- (d) None of these/इनमें से कोई नहीं

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (a) Chloramphenicol an antibiotic is a substance used to kill or inhibit the growth of bacteria. It is also been used for the treatment of typhoid and cholera.

Chloramphenicol is an antibiotic that inhibits protein synthesis.

89. Trench fever is caused by :

ट्रेंच बुखार किसके कारण होता है?

- (a) Bartonella quintana/बार्टोनेला क्विंटाना
- (b) Coxiella burnetii/कॉक्सिएला बर्नेटी
- (c) Orientia tsutsugamushi/ओरिएंटिया त्सुत्सुगामुशी
- (d) Rickettsia prowazekii/रिकेट्सिया प्रोवाजेकी

Kerala PSC Laboratory Technician Gr. II (09.05.2014)

Ans. (a) Trench fever is a louse-borne disease caused by the gram-negative bacteria *Bartonella quintana*. Trench fever is a moderately serious disease transmitted by body lice. Trench fever observed originally in military populations during world war I and II.

90. Which among the following diseases is not transmitted through blood transfusion?

निम्नलिखित में से कौन-सा रोग रक्त आधान के माध्यम से संचरित नहीं होता है?

- (a) HIV/एच.आई.वी.
 (b) Hepatitis B/हेपेटायटिस बी
 (c) Filariasis/फाइलेरियासिस
 (d) Hepatitis C/हेपेटायटिस सी

Kerala PSC Laboratory Technician Gr. II (09.05.2014)

Ans. (c) Filariasis is a disease that is not transmitted through blood transfusion. It is a vector born disease, meaning it is transmitted through insects such as mosquitoes.

91. Which among these is known as bad cholesterol?

इनमें से किसे खराब कोलेस्ट्रॉल के रूप में जाना जाता है?

- (a) HDL/एच डी एल (b) LDL/एलडीएल
 (c) IDL/आईडीएल (d) VLDL/वीएलडीएल

Kerala PSC Laboratory Technician Gr. II (09.05.2014)

Ans. (b) Low-density lipoprotein (LDL) cholesterol called as bad cholesterol that make up most of body's cholesterol

• Cholesterol is a waxy fat like substances that found in the cells in our body which is make by liver. High amount of cholesterol in blood raises a risk of coronary artery disease.

92. Sertoli cells are related to :

सर्टोली कोशिकाएँ सम्बन्धित है :

- (a) Nutrition of spermatozoa/शुक्राणुओं के पोषण से
 (b) Excretion/उत्सर्जन से
 (c) Respiration/श्वसन से
 (d) None of the above/उपर्युक्त में से कोई नहीं

UKSSSC Lab Assistant (19.05.2019)

Ans. (a) Sertoli cells are a type of somatic cell around which spermatids develop in the tubules of the testis, sertoli cell has also been called the mother or nurse cell which nourish developing sperm cells through the stages of spermatogenesis.

93. Endemic species are?

स्थानिक प्रजातियां कौन-सी होती हैं?

- (a) Rare species/विरल प्रजातियां
 (b) Species localized in a specific region/किसी विशिष्ट क्षेत्र में स्थानीयकृत प्रजातियां

(c) Cosmopolitan in distribution/वितरण में सार्वभौमिक

(d) Critically endangered species/बहुत अधिक खतरे में आने वाली प्रजातियां

MP VYAPAM Lab Technician (18.10.2015, Shift-III)

Ans. (b) Endemic species are plant and animal species that are found in a particular region. They are not naturally found any where else some species are endemic to a continent while others can be endemic to an island and mountain range etc.

94. General ratio of diluents to sperm is :

मंदक से शुक्राणु का सामान्य अनुपात है।

- (a) 1 : 1 to 4 (diluents : milt)/1 : 1 से 4 (मंदक : मिल्ट)
 (b) 1 : 1 to 6 (diluents : milt)/1 : 1 से 6 (मंदक : मिल्ट)
 (c) 1 : 1 to 10 (diluents : milt)/1 : 1 से 10 (मंदक : मिल्ट)
 (d) 1 : 1 to 12 (diluents : milt)/1 : 1 से 12 (मंदक : मिल्ट)

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (c) The correct ratio of 1 : 1 to 10 (diluents : milt) means that for every unit volume of milt, up to 10 units of diluents can be added. This range is designed to maintain sperm viability and motility while optimizing the conditions for fertilization.

95. Which of the following is not a viral disease?

निम्नलिखित में से क्या एक वायरल बीमारी नहीं है?

- (a) WSSV/डब्ल्यू एस एस वी
 (b) EUS/ई यू एस
 (c) IPNV/आई पी एन वी
 (d) TSV/टी एस वी

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) Epizootic ulcerative syndrome (EUS) also known as mycotic granulomatosis (MG) or red spot disease (RSD). It is a fungal disease caused by an oomycetes member called Aphanomyces invadans.

96. All forms of asexual reproduction shows certain common features that include :

अलैंगिक प्रजनन के सभी रूप कुछ सामान्य विशेषताओं को दर्शाते हैं, जिनमें शामिल हैं :

- (a) Mitotic cell division/माइटोटिक कोशिका विभाजन
 (b) Offspring identical to parents
 माता-पिता के समान संतान
 (c) Either one of the above/उपर्युक्त में से कोई एक
 (d) Both the above/उपर्युक्त दोनों

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (d) Asexual reproduction is a mode of reproduction in which a new offspring is produced by a single parents. i.e. They are the clones of their parents.

A mitosis is a form of asexual reproduction as the result of the cell cycle is two identical cells.

97. **Method of transmission of infection includes**
संक्रमण के संचरण की विधि में शामिल हैं

- (a) Inoculation /संरोपण
- (b) Inhalation/अंतश्चसन
- (c) Contact/संपर्क
- (d) All of the above/उक्त सभी

Haryana SSC Lab Technician (24.07.2021)

Ans. (c) Mode of transmission refers to how an infection agent can be transferred from one person to another as well as skin contact, sexual intercourse etc.

98. **The spermatids are transformed into sperms by the process called :**

शुक्राणुप्रसू रूपांतरित होकर स्पर्म बनाते हैं, इस प्रक्रिया को कहते हैं :

- (a) Spermiation/स्पर्मिएशन
- (b) Spermiogenesis/स्पर्मिओजेनेसिस
- (c) Spermatogenesis/स्पर्मेटोजेनेसिस
- (d) Spermatogonia/स्पर्मेटोगोनिया

RSMSSB Lab Assistant (29.06.2022)

Ans. (b) Spermatogenesis is the process by which haploid round spermatids developed from germ cells in the seminiferous tubules of the testicle spermatid cell change into spermatozoa by the process of spermiogenesis.

99. **Disease in which balance of sodium and potassium is disturbed and is caused by excess of aldosterone :**

रोग जिसमें सोडियम व पोटेशियम का संतुलन बिगड़ जाता है तथा यह एल्डोस्टेरॉन की अधिकतमा से उत्पन्न होता है :

- (a) Cushing's disease/कुशिंग रोग
- (b) Addison's disease/ऐडीसन का रोग
- (c) Conn's disease/कॉन्स रोग
- (d) Hirsutism/हिरसुटिज्म

RSMSSB Lab Assistant (29.06.2022)

Ans. (c) Conn's disease, also known as primary hyperaldosteronism, leads to an overproduction of aldosterone causing an imbalance in sodium and potassium levels.

100. **Malaria is caused by which micro-organism?**
मलेरिया किस सूक्ष्मजीव के कारण होता है?

- (a) Plasmodium vivax/प्लाज्मोडियम वाइवेक्स
- (b) Plasmodium Malariae/प्लाज्मोडियम मलेरियाई
- (c) Plasmodium Falciparum/प्लाज्मोडियम फेल्लिपेरम
- (d) All of these/उपरोक्त सभी

MP VYAPAM Lab Technician (17.10.2015)

Ans. (d) Malaria is an infection caused by a plasmodium parasite which is protozoa and transmitted by bite of infected mosquitoes. (Anopheles mosquitoes) Only four species of the protozoan genus plasmodium usually infect human P.falciparum, P.Vivax, P. Malariae and P. Ovale

101. **AIDS is caused by which type of micro-organism?**

एड्स किस प्रकार के सूक्ष्मजीव के कारण होता है?

- (a) Virus/वायरस
- (b) Bacteria/बैक्टीरिया
- (c) Fungus/फंगस
- (d) None of these/इनमें से कोई नहीं

MP VYAPAM Lab Technician (17.10.2015)

Ans. (a) AIDS (Acquired immune deficiency syndrome) is a viral disease that is caused by HIV Virus in which immune system is damage so that body is less able to fight infection and disease.

102. **What is the formation of sperm in a male called?**

पुरुष में शुक्राणु बनने की क्रिया को क्या कहते हैं?

- (a) Gametogenesis/गैमेटोजेनेसिस
- (b) Oogenesis/ऊजेनेसिस
- (c) Spermatocyte/स्पर्मेटोसाइट
- (d) Spermatogenesis/स्पर्मेटोजेनेसिस

MP VYAPAM Lab Technician (17.10.2015)

Ans. (d) Spermatogenesis is a process by which haploid spermatozoa developed from germ cells. Sperm production takes place inside the seminiferous tubules which is a convoluted cluster of tubes located inside the testes, Spermatogenesis begins at puberty when testosterone levels rise.

103. **RNA like particles that cause disease are**
रोग कारित करने वाले RNA जैसे कण हैं

- (a) Virus/वायरस
- (b) Viroid/वायरॉइड
- (c) Prion/प्रिऑन
- (d) Mycoplasma/माइकोप्लाज्मा

HPSSC Laboratory Assistant (10.07.2021)

Ans. (b) Viroids are small single stranded circular RNAs that infectious pathogen, they have no protein covering that causes several important diseases of cultivated plants. Viroids are the smallest known agents of infectious disease.

104. **_____ isoenzyme is elevated during myocardian infarction.**

दिल के दौरा के समय _____ आइसोएंजाइम बढ़ा हुआ होता है।

- (a) Amylase/एमाइलेज
- (b) G6-PD/ G6-PD
- (c) LDH/ LDH
- (d) CK - MB/ CK - MB

Gujarat AMC Lab Technicain (08.05.2022)

Ans.(d) During a myocardial infarction (MI), or heart attack, certain enzymes and isoenzymes are released into the bloodstream as a result of damage to the heart muscle. The key isoenzyme associated with myocardial infarction is CK - MB, which stands for creatine kinase-MB.

105. Which of the following is not an example of autosomal dominant trait?

निम्नलिखित में से कौन-सा एक ऑटोसोमल प्रबल लक्षण का उदाहरण नहीं है?

- (a) Cystic fibrosis/सिस्टिक फाइब्रोसिस
- (b) Brachydactyly/ब्रेकीडेक्टाइली
- (c) Huntington's disease/हंटिंगटन रोग
- (d) Marfan syndrome/मारफन सिंड्रोम

Gujarat AMC Lab Technicain (08.05.2022)

Ans. (a) Cystic fibrosis is an herited disease characterized by the build up of thick sticky mucus that can damage many of body's organs that passed down through families.

106. Kala azar is caused by the following parasite _____.

काला जार का कारण निम्नलिखित में से _____ परजीवी के कारण है।

- (a) Entamoeba histolytica/एंट-अमीबा हिस्टोलिका
- (b) Trypanosoma brucei/ट्राइपैनोसोमा ब्रुकाई
- (c) Leishmania donovani/लेसमानिया डोनोवानी
- (d) Plasmodium vivax/प्लाज्मोडियम वाइवैक्स

Gujarat AMC Lab Technicain (08.05.2022)

Ans. (c) Leishmania is a parasitic protozoa which responisble for the disease leishmaniasis that spread by sand fly of the genus phlebotomus in the old world. Leishmania parasites are found in tropical end sub-tropical areas of the world.

107. Cortisone is used as an Effective anti-inflammatory drug in the treatment of

कोर्टिसोन को के उपचार में सूजन रोधी औषधि के रूप में प्रयोग किया जाता है।

- (a) High blood pressure/उच्च रक्त चाप
- (b) Atherosclerosis/एथेरोस्लेरोसिस
- (c) Arthritis/अर्थराइटिस
- (d) Diabetes/मधुमेह

RRB Lab Technician (10.06.2015)

Ans. (c) Arthritis is a joint disorder in which the inflammation of one or more joints leading to pain. The cortisone inhibits the inflammatory effect of circulating monocytes and eosinophils thus contributing to relief of acute symptoms.

108. A disease caused by allergic disease is called: एलर्जी रोग के कारण होने वाले रोग को कहते हैं:

- (a) Asthma/अस्थमा
- (b) Tuberculosis/क्षय
- (c) Cancer/कैंसर
- (d) Gastroenteritis/गैस्ट्रोएंटेराइटिस

RRB Lab Technician (10.06.2015)

Ans. (a) A disease caused by allergic disease is called Asthma. It triggered by allergens like pollen, dust or pet dander etc. Asthma (Bronchial asthma) is a lung disease in which airways get narrow and swollen and blocked by excess mucus it is a chronic respiratory illness makes it harder to breath.

109. Inability to sleep is termed as : सोने की अक्षमता को कहा जाता है।

- (a) Dyspepsia/अपच/अजीर्ण/बदहजमी
- (b) Dyspnaea/डास्पिनिया
- (c) Anorexia/एनोरिक्सया
- (d) Insomnia/इंसोमनिया

RRB Lab Technician (10.06.2015)

Ans. (d) Insomnia is a common sleep disorder that can make it hard to fall asleep or stay a sleep depression anxiety lack of exercise chronic illness or certain medication.

110. An agent that has power to kill micro-organism:

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

- (a) Bacteriostat/बैक्टीरियोस्टेट
- (b) Bacteriocide/बैक्टीरियोसाइड
- (c) Antiseptic/एंटीसेप्टिक
- (d) Bacteriostasis/बैक्टीरियोस्टेसिस

RRB Lab Technician (10.06.2015)

Ans. (b) Bacteriocides are substances that may be used for the cleaning of consumer products.

- Bacteriocide is a substances which kills bacteria which nature are antiseptics or antibiotics and used to control sulfate-reducing bacteria slime forming bacteria iron oxidizing bacteria bacteriostatic antibiotics suppress the growth of bacteria
- Any substances that inhibits the growth of infections microorganisms called antiseptic.

111. 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

RRB Lab Technician (10.06.2015)

Ans. (a) Savlon is a antiseptic (liquid) which is use to wound wash for first aid treatment it provide protection against infection by cleaning or killing bacteria in cuts dilute 1 part savlon antiseptic liquid in 15 parts of H₂O before applying over cuts and scrapes.

112. 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

RRB Lab Technician (10.06.2015)

Ans. (b) Symptom is that a person feel or experiences that may indicate that they have a disease they can not be observed by a health care provider sign are externally observable while diagnosis is a process of determining the nature of a disease or disorder.

113. is the permanent method of sterilization.

बंध्याकरण की स्थायी विधि है।

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

RRB Lab Technician (10.06.2015)

Ans. (c) Tubectomy is a permanent method of women sterilization in which blocks the fallopian tubes by surgical method to preventing the egg released by ovary for reaching the uterus.

114. The following are the signs of dehydration except:

निम्नलिखित में से छोड़कर निर्जलीकरण का संकेत है:

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

RRB Lab Technician (10.06.2015)

Ans. (c) Diuresis refers to excessive urination, which is not a sign of dehydration but rather may indicate other conditions such as diabetes or excessive fluid intake.

115. 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।

- (a) Cholera/कॉलेरा (हैजा)
(b) Haemophilia/हीमोफीलिया
(c) Cancer/कैंसर (कैंसर)
(d) Sickle cell anaemia/दाब कोशिका पांडुरोग

RRB Lab Technician (10.06.2015)

Ans. (c) Cobalt therapy is the medical use of gamma rays from the radioisotope cobalt-60 to treat conditions such as cancer which emits gamma radiation with the help of this radiation that cancer cells are destroyed. Radium 223 dichloride act on bone metastases killing the tumor cells and reducing the pain that can course.

116. The disease that spread through sexual contact is

वह रोग जो यौन सम्बन्ध से फैलता है

- (a) Leprosy/कुष्ठ (b) AIDS/एड्स
(c) Itches/खुजली (d) Scabies/खाज

RRB Lab Technician (10.06.2015)

Ans. (b) HIV (Human immunodeficiency virus) is a virus that attacks cells that help the body fight infection it spread by body fluid of a person with HIV sex etc. HIV can lead to the disease AIDS (acquired immunodeficiency syndrome).

117. is example for the disease caused by bacteria:/जीवाणु के कारण होने वाले रोग का उदाहरण है:

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

RRB Lab Technician (10.06.2015)

Ans. (b) Typhoid is a bacterial infection that spread through contaminated food and water

• Typhoid fever is a life threatening infection caused by the bacterium *Salmonella typhi* they multiply and spread into the blood stream.

118. is caused by the fungus.

कवक के कारण होता है।

- (a) Malaria/मलेरिया
(b) Athletes foot/एथलीट्स फूट
(c) Filariasis/फाइलेरियासिस
(d) Typhus fever/टाइफस ज्वर

RRB Lab Technician (10.06.2015)

Ans. (b) Athletes foot is caused by fungi that normally live on skin hair called dermatophytes. It commonly occurs in people whose feet have become very sweaty while confined within tight fitting shoes cured by *Tinea pedis*.

119. Hormone secreted by the testes :

वृषण से हार्मोन स्रावित होता है:

- (a) Oestrogen/एस्ट्रोजन (b) Pitocin/पिटोसिन
(c) Androgens/एन्ड्रोजन (d) Progesterone/प्रोजेस्ट्रॉन

RRB Lab Technician (10.06.2015)

Ans. (c) Androgen is a steroid hormone that regulate the male characteristics in vertebrates by binding to androgen receptors. The predominant and most active androgen is testosterone which is produced by the male testes.

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

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

- (a) Quarentine/संगरोध
- (b) Recovery period/वसूली अवधि
- (c) Incubation/रुष्मायन
- (d) Isolation period/अलगाव अवधि

RRB Lab Technician (10.06.2015)

Ans. (c) Incubation period is the time from exposure to an infections agent to when you actually develop symptoms.
It is variable depending upon the pathogen and the immunity of the host.

121. Route of transmission of Hepatitis B :
हेपेटाइटिस बी के संचरण का मार्ग

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

RRB Lab Technician (10.06.2015)

Ans. (b) Hepatitis B is transmitted through blood and bodily fluids, including unprotected sex, sharing needles and from mother to child during birth. It is not spread via oral or contaminated water routes.

122. Mode of transmission of typhoid fever:
टाइफाइड बुखार के संचरण का तरीका

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

RRB Lab Technician (10.06.2015)

Ans. (b) The mode of transmission of typhoid fever primarily through contaminated food and water, which is a faecal-oral route. This means that the bacteria causing typhoid fever, *Salmonella typhi* are typically passed in the faeces and some times in the urine of infected people.

123. Causative organism of diphtheria
डिप्थीरिया का कारण जीव :

- (a) Mycobacteria/माइकोबैक्टीरिया
- (b) Streptococcus/स्ट्रेप्टोकोकस
- (c) Coryne Bacterium diphtheria
कोरिन बैक्टीरिया डिप्थीरिया
- (d) Staphylococcus/स्टैफिलोकोकस

RRB Lab Technician (10.06.2015)

Ans. (c) Diphtheria is a bacterial infection caused by *Corynebacterium diphtheria* it infects the respiratory system causes weakness sore throat mild fever and swollen grand's in neck.

124. Incubation period of measles :
खसरे का रुष्मायन अवधि होती है।

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

RRB Lab Technician (10.06.2015)

Ans. (b) Measles is a viral infection that spreads through the air by respiratory droplets produced from coughing or sneezing by the infected person. Symptoms usually develop 10-12 days after exposure to an infected person and last 7-10 days.

125. Site for Mantoux Test

मैनटॉक्स परीक्षण का स्थान है:

- (a) Outer and upper quadrant of gluteus maximus
ग्लूटियस मैक्सिमस का बाहरी तथा ऊपरी चौथाई भाग
- (b) Deltoid Left region
डेल्टॉयड बाँया क्षेत्र
- (c) Posterior left forearm
पिछला बाँयी बाँह
- (d) Anterior left forearm
अग्र बाँयी बाँह

RRB Lab Technician (10.06.2015)

Ans. (d) Anterior left forearm is the site for the mantoux test which is used to screen for tuberculosis. The test involves an intradermal injection on the flexor surface of the left forearm, mid-way between the elbow and wrist.

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

ट्यूबर्कल बैसिल्ली का गोजातीय प्रकार का संचरण माध्यम होता है:

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

RRB Lab Technician (10.06.2015)

Ans. (a) The primary media of transmission for bovine type of tubercle bacilli, which is *Mycobacterium bovis*, is trough milk. It is casually transmitted to humans by consuming raw milk from infected cows.

127. Painful Micturition :

पीड़ायुक्त पेशाब का होना (Micturition) होता है:

- (a) Eneuresis/शय्या मूत्रण
- (b) Dysuria/पेशाब में जलन
- (c) Retention of urine/पेशाब का अवरोध
- (d) Diarrhoea/अतिसार

RRB Lab Technician (10.06.2015)

Ans. (b) Dysuria is a painful urination or burning sensation during urination which is generally occurs due to bacterial infection of the urinary tract. It is more common in women.

128. 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:

- (a) 100-250 ml
- (b) 250-350 ml
- (c) 500-1000 ml
- (d) 1000-1500 ml

RRB Lab Technician (10.06.2015)

Ans. (c) The correct amount of solution used for an evacuant enema in adults is typically 500-1000 ml.

129. Mode of transmission of Pertussis :

पर्तुसिस 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) /Faecooral/फेकोरल

RRB Lab Technician (10.06.2015)

Ans. (c) Pertussis is a serious bacterial infection of lunge and breathing tubes that spread easily by the droplet infection initial symptom are usually similar to those of the common cold with a runny nose fever and mild cough.

130. Time required to measure the Mantoux test.

मंटॉक्स परीक्षण को मापने के लिए आवश्यक समय है?

- (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

RRB Lab Technician (10.06.2015)

Ans. (b) The Mantoux test is a tool for screening for tuberculosis. It is the major tuberculin skin tests used around the world. It should be read between 48 and 72 hours after administration.

131. 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

RRB Lab Technician (10.06.2015)

Ans. (d) Polio vaccines are used to prevent poliomyelitis which is developed by Dr. Albert sabin and first used in 1961. Which has played a key role in nearly eradicating.

132. 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.

RRB Lab Technician (10.06.2015)

Ans. (a) Chloromycin is used to treatment of bacterial infections that works by stopping the growth of bacteria.

• Antibiotic is a type of antimicrobial substances active against bacteria make it difficult for bacteria grow and multiply.

133. Which is primary sex organ?

कौन सा प्राथमिक यौन अंग है?

- (a) Vagina/योनि
- (b) Ovary/अण्डाशय
- (c) Uterus/गर्भाशय
- (d) Fallopian tubes/डिम्ब वाहिनी

HPSSC Laboratory Assistant(11.02.2021)

Ans.(b) Primary sex organ involved in the formation of gamete and sex hormones. While the secondary sex organs include glands, organ or duct which do not form any gamete but involved in sexual reproduction. So the ovary is the primary sex organ.

134. Which of the following is a STD?

निम्न में से कौन सा STD है ?

- (a) Cancer/कैंसर
- (b) Malaria/मलेरिया
- (c) Pneumonia/न्यूमोनिया
- (d) Trichomoniasis/ट्राइकोमोनियासिस

HPSSC Laboratory Assistant(11.02.2021)

Ans.(d) Trichomoniasis is a sexual transmitted infection caused by *Trichomonos vaginalis* which is a single celled protozoa produces mechanical stress on host cells and then ingests cell fragments after death.

135. Cob-web clot of CSF indicate:

CSF कॉब-वेब क्लॉट प्रदर्शित करता है :

- (a) Cryptococcal meningitis
क्रिप्टोकोकोकल मेनिनजाइटिस
- (b) Encephalitis/ इंसेफलाइटिस
- (c) Poliomyelitis/ पोलियोमायलिटिस
- (d) Tuberculous meningitis
ट्यूबरक्यूलस मेनिनजाइटिस

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (d) The CSF parameters is differentiating between intracerebral hemorrhage and cerebral infarction. A spider web clot in the CSF that has been collected is rare but indicative of TB meningitis.

136. The main sugar present in semen :

वीर्य में मुख्य शर्करा उपस्थित होता है।

- (a) Glucose/ग्लूकोज
- (b) Lactose/लैटोज
- (c) Sucrose/सुक्रोज
- (d) Fructose/फ्रक्टोज

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (d) Semen is unique among body fluids for a high concentration of the monosaccharides fructose which required to support sperm viability function and motility.

137. The following are biological hazards except :
निम्नलिखित में से छोड़कर जैविक जोखिम है :

- (a) Anaemia/एनीमिया (b) AIDS/एड्स
(c) Hepatitis/हेपेटाइटिस (d) Tuberculosis/तपेदिक

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (a) Biological hazard is a biological substance that poses a threat to the health of living organism. The main biological hazards encountered in food induce bacteria. Viruses which can have severely adverse health effects.

The most common nutritional cause of anemia is iron deficiency.

138. In which parasitic infection DEC Provocation test is used?

DEC उत्तेजित परीक्षण किस परजीवी संक्रमण में प्रयोग होता है?

- (a) Wuchereria bancrofti/वुचरेरिया बैंक्रॉफ्टी
(b) Ascaris lumbricoids/एस्केरिस लुम्ब्रिकोइड्स
(c) Entamoeba histolytica/एण्ट अमीबा हिस्टोलिटिका
(d) Tape worms/फीता कृमि

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (a) The diethylcarbamazine (DEC) provocation day test is used to diagnose the *Wuchereria bancrofti* infections in area where microfilariae exhibit nocturnal periodicity.

139. Black water fever is associated with the infection of.

कालाजार संक्रमण से सम्बन्धित है।

- (a) P. vivax/पी. वाइवैक्स
(b) P. falciparum/पी-फैल्सीपेरम
(c) P. ovale/पी-ओवेल
(d) P. malariae/पी-मलेरिया

Kerala PSC Laboratory Technician (29.01.2015)

Ans. (b) Black water fever is a severe clinical syndrome occurring as a complication of malarial infection characterized by intravascular hemolysis caused by heavy parasitization of red blood cells with *Plasmodium falciparum*.

140. Gastric diseases are those which are related to गैस्ट्रिक रोग वह है जो सम्बन्धित होता है :

- (a) Stomach/आमाशय (b) Intestine/आंत
(c) Lungs/फेफड़ा (d) Liver/यकृत

Gujarat VMC Lab Technician (28.03.2021)

Ans. (a) Gastrointestinal disease is disorders of the digestive tract which made up of mouth to anus functional disease are those in which the GI tract appears normal but does not move properly Ex-constipation food poisoning gas blotting.

141. Which of the following are disease that are caused by viruses? These viruses primarily affect the nervous system.

निम्नलिखित में से कौन-सा रोग है जिसका कारण विषाणु है? ये विषाणु प्राथमिक रूप से तंत्रिका तंत्र को प्रभावित करता है।

- (i) Poliomyelitis/पोलियोमेरूरज्जुशोथ
(ii) influenza/इंफ्लूएंजा
(iii) Bronchial pneumonia/ब्रोकाइल न्यूमोनिया
(iv) Rabies/रेबीज

- (a) i and ii (b) i and iii
(c) i and iv (d) ii and iv

Gujarat VMC Lab Technician (28.03.2021)

Ans. (c) The disease caused by viruses that primarily affects the nervous system is poliomyelitis and Rabies.

- Poliomyelitis a viral disease that can affect nerves and can lead to partial or full paralysis.
- Rabies - a viral infection that causes inflammation of the brain in humans and other mammals.

142. ELISA test is used for the diagnosis of एलिसा परीक्षण के निदान के लिए उपयोग किया जाता है :

- (a) Migraine/माइग्रेन (b) Hepatitis/हेपेटाइटिस
(c) Diabetes/मधुमेह (d) AIDS/एड्स

Gujarat VMC Lab Technician (28.03.2021)

Ans. (d) The enzyme linked immunosorbent assay (ELISA) is commonly used to detect antibodies in the blood which is produced by the body's immune system when it detects harmful substances called antigen. It used to detect virus infection especially blood borne viruses such as HBV, HIV etc.

143. Diseases caused by vectors are called रोगवाहकों द्वारा उत्पन्न होने वाला रोग कहलाता है।

- (a) Zoonoses /पशु जनित
(b) Arthropod borne /संधिपाद जनित
(c) Water borne /जल जनित
(d) Food borne /खाद्य जनित

Gujarat VMC Lab Technician (28.03.2021)

Ans. (a) Zoonoses are infection that people can get from animals. (Vertebrate animals) major modern diseases such as Ebola and salmonellosis are zoonoses the disease in directly transmitted like rabies and influenza.

144. The complete absence of semen ejaculation is called

वीर्य-स्खलन की पूर्ण अनुपस्थिति को कहा जाता है :

- (a) Oligospermia/ओलिगोस्पर्मिया
(b) Hypospermia/हाइपो-स्पर्मिया
(c) Hyperspermia/हाइपर-स्पर्मिया
(d) Aspermia/ए-स्पर्मिया

Gujarat VMC Lab Technician (28.03.2021)

Ans. (d) Aspermia is a abnormal results are found on the semen analysis. In which complete absence of seminal fluid emission upon ejaculation. There can be many causes of male factor infertility but causes unknown.

145. Diabetes mellitus occurs due to डायबिटीज मेलिटस किसके कारण से होता है।

- (a) Increased blood sugar level
बढ़ा हुआ रक्त शर्करा होता है।
- (b) Decreased blood sugar level
घटा हुआ रक्त शर्करा स्तर
- (c) Increased blood urea level
बढ़ा हुआ रक्त यूरिया स्तर
- (d) Decreased blood urea level
घटा हुआ रक्त यूरिया स्तर

Gujarat VMC Lab Technician (28.03.2021)

Ans. (a) Diabetes is a condition that happens when your blood sugar is too high it develops when your pancreas does not make insulin.

146. In _____, Bacillus mucosus capsulatus organism is found with the pneumococcus. _____ में, बैसिलस म्यूकोसस कैप्सूलैटस आर्गेनिज्म न्यूमोकोकस के साथ पाया जाता है।

- (a) Pneumonia/न्यूमोनिया
- (b) Tuberculosis/क्षयरोग
- (c) Pharyngitis/फैरिंजाइटिस
- (d) Pneumothorax/न्यूमोथोरेक्स

DSSSB Laboratory Technician (2012)

Ans. (a) Pneumonia is a viral infection that inflames air sacs in one or both lungs. Which may filled with fluid pneumonia can be very serious and can cause death.

147. Wilson's disease is a disorder of abnormal _____ metabolism. विलसन रोग असामान्य _____ चयापचय का एक विकार है।

- (a) Copper/ताँबा
- (b) Iodine/आयोडीन
- (c) Manganese/मैंगनीज
- (d) Zinc/जस्ता

DSSSB Laboratory Technician (2012)

Ans. (a) Wilson's disease is an inherited disorder in which copper accumulate in the organs especially in liver and brain. It can lead to high copper levels that cause life threatening organ damage.

148. Leprosy is caused by कोढ़ _____ के कारण होता है।

- (a) Mycobacterium tuberculosis/माइकोबैक्टीरियम ट्यूबरकुलोसिस
- (b) Mycobacterium leprae/ माइकोबैक्टीरियम लेप्री

- (c) Mycobacterium bovis/ माइकोबैक्टीरियम बोविस
- (d) None of the above/उक्त में से कोई नहीं

DSSSB Laboratory Technician (2012)

Ans. (b) Leprosy is an infectious disease that cause skin lesions and nerve damage. It is caused by *mycobacterium leprae*.

It mainly affects the skin, eyes, nose and peripheral nerve.

149. Oral thrush is caused by मुँह के छाले _____ के कारण होते हैं।

- (a) Penicillium/पेनिसिलियम
- (b) Fusarium/फ्यूजेरियम
- (c) Candida/कैंडिडा
- (d) None of the above/उक्त में से कोई नहीं

DSSSB Laboratory Technician (2012)

Ans. (c) Oral thrush is an infection caused by fungus Candida in which creamy white lesions on tongue or inner cheeks. It can quick become irritated and cause mouth pain and redness.

150. In AIDS, there occur depletion of एड्स _____ के कमी से आ जाती है।

- (a) CD4 lymphocytes/CD4 लिंफोसाइट
- (b) Monocytes/मोनोसाइट
- (c) Granulocytes/ग्रेन्यूलोसाइट
- (d) Reticulocytes/रेटिकुलोसाइट

DSSSB Laboratory Technician (2012)

Ans. (a) CD4 cells are type of white blood cell. That help fight infection by triggering immune system to destroy viruses bacteria that they make sick . HIV attacks and destroys CD4 cells that may destroy so many CD4 cells

151. Erysipelas and impetigo are typical _____ infections of the skin.

एरिसीपेलस और इंपेटिगो त्वचा के _____ संक्रमण है।

- (a) Staphylococcal/स्टेफाइलोकोकल
- (b) Streptococcal/स्ट्रेप्टोकोकल
- (c) Pneumococcal/न्यूमोकोकल
- (d) None of the above/उक्त में से कोई नहीं

DSSSB Laboratory Technician (2012)

Ans. (b) Impetigo in an non-life threatening infection but can result in post Streptococcal acute erysipelas caused by bacterial infection characterized by large raised red patches on skin caused by Streptococcus bacteria.

152. Removal of entire diseased part of the tissue is known as

उक्त के रोगग्रस्त भाग को पूरा निकाल देना _____ कहलाता है।

- (a) Incision biopsy/इन्सिजन बायोप्सी
- (b) Excision biopsy/एक्सिजन बायोप्सी
- (c) Punch biopsy/पंच बायोप्सी
- (d) Cone surgery/कोन सर्जरी

DSSSB Laboratory Technician (2012)

Ans. (b) Excision biopsy is a surgical procedure in which a small amount of healthy tissue around the abnormal area may also be removed (entire tumor).

153. The damage of human body due to radiation (X-rays or gamma rays) is measured in विकिरण (X-किरण अथवा गामा किरणों) के कारण मानव शरीर की क्षति को मापा जाता है

- (a) Rems /रेम्स
- (b) Roentgen /रोएन्टजन
- (c) Curei /क्यूरी
- (d) Rads /रैड

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (a) Rems is a units of radiation dosage applied to humans roentgen.

Equivalent man (rem) is a unit of equivalent dose effective dose and committed dose which used to measured to health effects of low levels of ionizing radiation on the human body.

154. Which is caused by deficiency of iodine ? आयोडीन की कमी से क्या होता है?

- (a) Hyperthyroidism /हाइपरथायरोइडिज्म
- (b) Goitre /गेंघा
- (c) Diabetes /मधुमेह
- (d) None of these /इनमें से कोई नहीं

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (b) Goitre happens when thyroid gland grows larger iodine deficiency is the most common cause of goiter. Body required iodine to produce thyroid hormone.

155. Human cloning is permitted in Britain for the purpose of किस प्रयोजन के लिए ब्रिटेन में मानव क्लोनिंग की अनुमति है?

- (a) Genetics /आनुवंशिकी
- (b) Research /अनुसंधान
- (c) Reproduction /जनन
- (d) Therapeutics /चिकित्सा

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (d) Human cloning is the creation of a genetically identical copy of human including techniques used to collect embryonic stem cells.

Therapeutics treatment and care of a patient for the purpose of preventing and combating disease or alleviating pain.

156. The sleeping sickness is caused by निद्रालु रोग इसके कारण होता है

- (a) Escherichia sp. /एशरिकिआ स्पी.
- (b) Neisseria sp. /नाइजीरिया स्पी.
- (c) Entamoeba sp. /एण्टामीबा स्पी.
- (d) Trypanosoma sp. /ट्रिपैनोसोमा स्पी.

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Ans. (d) African sleeping sickness (Trypanosomiasis) is a vector -borne parasitic disease caused by protozoans of genus Trypanosoma which transmitted by tse-tse flies (Glossina) it results in swelling of brain.

157. During bone marrow aspiration 'dry tap' is observed in

अस्थि-मज्जा चूषण के दौरान 'ड्राइ टैप' प्रेक्षित होता है

- (a) Aplastic anemia/एप्लास्टिक एनीमिया में
- (b) Myelofibrosis/मायलोफाइब्रोसिस में
- (c) Acute leukemia/तीव्र ल्यूकेमिया में
- (d) All of these/यह सभी में

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Ans. (d) Dry tap is a bone marrow aspiration in which no material entered the aspiration syringe which used to diagnosis and management of many hematological diseases depends on examination of the bone marrow.

- A plastic anemia is a condition in which body stops producing new blood cells.
- Myelofibrosis is a rare blood cancer where scar tissue forms in bone marrow.
- Acute leukemia is a blood cancer that affect WBCs.

158. Bence Jones proteins are seen in बेन्स जोन्स प्रोटीन दिखाई देते हैं

- (a) Haemolytic anemia/रुधिरलयी एनीमिया
- (b) Multiple myeloma/मल्टीपल मायलोमा
- (c) Leukemia/ल्यूकेमिया
- (d) Thrombocytopenia/थ्रॉम्बोसायटोपीनिया

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Ans. (b) Bence Jones protein is a monoclonal globulin protein found in urine that are particularly diagnostic of multiple myeloma in the context of target organ

- Multiple myeloma is a blood cancer affects plasma cells.

159. What is the cavity within a secondary follicle? द्वितीयक फॉलिकल में कोटर क्या है?

- (a) Graafian follicle /ग्राफियन फॉलिकल
- (b) Zona pellucida /जोना पेल्लुसिडा

- (c) Theca folliculi /थीका फॉलिकुलाई
(d) Antrum /एन्ट्रम

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Ans. (d) The follicular antrum is the portion of ovarian follicle filled with follicular fluid which provide the environments for development of oocyte.

160. Property of acquiring antibiotic resistance from viral colony is by विषाणु निवह से प्रतिजैविक प्रतिरोध अर्जित करने का गुण है

- (a) Transference/स्थानान्तरण द्वारा
(b) Conjugation/संयुग्मन द्वारा
(c) Transduction/पारक्रमण द्वारा
(d) Mutation/उत्परिवर्तन द्वारा

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Ans. (c) Transduction is a mode of genetic transfer from one bacteria to another through a virus that promoting genetic diversity, enhance survival in changing environment as well as antibiotic resistance or capability to metabolise new substrates.

161. Which of the following is a monogenetic parasite ? निम्न कौन सा एक मोनोजेनेटिक परजीवी है?

- (a) Hydra /हाइड्रा
(b) Fasciola /फैसिओला
(c) Ascaris /एस्कैरिस
(d) Earthworm /केंचुआ

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Ans.(c) Ascaris is a monogenetic parasite that complete their life cycle in only one individual host i.e. human causes the disease as ascariasis.

162. Which of the following combinations shows antagonism ? निम्न में से कौन सा संयोजन एन्टागोनिज्म दर्शाता है?

- (a) Aspirin + Warfarin /एस्पिरिन + वारफेरिन
(b) Nitrofurantoin + Nalidixic acid /नाइट्रोफ्युरेन्टोइन + नेलिडिक्सिक एसिड
(c) Ceftazimide + Gentamicin /सेफ्टाजिमाइड + जेन्टामाइसिन
(d) Imipenem + Cilastatin /इमिपेनम + सिलेस्टैन

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Ans.(b) Nitrofurantoin is an antibiotic medication that is used for the treatment of urinary tract infections which disrupt ribosomal RNA, DNA and other intracellular substances.

• Nitrofurantoin inhibits the antibacterial action of nalidixic acid nitrofurantoin will not work for colds flu or other viral infection.

163. Tetanus infection is characterized by all, except:

टीटेनेस के संक्रमण का लक्षण निम्न में से एक को छोड़कर सभी है:

- (a) Muscle spasm /पेशी स्पाज्म
(b) Fever /ज्वर
(c) Trouble swallowing /निगलने में कठिनाई
(d) Difficulty in urination /पेशाब में कठिनाई

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Ans.(d) Tetanus is a serious bacterial disease caused by Clostridium tetani that causes painful muscles spasms and can lead to death it may causes a fast pulse, fever, sweating, painful muscle spasms and trouble swallowing etc.

164. Amodiaquine an antimalarial drug belongs to एमाइडोक्वीन एक एन्टीमलेरिया औषधि है जो निम्न के अन्तर्गत आती है:

- (a) 4-amino quinolines /4-एमीनो क्वीनोलीन
(b) 8-amino quinolines /8- एमीनो क्वीनोलीन
(c) 2,4-diamino pyrimidine/2,4-डाइएमीनों पिरिमिडीन
(d) 1, 3-diamino acridine /1, 3-डाइएमीनों एक्रिडीन

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Ans.(a) Amodiaquine is a medication used to treat malaria and more effective than chloroquine while the mechanism of action to similar to that of chloroquine amodiaquine is a 4-aminoquinoline compound related to chloroquine.

165. Sulphadimethoxine is a/an सल्फाडाइमेथॉक्सिन है एक

- (a) Short acting sulpha drug /अल्पावधि प्रभावी सल्फा ड्रग
(b) Intermediate acting sulpha drug /मध्यवर्ती प्रभावी सल्फा ड्रग
(c) Long acting sulpha drug /दीर्घावधि प्रभावी सल्फा ड्रग
(d) Extra-long acting sulpha drug /अति दीर्घावधि प्रभावी सल्फा ड्रग

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Ans.(d) Sulphadimethoxine is the only drug that used to treat bacterial and protozoal pathogen in reptiles used mainly in veterinary medicine to treat coccidiosis as well as other infection.

166. Gentamycin belongs to which class ? जेन्टामाइसिन किस वर्ग के अन्तर्गत आती है?

- (a) Aminoglycoside antibiotic /एमीनो ग्लाइकोसाइड प्रतिजैविक
(b) Beta lactum antibiotics /बीटा लैक्टम प्रतिजैविक

- (c) Peptide antibiotics /पेप्टाइड प्रतिजैविक
(d) Macrolide antibiotics /मैक्रोलाइड प्रति जैविक

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Ans.(a) Gentamycin belongs to class aminoglycoside antibiotics which is used to killing bacteria or preventing their growth in many different part of body it rapidly crosses the placenta.

167. P³² is used as

P³² उपयोग में लिया जाता है

- (a) Investigation of blood disorder /रक्त विकृति की जाँच करने में
(b) Treatment of Thyroid gland /थायरॉयड ग्रंथि के उपचार में
(c) Treatment of Polycythaemia /पॉलीसाइथेमिया के उपचार में
(d) Investigation of Colon /कोलोन की जाँच करने में

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Ans.(c) P³² (Phosphorus) is a radioactive isotope of phosphorus whose nucleus consists of 15 protons and 17 neutrons it is used in the treatment of blood disorder called polycythemia (Type of leukemia).

168. Which is a systemic antacid ?

सिस्टेमिक आंट एसिड क्या है?

- (a) Magnesium hydroxide /मैग्नीशियम हाइड्रॉक्साइड
(b) Aluminium hydroxide /एल्युमिनियम हाइड्रॉक्साइड
(c) Sodium bicarbonate /सोडियम बाइकार्बोनेट
(d) Sodium carbonate /सोडियम कार्बोनेट

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Ans.(c) Systemic antacids are antacids which get systemically absorbed Ex-sodium bicarbonate.

• Antacid is a substance that neutralizes stomach acidity and relieve indigestion or upset stomach.

169. Parasympathomimetic drugs cause

पैरासिम्पैथोमिमेटिक ड्रग उत्पन्न करता है

- (a) Bronchodilation /ब्राँकोडाइलेशन
(b) Mydriasis /माइड्रियासिस
(c) Bradycardia /ब्रेडिकार्डिया
(d) Constipation /कास्टिपेशन

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Ans.(c) Parasympathomimetic drug used to activate the nervous system by modifying the effects of acetylcholine.

• These drugs are sometime used to treat slow heart rhythms (bradycardia).

170. Chloroquine is used for treatment of malaria caused by

क्लोरोक्वीन का उपयोग मलेरिया के उपचार में होता है, जो

- (a) P. ovale /पी. ओवेल द्वारा उत्पन्न हुआ हो।
(b) P. vivax /पी. वाइवेक्स द्वारा उत्पन्न हुआ हो।
(c) P. malaria /पी. मलेरिया द्वारा उत्पन्न हुआ हो।
(d) All of these /इन सभी द्वारा उत्पन्न हुआ हो।

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Ans.(d) Chloroquine is a medication used to treat malaria a red blood cell infection transmitted by the bite of a mosquito. It inhibits DNA and RNA biosynthesis and produces rapid degradation of ribosome's.

171. Skin discolouration from red-brown-black is caused by

लाल-भूरी-काली त्वचा का विरंजन होता है

- (a) Dapsone /डैप्सोन द्वारा
(b) Ethambutol /एथेम्ब्युटॉल द्वारा
(c) Rifampicin /रिफाम्पिसिन द्वारा
(d) Clofazimine /क्लोफेजिमाइन द्वारा

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Ans.(d) Clofazimine is a riminophenazine dye that has been extensively used for the treatment of leprosy or other skin diseases in very common and is unacceptable to some patients.

172. Furosemide is

फ्युरोसिमाइड है

- (a) Loop diuretics /लूप-डाइयूरेटिक्स
(b) Osmotic diuretics /ऑस्मोटिक यूरेटिक्स
(c) Thiazide diuretics /थायजाइड यूरेटिक्स
(d) Potassium sparing diuretics /पोटैशियम स्पेरिंग डाइयूरेटिक्स

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Ans.(a) Furosemide is a type of diuretic that treat high blood pressure, heart failure and oedema.

• It promotes diuresis by blocking tubular reabsorption of Na⁺ and Cl⁻ in proximal and distal tubules.

173. Calcium channel blocker produce cardiac effect by/कैल्सियम चैनल ब्लॉकर कार्डिक प्रभाव उत्पन्न करता है

- (a) Negative inotropy /निगेटिव इनोट्रोपी द्वारा
(b) Negative chronotropy /निगेटिव क्रोनोट्रोपी द्वारा
(c) Negative dromotropy /निगेटिव ड्रोमोट्रोपी द्वारा
(d) All of these /इन सभी के द्वारा

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Ans. (d) Calcium channel blockers are the medicines that used to lower blood pressure angina pressure angina pectoris and preventing migraine

- Negative inotropes weakens the heart contraction chromotropy (increases heart rate) and dromotropy (increase rate of conduction through AV node).

174. Acetylcholine and physostigmine are examples of which type of drug interactions ?

एसिटिलकोलिन तथा फायसोस्टिग्माइन निम्न किस प्रकार का ड्रग अन्तर्क्रिया का उदाहरण है?

- (a) Synergism/सीनर्जिज्म
- (b) Addition/योगशील
- (c) Potentiation/पोटेंशिएशन
- (d) Antagonism/एन्टागोनिज्म

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Ans.(c) Potentiation is a complex process leading to persistent strengthening of synapses.

- Potentiation when one drug does not elicit a response on its own but enhances the response to another drug.

175. Beta agonist used in bronchial asthma exert action by

बीटा एगोनिस्ट जिसका उपयोग ब्रॉकियल अस्थमा में होता है अपना असर डालता है

- (a) Blocking β_1 receptor/ β_1 रिसेप्टर को ब्लॉक करके
- (b) Blocking β_2 receptor/ β_2 रिसेप्टर को ब्लॉक करके
- (c) Stimulating β_1 receptor/ β_1 रिसेप्टर को उत्तेजित करके
- (d) Stimulating β_2 receptor/ β_2 रिसेप्टर को उत्तेजित करके

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Ans.(d) β agonist constitute the frontline treatment for both asthma and COPD (Chronic obstructive pulmonary disease). It relax airways smooth muscle by stimulating β -2 adrenergic receptors.

β -2 agonists are bronchodilator drugs.

176. The route of administration of human monovalent live vaccine (RV1) for Rotavirus is रोटा वायरस के लिए ह्यूमेन मोनोवैलेन्ट लाईव वेक्सिन (RV1) प्रदान करने का मार्ग है।

- (a) Subcutaneous/सबक्युटेनियस
- (b) Intra Muscular/इन्ट्रा मस्क्युलर
- (c) Intra-dermal/इन्ट्रा डर्मल
- (d) Oral/मुख (ओरल)

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Ans.(d) Rotavirus vaccine is administered by putting drops in the child's mouth before they turn 8 month old.

- There is no specific medicine to treat rotavirus infection.

177. Recommended site of administration of DPT in infants is /शिशुओं में DPT प्रदान करने के लिए प्रस्तावित साइट है

- (a) Gluteal/ग्लुटीयल
- (b) Deltoid/डेल्टॉयड
- (c) Lateral aspect of thigh/जाँघ का पार्श्विक पहलू
- (d) Forearm/भुजाग्र

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Ans.(c) DPT (diphtheria, pertussis, tetanus) vaccine is given as a number of injections to infant and young children. It preferred injection site is the vastus lateral is muscle of the thigh.

DPT should be given one dose at each of these dose ages 2 months, 4 months and 6 months.

178. Clarification is term used when solid content of product does not exceed to

उत्पाद का ठोस पदार्थ जब..... से अधिक नहीं होता तो पद क्लेरिफिकेशन प्रयुक्त किया जाता है।

- (a) 1%
- (b) 5%
- (c) 10%
- (d) 15%

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Ans.(a) Clarification is when solid do not exceed 1% filtration is applied to the recovery of valuable solids from slimes.

It is essential step in H₂O treatment process to remove suspended solid through gravity settling providing a clarified liquid effluent.

179. Weight variation limit as per IP for a tablet weighing 300 mg is

300 mg भार वाली किसी टेबलेट के लिए IP के अनुसार भार परिवर्त्य सीमा है

- (a) $\pm 2.5\%$
- (b) $\pm 5\%$
- (c) $\pm 7.5\%$
- (d) $\pm 10\%$

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Ans.(b) The weight variation statistical quality contrast test is used to confirm uniformity of the dosage unit and therefore also to support product safety, identity and quality.

- Weight variations in a limited extent are qutenormal due to variations in the density of the powder material and to a partially incomplete.

180. Disintegration time limit as per IP for an effervescent tablet is

IP के अनुसार, किसी बुलबुलेदार टेबलेट के लिए विखंडन समय सीमा है

- (a) 5 minutes/5 मिनट
- (b) 10 minutes/10 मिनट
- (c) 15 minutes /15 मिनट
- (d) 30 minutes/30 मिनट

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Ans. (a) Effervescent tablets are designed to release carbon dioxide upon contact with H₂O. The absorption process takes place faster than tablets and capsules.

• According to the European pharmacopoeial standards for effervescent tablets. The disintegration time should be 5 minutes.

181. Slightly soluble compound as per IP specification of solubility is

अल्पविलेय यौगिक की IP के अनुसार विलेयता का विनिर्देशन है।

- (a) One part in 10-30 parts of solvent/विलायक के 10-30 भाग में एक भाग
(b) One part in 30-100 parts of solvent/विलायक के 30-100 भाग में एक भाग
(c) One part in 100-1000 parts of solvent/विलायक के 100-1000 भाग में एक भाग
(d) One part in 1-10 parts of solvent/विलायक के 1-10 भाग में एक भाग

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Ans.(c) A slightly soluble salt is that dissolves only very slightly in H₂O from 100 to 1000.

• Solubility is the analytical composition of a saturated solution expressed as a proportion of a designated solute in a designated solvent.

182. A rectal suppository is used to treat a fever. The would represent what type of drug delivery?/मलाशयी वर्तिका का उपयोग ज्वरोपचार में किया जाता है। यह किस प्रकार की औषधि प्रेषण को दर्शाएगा?

- (a) Parenteral and local/पैरेंटेरल तथा लोकल
(b) Parenteral and systemic/पैरेंटेरल तथा सिस्टेमिक
(c) Enteral and local/एन्टरनल तथा लोकल
(d) Enteral and systemic/एन्टरनल तथा सिस्टेमिक

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Ans.(b) Rectal suppository used to treat fever represents enteral and systemic drug delivery. This product is used to relieve occasional constipation it works by drawing water into the intestine.

183. The storage temperature of soft gelatin capsule is

नरम जिलेटिन कैप्सूल का भंडारण तापमान

- (a) 15-18 °C (b) 21-24 °C
(c) 18-20 °C (d) 25-27 °C

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Ans.(b) Soft gelatin capsule is a type of capsule which contain medicine in the form of liquid or powder which dissolve more quickly and have 13% to 16% moisture content so storing in the range of 35% to 65% relative humidity and 15 to 25°C temperature.

184. The function of copper-T is to prevent कॉपर-T का कार्य किसको रोकना है?

- (a) Fertilization/निषेचन
(b) Egg maturation/अण्ड परिपक्वता
(c) Ovulation/अण्डोत्सर्ग
(d) Implantation of blastocyst/ब्लास्टोसिस्ट का आरोपण

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Ans. (a) Copper – T is an IUD that produces an inflammatory reaction that is toxic to sperm and egg preventing frequency it repel the movement of sperm by changing their pattern of movement.

It can also prevent the fertilized egg from implantation in the womb.

Note – The Commission has considered option (d) is correct.

185. Period of pregnancy is called गर्भावस्था की अवधि कहलाती है

- (a) Gestation period /सगर्भता अवधि
(b) Incubation period /उद्भवन अवधि
(c) Pre-patent period /पूर्व-एकत्व अवधि
(d) Blastulation /ब्लास्टुलेशन

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Ans. (a) Gestation is a period of development during the carrying of an embryo inside viviparous animal pregnancy is calculated as 40 weeks and starts from the first day of your last menstrual period classify into 3 stages known as trimesters.

186. Bidder's canal is meant for the passage of बिडर कैनाल किसको मार्ग देने के लिए है?

- (a) Ova/अंडाणु (b) Urine/मूत्र
(c) Sperms /शुक्राणु (d) All of these /ये सभी

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Ans. (c) Bidder's canal is a part of the males reproductive system and absent in females. It receives sperms from testes via vasa efferentia and acts as urinogenital canal opening into ureters.

187. Leydig cells secrete

लेडिग कोशिकाएँ स्रावित करती हैं

- (a) Oestrogens /एस्ट्रोजन
(b) Testosterone /टेस्टोस्टीरोन
(c) Progesterone /प्रोजेस्टेरोन
(d) Corticosterone /कॉर्टिकोस्टीरॉन

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Ans. (b) Leydig cells are primary source of testosterone or androgens in males which play an important role in sperm production and controlling sexual development.

188. Epididymis is lined by

एपिडिडायमिस स्तरित (घिरी) होती है

- (a) Cuboidal epithelium /घनाकार उपकला द्वारा
- (b) Simple columnar epithelium /साधारण स्तंभाकार उपकला
- (c) Pseudostratified columnar epithelium /कूटस्तरित स्तंभाकार उपकला द्वारा
- (d) Transitional epithelium /अंतर्वर्ती उपकला द्वारा

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Ans. (c) The epididymis is a single convoluted tubule lined by a pseudostratified epithelium cells the so called principle basal narrow and clear cells.

- It play important role in sperm maturation of gain motility to sperm and store sperms.

189. Leydig cells are seen in

लेडिग कोशिकाएँ दिखाई देती है

- (a) Liver /यकृत में
- (b) Bone /हड्डी में
- (c) Lungs /फेफड़ों में
- (d) Testes /वृषण में

HPSSC Laboratory Technician (27.09.2020)

Ans. (d) Leydig cells are the essential and crucial cells located in the testes of the male gonads known as testicular interstitial cells found adjacent to the testicle they produce testosterone in the presence of a luteinizing hormone (LH).

190. ELISA will use antibodies conjugated to all the following reagents, except :

एलाइजा निम्नलिखित सभी अभिकर्मकों से संयुग्मित एंटीबाँडी का उपयोग करेगा, सिवाय:

- (a) ALP
- (b) HRP
- (c) Riboflavin/राइबोफ्लेविन
- (d) Biotin/बायोटिन

HPSSC Laboratory Technician (27.09.2020)

Ans. (c) Vitamin B₂ (Riboflavin) is a Elisa kit for the in vitro quantitative measurement of vitamin B₂.

- The standard Elisa reagents used include a detection antigen or antibody.

191. Which serological test is done for diagnosis of enteric fever ?

आंत्र ज्वर के निदान के लिए कौन सीरमविज्ञानी (सीरोलॉजिकल) परीक्षण किया जाता है?

- (a) Widal test/विडाल परीक्षण
- (b) Weil-Felix test/वील-फेलिक्स परीक्षण
- (c) ASO
- (d) VDRL Test/VDRL परीक्षण

HPSSC Laboratory Technician (27.09.2020)

Ans. (a) Widal test is a quick procedure to diagnose typhoid fever or enteric fever it is developed by Georges Fernand Widal in 1896.

In this patient's serum mixed with antigens derived from two bacteria and found presence of antibodies against two antigens.

192. Method of stimulating adaptive immune response and memory against a known infectious agent is called

किसी ज्ञात संक्रमणकारी एजेंट के विरुद्ध अनुकूलित प्रतिरक्षा प्रतिक्रिया और स्मृति के उद्दीपन की विधि कहलाती है।

- (a) Grafting/उपरोहण
- (b) Vaccination/टीकाकरण
- (c) Natural resistance/प्राकृतिक प्रतिरोध
- (d) Hypersensitivity/अतिसंवेदनशीलता

HPSSC Laboratory Technician (27.09.2020)

Ans. (b) Vaccination is a simple and safe way of protecting body from disease before infection.

Vaccine contain a microorganism or virus in a weakened live or killed state or proteins or toxins from the organism it stimulating the body's adaptive immunity.

- Vaccine word comes from the cowpox virus vaccinia.

193. In malaria pre-erythrocytic schizogony occurs in/मलेरिया में प्रि-एरिथ्रोसाइटिक शाइजोगोनी उत्पन्न होती है।

- (a) Lungs/फेफड़ों में
- (b) Liver/यकृत में
- (c) Spleen/प्लीहा में
- (d) Kidney/वृक्क में

HPSSC Laboratory Technician (27.09.2020)

Ans. (b) Schizogony occurs first in hepatocytes and then repeatedly in erythrocytes causing all the pathology of malaria.

Pre-erythrocytes state or Exo-exoerythrocytic cycle includes both the sporozoite invasion of the mammalian host and the liver-stage.

194. Parasite which can be transmitted by sexual contact is

लैंगिक संपर्क द्वारा संचरित हो सकने वाला परजीवी है।

- (a) Trichomonas vaginalis/ट्राइकोमोनास वैजिनेलिस
- (b) Trypanosoma cruzi/ट्रिपैनोसोमा क्रूजी
- (c) Leishmania donovani/लीशमानिया डोनोवानी
- (d) Enteromonas hominis/एंटीरोमोनास होमिनिस

HPSSC Laboratory Technician (27.09.2020)

Ans. (a) Trichomonas vaginalis is an anaerobic flagellated protozoan parasite which is transmitted through sexual intercourse cause a disease called trichomoniasis, it is more common in black women.

195. Weil Felix reaction fir scrub typhus show positivity for

वील फेलिक्स अभिक्रिया फिर स्क्रब टाइफस किसके लिए धनात्मकता प्रदर्शित करता है?

- (a) OX-K
- (b) OXK + OX19
- (c) OX 2
- (d) OX 19

HPSSC Laboratory Technician (27.09.2020)

Ans. (a) Weil Felix is a non-specific agglutination test which detects anti-nickettsial antibodies in patients serum.

- Typhus fevers are a group of diseases caused by bacteria (*Orientia tsutsugamushi*).
- OXK reactive agglutinins appear 10-14 day after onset of scrub typhus and declined subsequently with time.

196. Schick test is for
शिक परीक्षण किसके लिए है?

- Susceptibility to diphtheria/डिफ्थेरिया की संभावना
- Susceptibility to tetanus/टीटेनस की संभावना
- Susceptibility to Scarlet fever/स्कार्लेट ज्वर की संभावना
- Susceptibility to RF/ RF की संभावना

HPSSC Laboratory Technician (27.09.2020)

Ans. (a) The Schick test detects immunity to diphtheria either acquired through previous infection or vaccination it is highly effective method for diagnosing and detecting potential infection of the bacterium *Clostridium diphtherae* it is a simple but accurate procedure.

197. The medical term used for the sleeplessness is
निद्राहीनता के लिए उपयोग में ली जाने वाली चिकित्सीय पद है:

- Somnambulism/सोम्नाम्बुलिज्म
- Insomnia/इन्सोम्निया
- Hallucination/हैलुजिनेशन
- Nyctinuria/निक्टीन्युरिया

HPSSC Laboratory Technician (25.07.2019)

Ans. (b) Insomnia is a sleeping disorder in which facing trouble falling or staying asleep insomnia is chronic when it happens at least 3 nights a week for 3 months or more it is not always clear what triggers insomnia but it's often associated with stress and anxiety.

198. Which of the following is not a characteristic symptom of diphtheria infected person ?

निम्न में से कौन सा एक डिफ्थेरिया ग्रसित व्यक्ति लाक्षणिक लक्षण नहीं है?

- Difficulty in urination / मूत्र बहाव में मुश्किल
- Swollen glands in neck / गले में फूली हुई ग्रंथि
- Sore throat / गल-शोथ
- Fever / ज्वर

HPSSC Laboratory Technician (25.07.2019)

Ans. (a) Diphtheria is a serious infection caused by strains of bacterial called *Corynebacterium diphtheriae* that make a toxin which is responsible for sore throat fever and swollen lymph node.

199. DPT booster dose-1 is given at
DPT का प्रथम बूस्टर डोज दिया जाता है:

- 1-2 months / 1-2 महीने पर
- 3-9 months / 3-9 माह पर
- 10-15 months / 10-15 माह पर
- 16-24 months / 16-24 माह पर

HPSSC Laboratory Technician (25.07.2019)

Ans. (d) DPT (Diphtheria, Pertussis and Tetanus) vaccine is consists of a sterile isotonic sodium chloride solution containing sodium phosphate buffer to control pH. All children should get five doses of DPT vaccine per the schedule 1st booster 16-24 months and 2nd booster 5 years.

200. Disease caused by Yersinia pestis is
यर्सिनिया पेस्टिस द्वारा कौन सा रोग होता है?

- Trachoma /ट्रेकोमा
- Gonorrhoea /गोनोरीया
- Plague /प्लेग
- Rabies /रेबीज

HPSSC Laboratory Technician (25.07.2019)

Ans. (c) Plague is an infectious disease that affects rodents caused by *Yersinia pestis* bacteria it spread by the bite of fleas that have previously fed on infected mice rat etc.

201. Sulfones are recommended in the treatment of
किसके उपचार में सल्फोन्स अनुशंसित है?

- Tuberculosis/टीबी (क्षय)
- Dysentery/अतिसार
- Leprosy/कुष्ठ
- Scurvy/स्कर्वी

HPSSC Laboratory Technician (25.07.2019)

Ans. (c) Sulfones is a bacteriostatic which is used in the treatment of leprosy.

- Leprosy is a bacterial infection caused by *Mycobacterium leprae* that affects mainly skin, eyes and nose etc.

202. Diethyl carbamazine is used in the treatment of
किसके उपचार में डाइएथिल कार्बमेजिन प्रयुक्त होता है?

- Hookworm infection/हूकवर्म संक्रमण
- Roundworm infection/राउण्डवर्म संक्रमण
- Tapeworm infection/टेपवर्म संक्रमण
- Filariasis/फाइलेरिएसिस

HPSSC Laboratory Technician (25.07.2019)

Ans. (d) Diethyl carbamazine is a medication which is used in the treatment of filariasis that is caused by aschelminthes worm called *Wuchereria bancrofti* that transmitted by *Culex* mosquito.

203. Toxoids are used for
टॉक्सॉइड्स प्रयुक्त होते हैं:

- Tuberculosis /ट्यूबरक्यूलोसिस के लिए
- Typhoid /टायफॉयड के लिए

- (c) Diphtheria /डिप्थेरिया के लिए
(d) Enteric fever /आंत्र ज्वर के लिए

HPSSC Laboratory Technician(25.07.2019)

Ans. (c) Toxoids is chemically modified toxin from pathogenic microorganism the most often used toxoid but diphtheria derived toxoids and other proteins are also used occasionally.

204. "Varicella vaccine" is given for the prevention of which of following Diseases ?

निम्न में से किस बीमारी से बचाव के लिए "वैरीसेला टीका" दिया जाता है?

- (a) Chicken pox /छोटी माता
(b) Cervical cancer /ग्रीवा का कैंसर
(c) Hepatitis /हेपेटाइटिस- A
(d) Tuberculosis /टीबी

HPSSC Laboratory Technician(25.07.2019)

Ans. (a) The Varicella vaccine is also known as chicken pox vaccine that protects against chickenpox.

Chickenpox is a highly contagious disease that causes an itchy rash and can sometimes lead complications

205. Result of Mantoux test is read after
मैन्टॉक्स परीक्षण का परिणाम पढ़ा जाता है:

- (a) 6 Hours /6 घण्टे पश्चात्
(b) 24 Hours /12 घण्टे पश्चात्
(c) 48 Hours /48 घण्टे पश्चात्
(d) 96 Hours /96 घण्टे पश्चात्

HPSSC Laboratory Technician(25.07.2019)

Ans. (c) The Mantoux test is a tool for screening for tuberculosis that is major tuberculin skin tests used around the world in which small amount of fluid (tuberculin) into the skin on the lower part of arm test must return within 48-72 hours to have trained health care worker look for reaction on the arm.

206. Reconstituted BCG vaccine should be used within/पुनःनिर्मित BCG टीका उपयोग में ले लेना चाहिए

- (a) 6 Hours /6 घंटे के भीतर
(b) 12 Hours /12 घंटे के भीतर
(c) 18 Hours /18 घंटे के भीतर
(d) 24 Hours /24 घंटे के भीतर

HPSSC Laboratory Technician(25.07.2019)

Ans. (a) BCG (Bacillus Calmette Guerin) is a vaccine for tuberculosis (TB) which is a bacterial disease.

• Reconstituted vaccines should be used as soon as possible after mixing and discarded with 6-hours.

207. Non-ciliated peg cells are found in
अ-रोमीय पेग कोशिकाएँ पाई जाती हैं

- (a) Uterus/गर्भाशय में
(b) CNS/CNS में
(c) Fallopian tube/डिम्बवाही नली में
(d) Stomach/आमाशय में

HPSSC Laboratory Technician (11.03.2022)

Ans. (c) A per cell is a non ciliated epithelial cell within the uterine tube the per cells capacitate spermatozoa making them capable of fertilizing an in the ampulla that make up around 10% total number of cells.

208. Food poisoning case with diarrhoea within 6 hours/6 घंटे के अंदर अतिसार के साथ खाद्य विषाक्तता का मामला होता है

- (a) S. aureus/एस. ऑरियस
(b) Clostridium perfringes /क्लॉस्ट्रीडियम परफ्रिंजेस
(c) C. botulinum/सी. बोटुलिनम
(d) V.cholerae/वी. कॉलेरी

HPSSC Laboratory Technician (11.03.2022)

Ans. (c) Clostridium botulinum is a gram-positive rod shaped bacteria which cause botulism that is a rare but serious illness caused by a toxin that attacks body's nervous system.

It is spread by the ingestion of inadequately cooked food or processed in which toxin has formed.

209. Which stage of falciparum not seen in Peripheral blood smear?

फाल्सिपेरम की कौन सी अवस्था परिधीय रुधिर आलेप में दिखाई नहीं देती है?

- (a) Schizont/शाइजॉन्ट
(b) Gametocyte/गैमिटोसाइट
(c) Ring for/रिंग फॉर
(d) Double ring/डबल रिंग

HPSSC Laboratory Technician (11.03.2022)

Ans. (a) Schizont stage of Plasmodium occurs in human liver cells and erythrocytes.

• Erythrocytes infected with Plasmodium falciparum schizonts are not seen in the peripheral circulation because they attach to venular endothelium via knob like structure on the infected erythrocyte membrane.

210. VDRL test is an example of
VDRL परीक्षण एक उदाहरण है:

- (a) Tube test/ट्यूब टेस्ट का
(b) Ring test/रिंग टेस्ट का
(c) Slide test/स्लाइड टेस्ट का
(d) None of these/इनमें से कोई नहीं

HPSSC Laboratory Technician (11.03.2022)

Ans. (c) The VDRL test is a screening test for syphilis. The test works by looking for antibodies in your blood sample specific to syphilis.

• Venereal disease research laboratory (VDRL) test is a slide flocculation test.

211. Azoospermia is/एजूस्परमिया है

- (a) Less sperms in semen/वीर्य में कम शुक्राणु
(b) Non-motile sperms in semen/वीर्य में अगतिशील शुक्राणु

- (c) No spermatozoa in the ejaculate/वीर्यपात में कोई शुक्राणु नहीं
 (d) Dead spermatozoa in the ejaculate /वीर्यपात में मृत शुक्राणु

HPSSC Laboratory Technician (11.03.2022)

Ans. (c) Azoospermia is the medical condition of a man whose semen contains no sperm it is associated with male infertility it affects about 1% of the male population.

- It may occur because of an obstruction in the reproductive tract or inadequate sperm production.

212. Selective media for Vibrio cholerae is विब्रियो कॉलेरी के लिए चयनित माध्यम है

- (a) Stuart/स्टुअर्ट
 (b) Blood agar/रुधिर अगार
 (c) TCBS
 (d) Chocolate agar/चॉकलेट अगार

HPSSC Laboratory Technician (11.03.2022)

Ans. (c) Thiosulfate citrate bile salts sucrose agar (TCBS) is a medium for the isolation of V. Cholerae and is widely used world wide.

- TCBS agar is highly selective for the isolations of V. cholerae and V. parahaemolyticus as well as other Vibrio species.

213. Mycobacterium tuberculosis was discovered by माइकोबैक्टीरियम ट्यूबरकुलोसिस की खोज की थी

- (a) Louis Pasteur/लुई पाश्चर
 (b) Robert Koch/रॉबर्ट कोच
 (c) Lister/लिस्टर
 (d) Jenner/जेनर

HPSSC Laboratory Technician (11.03.2022)

Ans. (b) In 1882 Dr. Robert Koch announced the discovery of Mycobacterium tuberculosis. The bacteria responsible for causing tuberculosis (TB) he was awarded the noble prize in medicine in 1905.

214. Name the parasite causing Malaria.

मलेरिया उत्पन्न करने वाले परजीवी का नाम-

- (a) Plasmodium vivax/प्लाज्मोडियम वाइवैक्स
 (b) Wuchereria bancrofti /वुचेरिया बैंक्राफ्टी
 (c) Brugia malayi/ब्रुजिया मलाई
 (d) Leishmania donovani/लीसमानिया डोनोवानी

Kerala PSC Jr. Laboratory Asst. (07.07.2018)

Ans. (a) The parasite causing malaria known Plasmodium vivax is a species of the genus Plasmodium, which is transmitted to humans through the bite of infected female Anopheles mosquitoes.

215. Barr body is absent in :

बर् बॉडी में अनुपस्थित होता है-

- (a) Edward's syndrome/एडवर्ड सिंड्रोम
 (b) Super female/सुपर महिला

- (c) Turner's syndrome/टर्नर सिंड्रोम
 (d) None of these/इनमें से कोई नहीं

Kerala PSC Laboratory Technician Gr. II (09.05.2014)

Ans. (c) Turner syndrome is a genetic condition in which females are born with only one X chromosome, rather than the usual two.

As a result, they typically have one X chromosome and no Barr body, which is a condensed, inactive X-chromosome found in the cells of most females.

216. _____ cell lines appear to be immortal.

..... कोशिका रेखाएँ अविनाशी प्रतीत होती हैं।

- (a) Primary/मुख्य
 (b) Continuous/निरंतर
 (c) Adherent/अधरेन्ट
 (d) Suspension/निलंबन

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) Continuously cell lines possess immortality demonstrating indefinite proliferation under laboratory conditions, making them valuable tools for long term studies in various field of research.

217. The larger cell in cervical smears is

ग्रीवा आलेय में बृहतर कोशिका है

- (a) Basal cell/बेसल कोशिका
 (b) Parabasal cell/पैराबेसल कोशिका
 (c) Intermediate cell/इण्टरमीडिएट कोशिका
 (d) Superficial cells/सुपरफीसियल कोशिका

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (d) In cervical smears, superficial cells are larger than other cell types, making them easier to identify. They are shed from the surface of the cervix and play a role in evaluating cervical health.

218. CB-NAAT technology is used for

CB-NAAT तकनीक किसके लिए प्रयुक्त होती है?

- (a) Bacterial culture/जीवाणुक संवर्धन
 (b) Bacterial identification/जीवाणुक पहचान
 (c) M. Tuberculosis/एम. ट्यूबरकुलोलिसिस
 (d) Hepatitis B/हैपेटाइटिस B

HPSSC Lab Technician (29-11-2020)

Ans. (c) CB-NAAT (Cartidge Based Nucleic Acid Amplification Test) technology is used for the detection of mycobacterium tuberculosis and rifampicin resistance. It provides results within a few hours, significantly aiding in the early diagnosis and treatment of tuberculosis.

219. Which of the following mosquitoes act as vector for dengue fever?

डेंगू ज्वर के लिए कौन सा मच्छर वाहक के तौर पर कार्य करता है?

- (a) Culex/क्यूलेक्स (b) Anopheles/एनॉफिलीज
(c) Aedes/एडीज (d) All of these/यह सभी

HPSSC Lab Technician (29-11-2020)

Ans. (c) Aedes mosquito act as vector for dengue fever. Dengue caused flu-like symptoms and lasts for 2-7 days. Symptoms include headache, high fever, rash and muscular and joint pain. It may also cause nausea and vomiting.

220. G6PD deficiency anemia is due to G6PD कमी वाला एनीमिया किस कारण होता है?

- (a) Membrane defect /झिल्ली त्रुटि
(b) Enzyme defect /किण्वक त्रुटि
(c) Haemoglobin abnormality /हीमोग्लोबिन असामान्यता
(d) Blood loss /रक्त हानि

HPSSC Laboratory Technician (27.09.2020)

Ans. (b) G6PD deficiency anemia is due to enzyme defect known as G6PD (glucose-6-phosphate dehydrogenase). This enzyme helps red blood cells work properly. A lack of this enzyme can cause hemolytic anemia.

221. The most common form 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/क्वाशरकोर

RRB Lab Technician (10.06.2015)

Ans. (a) The most common form of malnutrition are the protein energy main nutrition, marasmus, kwashiorkor except beri-beri.

222. Scurvy caused due to deficiency of स्कर्वी किसकी कमी से होता है?

- (a) Pyridoxal phosphate/पायरिडॉक्सल फॉस्फेट
(b) Cyanocobalamin/सायनोकोबालामिन
(c) Thiamine/थायमिन
(d) Ascorbic Acid/एस्कॉर्बिक एसिड

HPSSC Laboratory Technician (27.09.2020)

Ans. (d) Scurvy caused due to deficiency of ascorbic acid (vitamin C). Vitamin C is found in citrus fruits and vegetables. Symptoms of scurvy include bleeding gums fatigue, skin rash, weakness, bruising etc.

223. Which is a deficiency disease ? निम्न में से कौन सा एक त्रुटि रोग है?

- (a) Asthma/अस्थमा (b) Jaundice/पीलिया
(c) Scurvy/स्कर्वी (d) Cancer/कैंसर

HPSSC Laboratory Technician(25.07.2019)

Ans. (c) Scurvy is a deficiency disease.

Scurvy caused due to deficiency of ascorbic acid (vitamin C).

Vitamin C is found in citrus fruits and vegetables.

Symptoms of scurvy include bleeding gums fatigue, skin rash, weakness, bruising.

224. Dark adaptation time is increased in deficient individuals./अंधकार अनुकूलन समयकी कमी वाले लोगों में बढ़ जाता है।

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

Haryana SSC Lab Technician (24.07.2021)

Ans. (a) Dark adaptation time is increased in vitamin A deficient individuals.

• Xerophthalmia disease occurs due to the deficiency of vitamin A.

• It is the abnormal dryness of the conjunctiva and cornea of the eye with inflammation and ridge formation.

225. Adjuvant added in DPT vaccine is DPT टीकाकरण में मिलाया जाने वाला एडजुवेंट है

- (a) Aluminum phosphate/एल्युमिनियम फॉस्फेट
(b) Magnesium phosphate/मैग्नीशियम फॉस्फेट
(c) Zinc phosphate/ज़िंक फॉस्फेट
(d) Ammonium phosphate/अमोनियम फॉस्फेट

HPSSC Laboratory Assistant (25.07.2019)

Ans.(a) Adjuvant added in DPT vaccine is aluminum phosphate.

Each 0.5-ml dose contains aluminium hydroxide as adjuvant (not more than 0.6 mg aluminium by assay) and 4.5 mg of sodium chloride.

226. Ayre's spatula is used to scrape/आयरे-स्पेटुला का उपयोग खुरचने के लिए किया जाता है:

- (a) Nipple discharge/निप्पल डिस्चार्ज
(b) Pap smear/पैप स्मीयर
(c) Biopsy/बायोप्सी
(d) Sputum/थूक

GSSSB Laboratory Technician(30.11.2019)

Ans. (b) Ayre's spatula is utilized for pap smears. it scrapes cells from the cervix, aiding in cervical cancer screening. This method helps detect abnormalities early, facilitating effective treatment and prevention strategies.

227. Non-enzymatic addition of any sugar to protein is called/प्रोटीन में किसी शर्करा के गैर एंजाइमी को मिलाना कहलाता है :

- (a) Glycosylation /ग्लाइकोसाइलेशन
(b) Glycogenation /ग्लाइकोजिनेशन
(c) Glycation /ग्लाइकेशन
(d) Glycolysis /ग्लाइकोलिसिस

Kerala PSC Lab Technician(21.01.2023)

Ans. (c) Glycation is the non-enzymatic process where sugars react with proteins, altering their structure and function. This modification is implicated in various age-related diseases like diabetes and neurodegenerative disorders.

228. Tumour marker of ovarian cancer is

गर्भाशय का कैंसर का ट्यूमर मार्कर है :

- (a) T24 (b) CEA
(c) CA 19.9 (d) CA 125

Kerala PSC Lab Technician(21.01.2023)

Ans. (d) CA 125 is a protein biomarker elevated in ovarian cancer. It is used for diagnosis, monitoring treatment response and detecting recurrence. The elevated CA 125 levels indicate potential ovarian cancer presence or progression.

229. Metabolic disorder associated with abnormal metabolism of Tyrosine is called

टाइरोसिन के असामान्य मेटेबोलिज्म से सम्बन्धित मेटेबोलिक बिकार को कहते हैं

- (a) Albinism/ऐलबिनिज्म
(b) Alkaptonuria/ एलकैप्टोन्यूरिया
(c) Phenylketonuria / फेनाइल केटोन्यूरिया
(d) Tyrosinosis / टायरोसिनोसिस

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Alkaptonuria is a metabolic disorder where the body cannot breakdown tyrosine properly, leading to the accumulation of homogentisic acid, causing urine and other body fluids to turn dark when exposed to air.

230. The agglutinin develop in the embryo after how many days of conception?

गर्भधारण के कितने दिन बाद भ्रूण में अँग्लुटिनोजेन विकसित होता है?

- (a) 10 (b) 20
(c) 30 (d) 40

DSSSB Lab Assistant (10.05.2015)

Ans. (d) The agglutinin develops in the embryo approximately 40 days after conception. This process marks a crucial stage in the development of the immune system, facilitating the production of antibodies to combat potential pathogens and foreign substances.

231. What is the normal bleeding time, by duke method?

ड्यूक पद्धति के अनुसार सामान्य रक्तस्राव की अवधि कितनी है?

- (a) 1 - 6 minute/1- 6 मिनट
(b) 6 - 10 minute/6 - 10 मिनट
(c) 10 -14 minute/10 - 14 मिनट
(d) 15-20 minute/15-20 मिनट

DSSSB Lab Assistant (10.05.2015)

Ans. (a) The normal bleeding time, determined by the Duke method, ranges from 1 to 6 minutes. This method assesses the time it takes for bleeding to stop after a standardized incision. It aids in diagnosing disorders related to platelet function and vascular integrity.

232. Chronic case of a disease denotes:

बीमारी की दीर्घकालिक स्थिति _____ का द्योतक है।

- (a) Severe attack of the disease/रोग का कष्टमय आक्रमण
(b) Mild attack of the disease/रोग का मन्द अवधि से रोग
(c) Disease occurring for a very long period/बहुत लंबी अवधि से रोग
(d) Disease occurring for a short period of time /अल्पावधि रोग

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) "Chronic case of a disease" denotes a prolonged state of illness, lasting for an extensive period, indicating a condition that persists over a long duration rather than a brief or acute duration.

233. Papanicolaou is

पापानीकालाउ है-

- (a) A plant/एक पौधा
(b) An animal/एक प्राणी
(c) A scientist/एक वैज्ञानिक
(d) None of the above/एक भी नहीं

HPSSC Laboratory Technician (26-06-2017)

Ans. (c) Papanicolaou refers to a scientist named George Papanicolaou, known for developing the Pap smear test, a screening method for cervical cancer detection, which has saved countless lives worldwide.

234. _____ is the major form found during intrauterine life and at birth.

.....गर्भाशय के भीतर के जीवन और जन्म के समय पाया जाने वाला मुख्य रूप है।

- (a) HbA
(b) HbA₂
(c) HbF
(d) None of the above/उक्त में से कोई नहीं

Haryana SSC Lab Technician (24.07.2021)

Ans. (c) Hemoglobin F (HbF) is the primary form present during intrauterine life and at birth. It has a higher affinity for oxygen, facilitating oxygen transfer from maternal to fetal circulation. HbF gradually diminishes after birth, replaced by adult hemoglobin variants.

235. Paediatrics deals with care and cure of diseases of

पीडियाट्रिक्स संबंधित है इनकी सेवा और सुश्रुषा से-

- (a) Children/बच्चे
- (b) All ages/सभी उम्र
- (c) Accident cases/दुर्घटना
- (d) None of these/इनमें से कोई नहीं

HPSSC Laboratory Assistant 10.04.2022

Ans. (a) Paediatrics focuses on providing medical care and treatment exclusively for children, encompassing their physical, mental and development health needs from infancy through adolescence.

236. Labour takes place after days of last menstrual period :आखिरी महावारी के दिनों के बाद प्रसव होता है:

- (a) 300
- (b) 280
- (c) 365
- (d) 240

RRB Lab Technician (10.06.2015)

Ans. (b) Labor typically occurs about 280 days after the last menstrual period, marking the duration of a full-term pregnancy. This timeframe is used to estimate the expected due date for childbirth.

237. Signs of true labour are not the following except.

निम्न में से _____ को छोड़कर प्रसव का सही संकेत नहीं है।

- (a) Painful rhythmic uterine contraction
दर्दनाक लयबद्ध गर्भाशय संकुचन
- (b) Dilatation of the OS/ओ एस का फैलाव
- (c) Fetal movement/भ्रूण का हलचल
- (d) Show/दिखना

RRB Lab Technician (10.06.2015)

Ans. (c) True labour signs include painful rhythmic uterine contractions, dilatation of the OS (cervical opening) and the presence of a show (mucus discharge). The fetal movement is not a direct indicator of true labour.

238. Mitomycin is used as

माइटोमाइसिन प्रयुक्त होता है,

- (a) Anti-biotic /एंटी-बायोटिक के तौर पर
- (b) Anti-cancer /एंटी-कैंसर के तौर पर
- (c) Anti-fungal /एंटी-फंगल के तौर पर
- (d) Anti-thyroid /एंटी-थायरॉइड के तौर पर

HPSSC Laboratory Technician(25.07.2019)

Ans. (b) Mitomycin functions as an anti-cancer drug, inhibiting cancer cell growth and spread. It's used in treating various cancers by damaging the DNA within the cancer cells, ultimately leading to cell death.

239. Which drugs among the following cause failure of oral contraceptive ?

मुख-गर्भ निरोधक विफलता का कारण निम्न में से एक ड्रग है:

- (a) Isoniazid /आइसोनाइजिड
- (b) Rifampicin /रिफाम्पिसिन
- (c) Pyrazinamide /पायराजिनएमाइड
- (d) Ethambutol /ईथामब्यूटोल

HPSSC Laboratory Technician(25.07.2019)

Ans. (b) Rifampicin can cause oral contraceptive failure by accelerating the breakdown of hormones in the liver, reducing their effectiveness. This interaction may lead to unintended pregnancy while using oral contraceptives alongside rifampicin.

240. Which medium is used for recovery of opportunistic and dimorphic pathogens?

अवसरवादी तथा द्विरूपी रोगाणुओं की रिकवरी के लिए कौन सा माध्यम होता है?

- (a) SDA agar/ SDA अगार
- (b) Malt extract agar/माल्ट सार अगार
- (c) Brain heart infusion agar/मस्तिष्क-हृदय संलयित अगार
- (d) None of these/इनमें से कोई नहीं

HPSSC Lab Technician (29-11-2020)

Ans. (c) Brain heart infusion agar is used for the recovery of opportunistic and dimorphic pathogens due to its nutrient-rich composition, which supports the growth of a wide range of microorganisms.

241. The Ayer's spatula is used to obtain

क्या प्राप्त करने के लिए आयेर का स्पैचुला प्रयुक्त होता है?

- (a) Gastric smears/जठरीय स्मीयर
- (b) Oral smears/मुखीय स्मीयर
- (c) Sweat smears/पसीने का स्मीयर
- (d) Vaginal smears/योनि स्मीयर

HPSSC Lab Technician (29-11-2020)

Ans. (d) The Ayer's spatula is utilized to obtain vaginal smears, aiding in the collection of samples for diagnostic purposes, particularly in gynecology for assessing cellular abnormalities and infections.

Chapter-3

Classification of Animal Kingdom

1. Which of the following animals reproduced by fragmentation?/निम्नलिखित में से कौन सा प्राणी विखण्डन के द्वारा प्रजनन करता है ?

- (a) Amoeba/अमीबा (b) Spirogyra/स्पाइरोगाइरा
(c) Papaya/पपीता (d) Hydra/हाइड्रा

CG-FSL-Lab-Attendant-2024

Ans. (b) : Spirogyra reproduces by fragmentation where the parent organism breaks up into small parts, each of which can grow into a new complete individual.

2. Internal digestion is mainly seen in which organism?/आंतरिक पाचन मुख्य रूप से किस जीव में देखा जाता है ?

- (a) Amoeba/अमीबा (b) Fish/मछली
(c) Bird/पक्षी (d) Mammals /स्तनधारी

CG-FSL-Lab-Attendant-2024

Ans. (a) : Internal digestion is mainly seen in organism like Amoeba.

In this process food is ingested and digested within the body. Enzymes breakdown the food particles, allowing nutrients to be absorbed and utilized by the organism for energy and growth.

3. Dogs can smell a body up to _____ feet underwater./कुत्ते पानी के अन्दर _____ फीट तक शरीर को सूँघ सकते हैं।

- (a) 30 (b) 50
(c) 60 (d) 70

HPSSC Laboratory Assistant (10.07.2021)

Ans. (a) Dogs can detect a body upto 30 feet underwater due to their highly sensitive sense of smell, which aids in tasks such as search and rescue operations.

4. The migration of fish from fresh water to marine waters is known as : समुद्र से ताजा पानी में मछलियों का प्रवास इस प्रकार के अंतर्गत आता है।

- (a) Diadromous/डायड्रोमस
(b) Catadromous/केटाड्रोमस
(c) Anadromous/एनाड्रोमस
(d) None of the above/उपरोक्त में से कोई नहीं

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) Catadromous fish migrate from freshwater to marine waters to spawn. Unlike anadromous fish, they spend most of their lives in freshwater and only migrate to the ocean for reproduction.

5. Conversion coefficient of fish nitrogen to protein is :

मछली नाइट्रोजन से प्रोटीन का रूपांतरण गुणांक है :

- (a) 6.98/6.98 (b) 6.25/6.25
(c) 6.38/6.38 (d) 6.68/6.68

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) The conversion coefficient of fish nitrogen to protein is 6.25. This means that for every gram of nitrogen found in fish tissue, it is equivalent to 6.25 grams of protein. It is a standard method used to estimate protein content in fish and is widely accepted in fisheries and nutrition research.

6. The arrangement of groups in an orderly sequence is called as :

एक व्यवस्थित अनुक्रम में समूहों की व्यवस्था को क्या कहा जाता है :

- (a) Hierarchy/पदानुक्रम (b) Genetics/जेनेटिक्स
(c) Taxonomy/वर्गीकरण (d) Biology/जीव विज्ञान

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) Hierarchy refers to the organization of groups in a systematic order, where each group is ranked according to its level of importance or authority, creating a structured and organized arrangement.

7. _____ is a marine ornamental fish.

_____ समुद्री सजावटी मछली है।

- (a) Pomacanthus imperator/पोमाकैथस इम्पेरेटर
(b) Poecilia latipinna/पोईसीलिया लैटिपिन्ना
(c) Betta splendens/बेट्टा स्प्लेंडेंस
(d) Pterophyllum scalare/टेरोफाइलम स्केलर

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) *Pomacanthus imperator*, also known as the Emperor Angelfish, is a popular marine ornamental fish. It is prized for its vibrant colors and striking appearance, making it a sought-after species in the aquarium trade.

8. White spot disease in aquarium fishes is caused by _____.

एक्वेरियम मछलियों में श्वेत धब्बा बीमारी का कारण _____ है।

- (a) *Ichthyophthirius multifiliis*
इचथायोफथेरीउस् मल्टीफिलीस
- (b) *Ictalurus punctatus*/इकटालुरुस पुन्कटातुस
- (c) White spot virus/श्वेत धब्बा वायरस
- (d) None of these/इनमें से कोई नहीं

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) White spot disease in aquarium fishes is caused by *Ichthyophthirius multifiliis*, a parasitic protozoan. It manifests as white spots on the fish's body and fins, leading to irritation and potential death if untreated.

9. _____ is a synthetic compound used for induced spawning of finfish :

फिनमछली की प्रेरित स्पॉन के इस्तेमाल के लिए _____ एक कृत्रिम यौगिक है।

- (a) Pituitary gland/पीयूष ग्रंथि
- (b) Ovaprim/ओवाप्रिम
- (c) MS-22/एमएस-222
- (d) GTH-ii/जीटीएच-ii

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) Ovaprim is a synthetic compound used to induce spawning in finfish. It helps synchronize and stimulates ovulation, aiding in artificial reproduction efforts by facilitating controlled breeding in aquaculture settings.

10. Bitter flavor in spoiled fish is due to _____.

खराब मछली में कड़वा स्वाद _____ की वजह से होता है।

- (a) Hypoxanthine/हाइपोक्सान्थिन
- (b) IMP/आई एम पी
- (c) NH_3 / NH_3
- (d) AMP/ए एम पी

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) The bitter taste in spoiled fish is mainly caused by high levels of hypoxanthine. When fish spoils, hypoxanthine increases, contributing to the development of a bitter flavor.

11. Factors that limits storage life of frozen fish is:

जमी हुई मछली के भंडारण के जीवन को क्या सीमित करता है :

- (a) Changes in protein/प्रोटीन में परिवर्तन
- (b) Oxidation changes in fat/वसा में ऑक्सीडेटिव परिवर्तन
- (c) Discoloration/रंग बिगाड़ना
- (d) All of these/सभी

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (d) The storage life of frozen fish is limited by various factors, including changes in protein structure, oxidation of fats leading to rancidity and discoloration. These processes degrade quality over time, reducing the fish's shelf life and palatability.

12. CPUE is the most common used index of _____ :
/सीपीयूई _____ का सबसे अधिक प्रयुक्त सूचकांक है :

- (a) Total abundance/कुल बहुतायत
- (b) Relative abundance/सापेक्ष प्रचुरता
- (c) (a) and (b)/ (a) और (b)
- (d) Neither (a) nor (b)/ न (a) या (b)

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (c) CPUE, or Catch Per Unit Effort serves as an index of both total abundance and relative abundance in fisheries biology. It measures the average catch of fish per unit of fishing effort, providing insights into the overall and relative population sizes.

13. Muga silk is produced by the larva of _____ .

मूगा रेशम के डिंभ द्वारा निर्मित होता है।

- (a) *Antheraea paphia*/एंथेरिया पफिया
- (b) *Attacus ricini*/अटाकस रिसिनी
- (c) *Antheraea assamensis*/एंथेरिया एसामेन्सिस
- (d) *Attacus atlas*/अटैकस ऑल्टस

DSSSB Laboratory Assistant (28.08.2021)

Ans. (c) Muga silk is spun by the larvae of the *Antheraea assamensis* moth. It is indigenous to Assam, India, these larvae produce a golden-colored silk highly valued for its durability and sheen.

14. Which among the following is a physiological character of Gold fish (a common aquarium fish)?

निम्नलिखित में से कौन सुनहरी मछली (एक सामान्य एक्वेरियम मछली) का शारीरिक लक्षण है?

- (a) Thermotolerance/तापीय सहिष्णुता (थर्मोटोलेरंस)
- (b) Lack of teeth/दाँतों की कमी
- (c) Tolerance to acids/अम्ल के प्रति सहिष्णुता
- (d) Absence of stomach/पेट की अनुपस्थिति

DSSSB Laboratory Assistant (28.08.2021)

Ans. (d) Goldfish lack a stomach, which means they have a straight digestive tract. Instead, they possess a long intestine for digestion, making them adapted for constant feeding and processing of food.

15. In aquaculture, nitrogenous fertilizer is supplied by: /मत्स्यपालन (एक्वकल्चर) में, नाइट्रोजन उर्वरक की आपूर्ति निम्न के द्वारा की जाती है:

- (a) Fish culture/मत्स्यपालन
- (b) Organic compost/जैविक खाद
- (c) Ammonium nitrate/अमोनियम नाइट्रेट
- (d) Potassium nitrate/पोटैशियम नाइट्रेट

DSSSB Laboratory Assistant (28.08.2021)

Ans. (a) In aquaculture, fish culture provides nitrogenous fertilizer through fish waste, which contains ammonia and other nitrogen compounds. These serve as nutrients for aquatic plants, promoting their growth and sustaining the ecosystem.

16. _____ is infertile female developed from fertilized eggs./..... निषेचित अंडों से विकसित अनुर्वर मादा है।

- (a) Queen bee/रानी मधुमक्खी
(b) Worker bee/श्रमिक मधुमक्खी
(c) Drone/नर मधुमक्खी (ड्रोन)
(d) Female bee/मादा मधुमक्खी

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) In a beehive, infertile female worker bees develop from fertilized eggs. They perform various tasks within the colony, such as foraging, nursing larvae and building comb structures.

17. **Honeybees mix beeswax and resins to produce**

मधुमक्खियाँ का उत्पादन करने के लिए मधुमोम और रेजिन को मिलाती हैं।

- (a) Royal Jelly/रॉयल जेली (b) Honey/शहद
(c) Propolis/प्रोपोलिस (d) Venom/विष

DSSSB Laboratory Assistant (28.08.2021)

Ans. (c) Honeybees combine beeswax and plant resins to create propolis, a sticky substance used to seal gaps in the hive, reinforce the structure and protect against pathogens and invaders.

18. **Abdominal dropsy of Carps is caused by _____ .**
कार्प्स की एडोमिनल ड्रॉप्सी के कारण होती है।

- (a) Aeromonas hydrophila/एरोमोनास हाइड्रोफिला
(b) Edwardsiella ictaluri/एडवर्ड्सिएला इक्तालुरी
(c) Trypanosoma/ट्रिपैनोसोमा
(d) Myxobolus/मायक्सोबोलस

DSSSB Laboratory Assistant (28.08.2021)

Ans. (a) Abdominal dropsy in carps is caused by the bacterium Aeromonas hydrophila. It leads to fluid accumulation in the abdominal cavity, resulting in swelling and ultimately affecting the fish's health and survival.

19. **Who proposed five kingdom classification?**
पाँच जगत वर्गीकरण किसने प्रस्तावित किया?

- (a) Ernst Mayr /अर्नेस्ट मायर
(b) R.H. Whittaker /आर.एच. व्हिटेकर
(c) M.W. Beijerinck /एम.डब्ल्यू. बीजरिन्क
(d) D.I. Ivanovsky /डी.आई. इवानोवस्की

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (b) R.H. Whittaker proposed the five kingdom classification in 1969 based on cell structure, thallus organization, mode of nutrition etc. Monera, protista, fungi, plantae and animalia .

20. **Blue whale is placed under**
नीली व्हेल को किसके अंतर्गत रखा गया है?

- (a) Endangered/संकटग्रस्त
(b) Critically endangered/गंभीर संकटग्रस्त

- (c) Rare/विरल
(d) Extinct/विलुप्त

MP VYAPAM Lab Technician (18.10.2015, Shift-III)

Ans. (a) Blue whale are threatened species by environmental changes and other factors, blue whales are listed as endangered under the endangered species act and protected under the marine mammal production act.

21. **Internal fertilization is the characteristic feature of the most species of order :**

किस समूह की अधिकांश जातियों में आंतरिक निषेचन की विशेषता है :

- (a) Apoda/अपोडा (b) Caudata/कॉडेटा
(c) Anura/एन्यूरा
(d) Lissamphibia/लिसएम्फीबिया

UKSSSC Lab Assistant (19.05.2019)

Ans. (b) Caudata is a order of amphibia that include salamanders in which fertilization occurs in the cloaca during the few minutes proceeding oviposition. Thus while fertilization is internal embryo development is entirely external.

22. **Excretory organ in insects is**
कीड़ों में उत्सर्जी अंग हैं:

- (a) Green gland/हरित ग्रंथि
(b) Malpighian tubules/मैलपीगी नलिकाएँ
(c) Nephridia/नेफ्रिडिया
(d) Protonephridia/अधिवृक्क

Kerala PSC Jr. Laboratory Asst. (07.07.2018)

Ans. (b) Malpighian tubules is a type of excretory organs and osmoregulatory system in insects. Which is analogous organ to kidney. It is corresponding organs of annelids and vertebrates.

23. **Which of the following has a laterally compressed body and no wings?**

निम्नलिखित में से किसके पास पार्श्व संकुचित शरीर होता है और कोई पंख नहीं होता है?

- (a) Mosquitoes/मच्छरों (b) Lice/जूँ
(c) Fleas/पिस्सू (d) Bugs/कीड़े

Kerala PSC Laboratory Technician Gr. III (14.12.2016)

Ans. (c) Fleas is a group of blood sucking insects, that are important carriers of disease which are parasites on the exterior of the host.

Fleas are small wingless insects with a tough and laterally compressed body.

24. **Sexes are separate in which of the following?**
निम्नलिखित में से किसमें लिंग अलग-अलग होता है?

- (a) Amphistomes/एम्फिस्टोम्स
(b) Schistosomes/शिस्टोसोम्स
(c) Distome/डिस्टोम
(d) Monostome/मोनोस्टोम

Kerala PSC Laboratory Technician Gr. III (14.12.2016)

Ans. (b) Schistosomes belongs to phylum Platyhelminthes commonly known as bilharzia or snail fever. It is dioecious animal show sexual dimorphism male are short while female are large & both are attached with gynaecophoric canal.

25. **Nematodes are best fixed in:**
सूत्र कृमि को अच्छे से स्थिर करते हैं।
- 10% formalin/10%फार्मेलीन
 - Bouin's fluid/बोइन द्रव्य
 - Phenol/फिनॉल
 - Hot glycerine alcohol/गर्म ग्लिसरीन एल्कोहल

Kerala PSC Laboratory Technician Gr. III (14.12.2016)

Ans. (d) Nematodes belongs to phylum Aschelminthes which include free living forms as well as parasite of plants.

Hot glycerin alcohol is the preferred fixative for nematodes due to its ability to preserve morphology effectively. It penetrates tissues well and maintains the integrity of specimens.

26. **What is meant by Pisciculture is?**
मत्स्य पालन क्या है?
- The professional growing of trees/पेशेवर रूप से पेड़ों की खेती करना
 - The professional growing of silver/पेशेवर रूप से चांदी बनाना
 - The professional growing of fish/पेशेवर रूप से मछली पालन करना
 - The professional growing of silk/पेशेवर रूप से सिल्क की खेती करना

MP VYAPAM Lab Technician (18.10.2015, Shift-III)

Ans. (c) Pisciculture is the professional cultivation of fish for commercial purposes. It involves raising fish in controlled environments like ponds or tanks for food production or commercial sale.

27. **Fisheries sector is operated in _____,**
मत्स्य पालन का संचालन _____ में किया जाता है।
- Cold areas/ठण्डे क्षेत्र
 - Hot areas/गर्म क्षेत्र
 - Both the above/उपर्युक्त दोनों
 - None of these/इनमें से कोई नहीं

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) The fisheries sector mainly operates in cold areas because they offer optimal conditions for fish farming and harvesting, supporting the industry's growth and sustainability.

28. **All the three species of anopheles have a secondary exo-erythrocytic stage, except एक को छोड़कर सभी तीन एनाफीलों में द्वितीयक इरिथ्रोसायटिक अवस्था होती है**
- Plasmodium vivax*/प्लाज्मोडियम वाइवेक्स
 - Plasmodium malariae*/प्लाज्मोडियम मलेरियाई
 - Plasmodium ovale*/प्लाज्मोडियम ओवेल
 - Plasmodium falciparum*/प्लाज्मोडियम फाल्सीपेरम

HPSSC Laboratory Assistant (25.07.2019)

Ans.(d) *Plasmodium falciparum* does not have a secondary exo-erythrocytic stage.

29. **Haemozoin is/हीमोज्वाइन है**
- a precursor of haemoglobin/हीमोग्लोबिन का अग्रणी
 - a toxin from Streptococcus species/स्ट्रेप्टोकोकस स्पीशीज का टॉक्सिन
 - a toxin from Plasmodium species/प्लाज्मोडियम स्पीशीज का टॉक्सिन
 - a toxin from Haemophilus species/हीमोफिलस स्पीशीज का टॉक्सिन

HPSSC Laboratory Technician (27.09.2020)

Ans. (c) Haemozoin is not quite a toxin, but rather a by product of the plasmodium parasite's digestion process. Malaria parasites feed on hemoglobin, the protein in red blood cells that carries oxygen throughout the body. As they digest hemoglobin they release a toxic by product called heme, to protect themselves from this toxic heme, the parasites convert it into an insoluble crysalline form called haemozoin.

30. **Which parasite is single-celled, simple organism mainly consisting of a nucleus and cytoplasm ?**
मुख्यतः केन्द्रक और कोशिका-द्रव्य से निर्मित एकल कोशिकी सरल जीव परजीवी कौन सा है?
- Commensal /सहभोजी
 - Protozoa /प्रोटोजोआ
 - Endoparasite /एण्डोपेराजाइट
 - Helminths /हेल्मिन्थज

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (b) Protozoa are indeed single-celled simple organisms consisting of a nucleus and cytoplasm. They are classified as eukaryotes and include various parasitic species such as plasmodium, *Trypanosoma* and *Giardia lamblia*.

31. **Vegetative stage of intestinal protozoan is also called/आंतो के प्रोटोजोआन की कायिक अवस्था यह भी कहलाती है**
- Trophozoite stage/पोषाणु अवस्था
 - Cystic stage/पुटीय अवस्था
 - Dormant stage/प्रसुप्त अवस्था
 - All of these/यह सभी

HPSSC Sr. Laboratory Technician Gr.II(23.09.2020)

Ans. (a) The vegetative stage of intestinal protozoa is often referred to as the trophozoite stage. It's responsible for colonization and causing symptoms in hosts.

32. **Which of the following parasites is called liver fluke? किस परजीवी को जिगर अस्थायी कहते हैं?**
- Ancylostoma duodenale*/एंसाइलोस्टोमा ड्यूडेनेल
 - Toxoplasma gondii*/टॉक्सोप्लाज्मा गोनडाई
 - Fasciola hepatica*/फैशिलोला हिपेटिका
 - Plasmodium vivax*/प्लाज्मोडियम वाइवेक्स

DSSSB Laboratory Technician (2012)

Ans. (c) *Fasciola hepatica* also known as the common liver fluke or sheep liver fluke is a parasitic trematode that infects the liver and bile ducts of various mammals including humans, sheep, cattle and other herbivores.

33. *Trichuris trichiura* is commonly known as
ट्राइकुरिस ट्राइक्युरा को सामान्यतः _____ कहते हैं।

- (a) Hookworm/हुक कृमि
(b) Whipworm/कोडा कृमि
(c) Tapeworm/फीता कृमि
(d) Stickworm/छड़ी कृमि

DSSSB Laboratory Technician (2012)

Ans. (b) *Trichuris trichiura* is indeed commonly known as the whipworm. It's a parasitic roundworm that injects the large intestine of humans and other mammals.

34. _____ secretes a toxic fluid called ascarron.
_____ एक विषैला द्रव एस्केरॉन स्रावित करते हैं।

- (a) *Ascaris lumbricoides*/एस्केरिस लुंब्रिकोइड्स
(b) *Ancylostoma duodenale*/एंसाइलोस्टोमा ड्यूडेनेल
(c) *Trichuris trichiura*/ट्राइकुरीय ट्राइक्युरा
(d) *Enterobius vermicularis*/एंटेरोबायस वर्मिक्युलेरिस

DSSSB Laboratory Technician (2012)

Ans. (a) *Ascaris lumbricoides* secretes a toxic fluid called ascarron, contributing to its pathogenic effects in the host's body, causing various symptoms.

35. _____ is found in the exoskeletons of crustaceans.
क्रुस्टेशियन्स के बहिःकंकाल में _____ पाया जाता है।

- (a) Chylomicron/कैलोमाइक्रॉन
(b) Cholesterol/कोलेस्ट्रॉल
(c) Chitin/काइटिन
(d) Cholic acid/कोलिक एसिड

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) Chitin is long-chain polymer found in the exoskeletons of crustaceans like crabs, lobsters, and shrimps, providing structural support and protection against environmental challenges.

36. A plant species is said to be 'endemic' to a region if it _____
किसी पादप प्रजाति को किसी क्षेत्र के लिए 'स्थानिक' कहा जाता है यदि वह _____।

- (a) is the most common species found in that area
उस क्षेत्र में पाई जाने वाली सर्वाधिक आम प्रजाति है
(b) is a species which can not be grown anywhere out side that particular region
ऐसी प्रजाति है, जिसे उस विशेष क्षेत्र के बाहर कहीं भी नहीं उगाया जा सकता है
(c) it is a rare species found in that area and is in danger of extinction
उस क्षेत्र में पाई जाने वाली दुर्लभ प्रजाति है और उसके विलुप्त होने की आशंका है
(d) is a species which is found naturally only in that area
ऐसी प्रजाति है, जो प्राकृतिक रूप से केवल उस क्षेत्र में पाई जाती है

NVS Lab Attendant(09.03.2022)

Ans. (d) Endemic species are those that are native and restricted to a particular geographic area, meaning they

are found naturally only in that specific region no where else. This term is commonly used in biology and ecology to describe species with limited distribution ranges.

37. One of the following organism is not included in the phylum Mollusca.

निम्नलिखित में से एक जीव मोलस्का संघ में शामिल नहीं है।

- (a) Chaetopleura/चेटोप्लूरा (b) Aplysia/अप्लीसिया
(c) Ophiura/ओफ्यूरिया (d) Loligo/लोलिगो

Kerala PSC Lab Technician(21.01.2023)

Ans. (c) Ophiura is not included in the phylum Mollusca. Ophiura belongs to the phylum Echinodermata, specifically to the class ophiuroidea which includes brittle stars.

38. Pseudocoelom is found only in animals belonging to the phylum

स्पूडासिलोम केवल फाइलम से सम्बन्धित जानवरों में पाया जाता है :

- (a) Cnidaria/नाइडेरिया
(b) Aschelminthes/एस्केल्मिथीज
(c) Mollusca/मोलस्का
(d) Echinodermata/इकाइनोडर्मेटा

Kerala PSC Lab Technician(21.01.2023)

Ans. (b) Pseudocoelom is a body cavity that is not completely lined by mesoderm. It is found in animal belonging to the phylum Aschelminthes, also known as Nematoda (roundworm) and Rotifera (rotifers).

39. Which of the following fish is not larvivorous fish?/निम्नलिखित में से कौन-सी मछली लार्वीवोरस मछली नहीं है?

- (a) Trichogaster/ट्राइकोगैस्टर
(b) Gambusia/गैम्बूसिया
(c) Haplochitus/हापलोचिटस
(d) Pterophyllum/टेरोफिलम

DSSSB Laboratory Assistant (28.08.2021)

Ans. (d) Pterophyllum commonly known as angelfish is not a larvivorous fish. Larvivorous fish are those that feed on the larvae of mosquitoes helping control mosquito populations and reduce the speed of diseases like malaria and dengue fever.

40. _____ is the practise of eating insects like tarantulas and centipedes.

..... बड़ी टारेंटयुलास और शतपाद जैसे कीटों को खाने की प्रथा है।

- (a) Melittology/मेलिटोलॉजी
(b) Myrmecology/पिपीलिका विज्ञान
(c) Entomology/कीट विज्ञान
(d) Entomophagy/कीटाहारिता (एंटोमोफागी)

DSSSB Laboratory Assistant (28.08.2021)

Ans. (d) Entomophagy is the practice of eating insects. It involves consuming insects as food. This includes various types of insects such as tarantulas and centipedes.

41. Insects have a _____ heart and the circulatory system is _____.
कीटों का हृदय होता है और परिसंचरण तंत्र होता है।

- (a) Dorsal, closed/पृष्ठीय, बंद
(b) Ventral, closed/अभ्युदर, बंद
(c) Dorsal, open/ पृष्ठीय, खुला
(d) Ventral, open/ अभ्युदर, खुला

DSSSB Laboratory Assistant (28.08.2021)

Ans. (c) Insects have an open circulatory system, meaning that their blood, called hemolymph, is pumped into the body cavity by the heart through opening called ostia and then bathes the internal organs directly.

• The heart of insects is typically dorsal and the circulatory system is open, allowing hemolymph to flow freely throughout the body cavity.

42. Which of the following is an example of negative phototaxis?/निम्नलिखित में से कौन ऋणात्मक फोटोटैक्सिस का उदाहरण है?

- (a) Cockroaches/तिलचट्टा
(b) Maggots/मैगट
(c) Wood lice/वुड लाइस
(d) Cockroaches, Maggots & Wood lice, all are correct/तिलचट्टा, मैगट और वुड लाइस सभी सही हैं।

DSSSB Laboratory Assistant (28.08.2021)

Ans. (d) Negative phototaxis refers to the movement away from light.

• Cockroaches, maggots and woodlice are examples of organism that exhibit negative phototaxis, as they tend to move away from sources of light to avoid detection by predators or to seek shelter in dark hidden places.

43. Bacteria belongs to which of the following classes?

जीवाणु, निम्नलिखित वर्गों में से किससे जुड़े होते हैं?

- (a) Prokaryotes/प्रोकैरियोट्स
(b) Eukaryotes/यूकैरियोट्स
(c) Protozoans/प्रोटोजोन्स
(d) Kinetoplastids/किनेटोप्लास्टिड्स

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) Bacteria belong to the class of prokaryotes, which are unicellular organism lacking a nucleus and other membrane bound organelles. Prokaryotes include bacteria and archaea, both of which are characterized by their simple cellular structure compared to eukaryotes.

44. Monerans bearing conidia for reproduction belong to

मोनेरा जिसमें जनन के लिए कोनीडिया होता है, इससे सम्बन्धित है

- (a) Eubacteria/यूबैक्टीरिया
(b) Archebacteria/आर्किबैक्टीरिया
(c) Actinomycetes/एक्टिनोमाइसिटिज
(d) Mycoplasma/माइकोप्लाज्मा

HPSSC Jr. Laboratory Technician (18.12.2020)

Ans. (c) Actinomycetes are a group of bacteria that bear conidia for reproduction. Conidia are asexual spores produced by certain fungi and bacteria, including

Actinomycetes as a means of reproduction therefore the presence of conidia for reproduction is related to Actinomycetes.

45. Lungs is to man as _____ is to fish./मनुष्य के लिए फेफड़े जैसे ही हैजैसे मछली के लिए

- (a) fin / फिन (b) gills / गलफड़े
(c) water / पानी (d) oxygen / ऑक्सीजन

HPSSC Laboratory Assistant (22.09.2019)

Ans. (b) Lungs are organs in mammals, including human that facilitate the exchange of oxygen and carbon dioxide with the blood stream similarly, gills are the respiratory organs in fishes that enable them to extract oxygen from water and release carbon dioxide, so, just as lungs are essential for breathing in mammals gills serve the same purpose for fish.

46. Which have valveless heart ?

किसमें कपाटविहीन हृदय पाया जाता है?

- (a) Mammals /स्तनधारी में
(b) Reptiles /सरीसृप में
(c) Fish /मत्स्यों में
(d) Amphibians /उभयचर में

HPSSC Laboratory Assistant (22.09.2019)

Ans. (c) Fish have valveless hearts. Their hearts consists of two chambers and pump blood in a single circuit through the gills and then to the rest of the body. This type of heart structure is common among fish and is referred to as a "single circulation" system.

47. The scientific name of mid wife toad is :

मिड वाइफ टोड का वैज्ञानिक नाम है :

- (a) Bufo/बूफो (b) Hyla/हाइला
(c) Rhacophorus/रैकोफोरस
(d) Alytes/एलाइटीज

UKSSSC Lab Assistant (19.05.2019)

Ans. (d) The scientific name of the midwife toad is Alytes. These toads belong to the genus Alytes within the family Alytidae. They are known for their unique reproductive behavior where the male carries the fertilized eggs on its back until they hatch hence the name midwife toad.

48. Excretory organs of platyhelminthes :

प्लैटीहेल्मिन्थीज संघ में उत्सर्जी अंग है :

- (a) Flame cell/ज्वाला कोशिका
(b) Nephridia/नेफ्रिडिया
(c) Renette cell/रेनेट कोशिका
(d) Meta nephridia/मेटा नेफ्रिडिया

UKSSSC Lab Assistant (19.05.2019)

Ans. (a) Flame cell specialized excretory cells found in simple invertebrates including flat worms, (platyhelminthes). They are responsible for osmoregulation and excretion.

49. Which one of the statements given below is/are correct with respect to Tapeworm?

नीचे दिए गए वक्तव्यों में से कौन-सा वक्तव्य फीताकृमियों के संबंध में सही है?

- A. They are intestinal parasites/ये आंत्रिय परजीवी होते हैं।
 B. They survives within the intestines of animals including humans/ये मानवों सहित पशुओं की आंतों के भीतर जीवित रहते हैं।
 C. They survives within the intestines of animals excluding humans/ये मानवों के अलावा पशुओं की आंतों में जीवित रहते हैं।
- (a) A and B (b) A and C
 (c) Only A (d) A, B and C

MP VYAPAM Lab Technician (18.10.2015, Shift-III)

Ans. (a) They are intestinal parasites-Tapeworms are indeed intestinal parasites that reside in the intestine of their hosts.

• They survive within the intestines of animal including humans. Tapeworms can infect a variety of animals including humans and live within their intestine.

50. Scientific name of Sucker cat fish is _____.
 सकर कैट मछली का वैज्ञानिक नाम _____ है।

- (a) Carassius auratus/केरेसियस अरिटस
 (b) Cyprinus Carpeo/सिप्रिनस कार्पिओ
 (c) Labeo bicolor/लैबियो बाईकॉलर
 (d) Hypostomus Plecostomus/ हाइपोस्टोमस प्लेकोस्टोमस

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (d) The scientific name of the sucker catfish is Hypostomus plecostomus. This species is commonly known as the plecostomus or pleco. Plecostomus are freshwater fish belonging to the loricariidae family and are known for their ability to clean algae from aquarium tanks.

51. Vagina of Scoliodon is formed by the union of ____./स्कोलियोडॉन की योनि _____ के मिलन से बनती है।

- (a) Uteri/ग्रीवा
 (b) Ureters/मूत्रवाहिनी
 (c) Vas deferens/वास डेफरेंस
 (d) Vasa efferentia/वासा इफरेंशिया

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) The vagina of scoliodon, which is a type of shark commonly known as the spadenose shark, is formed by the union of uteri.

52. Spermatozoa in Scoliodon are developed in _____.
 स्कोलियोडॉन के शुक्राणु _____ में विकसित होते हैं।

- (a) Apopyle/एपोपाइल
 (b) Testes/वृषण
 (c) Siphon/साइफन
 (d) Seminal vesicle/शुक्राणु पुटिका

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) Spermatozoa in scoliodon are developed in the testes. The testes are the primary organs responsible for producing sperm cells (Spermatozoa) in male animals including shark.

53. Ampullae of Lorenzini are _____.
 लोरेंजिनी की एम्पुली _____ हैं।

- (a) Photoreceptors/फोटोरिसेप्टर
 (b) Thermoreceptors/थर्मोरिसेप्टर
 (c) Rheoreceptors/ रिओरिसेप्टर
 (d) Tangoreceptors/टेंगोरिसेप्टर

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (b) Ampullae of Lorenzini are specialized structures found in sharks and related fish species. They act as thermoreceptors, detecting temperature changes in the surrounding water, aiding in locating prey and navigating their environment.

54. The term malacology is used for the scientific study of _____.

मालाकोलॉजी शब्द _____ के वैज्ञानिक अध्ययन के लिए प्रयोग किया जाता है।

- (a) Decapod Crustaceans
 दस पैरवाला क्रस्टेशियन
 (b) Malacostracan crustaceans
 मालाकोस्ट्राकैन क्रस्टेशियन
 (c) Echinoderms/इकाइनोडर्म्स
 (d) Molluscans/मोलस्कंस

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (d) The term Malacology is indeed used for the scientific study of molluscs, which are soft-bodied invertebrates including snail, slugs, clams squid and octopuses.

55. The integument of posterior dorsal border of prawn head extending back over the body is known as _____.

झींगे के सिर से पीछे से शरीर पृष्ठीय सीमा के आवरण को _____ के रूप में जाना जाता है।

- (a) Somite/कायखंड
 (b) Thorax/वक्ष
 (c) Carapace/पृष्ठवर्म
 (d) None of these/इनमें से कोई नहीं

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (c) The integument of the posterior dorsal border of a prawn's head extending back over the body is called the carapace, a hard protective shell covering the head and thorax.

56. Which of the following is commonly known as flying fish?/निम्न में से कौन आमतौर पर उड़ने वाली मछली के रूप में जाना जाता है।

- (a) Exocoetus volitans/एक्सोकोटस वॉलीटन
 (b) Megalaspis cordyla/मेगालास्पिस कोर्डिला
 (c) Catla catla/कैटला कैटला
 (d) Scoliodon laticaudus/स्कोलियोडॉन लाटिकाऊडस

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (a) The commonly known flying fish is Exocoetus volitans

• Flying fish are characterized by their ability to leap out of the water and glide for considerable distance

using their enlarged pectoral fins. This behavior allows them to escape from predators and cover more ground while foraging for food.

57. **Heterocoelous centrum is a characteristic of? हेटेरोकोलियस सेंट्रम किसकी विशेषता है?**

- (a) Amphibia/उभयचर (b) Reptilia/सरीसृप
(c) Birds/पक्षी
(d) Mammalia/स्तनीयजन्तु

MP VYAPAM Lab Technician(18.10.2015,Shift-I)

Ans. (c) Heterocoelous centrum refers to a type of vertebrae found in birds. In this type of vertebrae, the articular surfaces of adjacent vertebrae are saddle-shaped, allowing for more mobility and flexibility in the spine which is important for flight.

58. **Body cavity lined by mesoderm is मध्यजनस्तर द्वारा आस्तरित देहगुहा है-**

- (a) Coelenteron/सिलेन्ट्रॉन (b) Blastocoel/ब्लास्टोसील
(c) Coelom/सिलोम
(d) Pseudocoel/स्यूडासिलोम

HPSSC Laboratory Assistant 10.04.2022

Ans. (c) The coelom is a body cavity lined by mesoderm in higher animals, including vertebrates. This cavity separates the digestive tract from the body wall and house various internal organ.

59. **Dead Man's Finger is मृत मानवांगुलि है-**

- (a) Coral/प्रवाल
(b) Echinoderm/शूलचर्मी
(c) Sponge/स्पंज
(d) Infected appendix/संक्रमित उपांग

HPSSC Laboratory Assistant 10.04.2022

Ans. (a) "Dead Man's fingers" refers to a soft coral in the genus alcyonium. It earns its name from its resemblance to person pale, thick fingers, like those of a dead person.

60. **A dioecious animal is एक द्विलिंगाश्रयी प्राणी है-**

- (a) Tapeworm/फीताकृमि (b) Earthworm/केंचुआ
(c) Liver fluke/लीवर फ्लूक
(d) Aurelia/ऑरीलिया

HPSSC Laboratory Assistant 10.04.2022

Ans. (d) Aurelia is a genus of jellyfish, which are dioecious animals. "Dieocious" means that individuals of the species are either male or female, with separate sex. This is in contrast to other animals where individuals may possess both male and female reproductive organs (hermaphrodites) or change sex at some point in their life cycle.

61. **Arthropods lack संधिपादों में कमी होती है-**

- (a) Jointed appendages/जुड़े उपांग
(b) Cilia/पक्ष्माभ
(c) Respiratory organs/श्वसन अंग
(d) Segmented body/सखंड शरीर

HPSSC Laboratory Assistant 10.04.2022

Ans. (b) Arthropods do not lack jointed appendages, respiratory organs or segmented bodies. However they lack cilia.

• Cilia are tiny hair-like structures found in many other organisms such as some species of worm and protozoa, used for movement or sensory functions.

62. **Connecting link between chordates and non-chordates is:/कार्डेटा तथा नॉन-कार्डेटा के बीच की योजक कड़ी है :**

- (a) Peripatus/पेरीपेट्स
(b) Neoplina/निओपेलाइना
(c) Balanoglossus/बेलेनोग्लोसस
(d) Tochyglossus/टेकीग्लोसस

RSMSSB Lab Assistant (29.06.2022)

Ans. (c) Balanoglossus is a genus of marine animal often considered as a connecting link between chordates and non-chordates. It belong to the phylum Hemichordata.

63. **What is the scientific name of starfish? स्टार फिश का वैज्ञानिक नाम क्या है?**

- (a) Asterias/एस्टेरियस (b) Echinus/एकाइनस
(c) Lionulus/लिन्युलस (d) Echidna/एकिडना

MP VYAPAM Lab Technician (17.10.2015)

Ans. (a) The scientific name for starfish is "Asterias". The term "Asterias" is derived from the Greek word for "star", which reflects the star-like shape of many species of starfish. This genus includes several species commonly known as sea stars or star fish.

64. **Which is the biggest phylum in animal? जन्तु जगत में सबसे बड़ा फाइलम कौन सा है?**

- (a) Arthropoda/आर्थोपोडा (b) Protozoa/प्रोटोजोआ
(c) Chordata/कार्डेटा (d) Mollusca/मोलस्का

MP VYAPAM Lab Technician (17.10.2015)

Ans. (a) The biggest phylum in the animal kingdom is Arthropoda. Arthropods include insects, spiders crustaceans and other invertebrates.

• They are characterized by having segmented bodies, joined limbs, and an exoskeleton made of chitin.

• Arthropods are incredibly diverse and abundant, with over million described species making them the largest phylum in terms of species richness.

65. **Which type of blood is found in Aves? पक्षियों में किस प्रकार का रक्त पाया जाता है?**

- (a) Semi warm/अर्द्ध गर्म
(b) Cold/ठंडा
(c) Warm/गर्म
(d) Warm and cold/गर्म, ठण्डा दोनों

MP VYAPAM Lab Technician (17.10.2015)

Ans. (c) Aves, which is the scientific classification for birds, have warm blood. They are warm-blooded vertebrates, which means they maintain a constant body temperature regardless of the environment.

66. **Which of these creatures is not in the Insect Class?**

इनमें से कौन सा जीव कीट वर्ग में नहीं है?

- (a) Butterfly/तितली (b) Mosquito/मच्छर
(c) Spider/मकड़ी (d) Beetles/बीटल्स

MP VYAPAM Lab Technician (17.10.2015)

Ans. (c) Spiders belong to the class Arachnida, not Insecta. Insects have six legs, while spiders have eight legs. Therefore, spiders are not classified as insects.

67. The kingdom of prokaryotes is प्रावकेन्द्रकी का जगत है

- (a) Monera/मोनेरा (b) Protista/प्रोटीस्टा
(c) Fungi/फंगी (d) Plantae/प्लांटी

HPSSC Laboratory Assistant(11.02.2021)

Ans.(a) The kingdom monera consists of prokaryotic organism which are unicellular organisms lacking a nucleus and other membrane bound organelles. This kingdom includes bacteria and cyanobacteria (blue-green algae). Therefore, the kingdom of prokaryotes is monera.

68. Highest degree of polymorphism is found in बहुरूपता की उच्चतम कोटि पाई जाती है

- (a) Protozoa/प्रोटोजोआ में
(b) Cnidaria/नाइडेरिया में
(c) Platyhelminthes/प्लैटीहेल्मिन्थीज में
(d) Arthropoda/आर्थ्रोपोडा में

HPSSC Laboratory Assistant(11.02.2021)

Ans.(b) Cnidaria which include jellyfish, corals and sea anemones, exhibit the highest degree of polymorphism.

- Polymorphism in cnidarians refers to the presence of different body forms with in a single species, such as the polyp and medusa forms.
- This polymorphism allows cnidarians to adopt to various environmental condition and lifestyles, making them highly diverse and successful organisms.

69. Methanogenic bacteria are मथैनाजेनिक जीवाणु हैं

- (a) Anaerobic in nature/प्रकृति में अवायवीय
(b) Aerobic in nature/प्रकृति में वायावीय
(c) Saprophytic in nature/प्रकृति में मृतजीवी
(d) None of these/इनमें से कोई नहीं

HPSSC Laboratory Assistant(11.02.2021)

Ans.(a) Methanogenic bacteria are anaerobic in nature meaning they thrive in environments without oxygen. They play crucial role in anaerobic digestion, breaking down organic matter such as dead plants and animals and producing methane gas as a by product.

70. Connecting link between phylum Annelida and Mollusca is -

संघ एनीलिडा एवं मोलस्का की योजक कड़ी है-

- (a) Peripatus/पेरीपेटस
(b) Neopilina/निओपिलाइना
(c) Chiton/काइटन
(d) Nautlus/नॉटिलस

RSMSSB Lab Assistant (03.02.2019)

Ans. (b) Neopilina is a genus of deep -sea mollusks that is considered to be a connecting link between the phylum Annelida and Mollusca.

71. The animals of which group are homoeothermic ?

निम्न में कौन सा समूह समतापी प्राणियों का है ?

- (a) Whale, Pigeon, Bat/व्हेल, कबूतर, चमगादड़
(b) Crocodile, Alligator, Bat/क्रोकोडाइल, ऐलीगेटर, चमगादड़
(c) Whale, Alligator, Pigeon/व्हेल, ऐलीगेटर, कबूतर
(d) Hippocampus, Bat, Alligator/हिपोकेम्पस, चमगादड़, ऐलीगेटर

RSMSSB Lab Assistant (03.02.2019)

Ans. (a) Whale, pigeon, Bat - regulate their body temperature internally, known as homoeothermic. This enables them to maintain a stable body temperature regardless of external condition, distinguishing them as homoeothermic animals.

72. Match List-I with names of Phylum with List-II with structures and answer:

संघों के नामयुक्त सूची -I को संरचनाओंयुक्त सूची-II से मेल करें तथा सही उत्तर का चयन कीजिए

List -I/ सूची -I		List-II/ सूची-II	
(a)	Porifera/पोरीफेरा	(i)	Flame cells/ ज्वाला कोशिकाएँ
(b)	Platyhelminthes/ प्लैटीहेल्मिन्थीज	(ii)	Choanocytes/ कीपाणु
(c)	Nemathelminthes/ निमैटहेल्मिन्थीज	(iii)	Phasmids/ फास्मिड्स
(d)	Chordata/कॉर्डेटा	(iv)	Cnidocytes/ दंशकोशिकाएँ
		(v)	Malpighian tubules/मैलपीघिय न नलिकाएँ
		(vi)	Postanal tail/ पश्चगुद पुच्छ

- (a) (a) (iv), (ii); (b) (i); (c) (v); (d) (vi)
(b) (a) (iii), (b); (i) (iv); (c) (ii); (d) (v)
(c) (a) (ii), (b); (i) (c); (iii) (d); (vi) (vi)
(d) (a) (i), (ii); (b) (iv); (c) (iii); (d) (vi)

RSMSSB Lab Assistant (03.02.2019)

Ans. (c)			
List -I/ सूची -I		List-II/ सूची-II	
(a)	Porifera/पोरीफेरा	(ii)	Choanocytes/ कीपाणु
(b)	Platyhelminthes/ प्लैटीहेल्मिन्थीज	(i)	Flame cells/ ज्वाला कोशिकाएँ
(c)	Nemathelminthes/ निमैटहेल्मिन्थीज	(iii)	Phasmids/ फास्मिड्स
(d)	Chordata/कॉर्डेटा	(vi)	Postanal tail/ पश्चगुद पुच्छ

Chapter-4

Circulatory & Endocrine System of Humans

1. Which hormones are mainly responsible for control and coordination in plants ?

पौधों में नियंत्रण और समन्वय के लिए मुख्य रूप से कौन से हार्मोन जिम्मेदार होते हैं ?

- (a) Adrenaline and insulin/एड्रीनलिन और इंसुलिन
- (b) Cytokinin and ethylene/साइटोकाइनिन और इथाइलीन
- (c) Thyroxine and progesterone/थायरॉक्सिन और प्रोजेस्ट्रॉन
- (d) Melatonin and testosterone/मेलैटोनिन और टेस्टोस्टीरॉन

CG-FSL-Lab-Attendant-2024

Ans. (b) : The hormones primarily responsible for control and coordination in plants are cytokinin and ethylene.

These hormones play crucial roles in various physiological processes such as growth, development, and response to environmental stimuli in plants.

2. Which elements in blood are essential for human life?/रक्त में कौन-से तत्व मानव जीवन के लिए आवश्यक होते हैं ?

- (a) Caesium/सीजियम
- (b) Wood/लकड़ी
- (c) Globin/ग्लोबिन
- (d) Metal/धातु

CG-FSL-Lab-Attendant-2024

Ans. (c) : The elements in blood that are essential for human life are primarily globin.

Globin is a protein component found in hemoglobin, which is crucial for transporting oxygen in the blood.

3. Which part of the heart is used to transport blood?/हृदय के किस हिस्से के उपयोग से रक्त परिवहन होता है ?

- (a) Lateral part /पार्श्विक भाग
- (b) Neuroconductor/स्नायुचालक
- (c) Both/दोनों
- (d) None of these/इनमें से कोई नहीं

CG-FSL-Lab-Attendant-2024

Ans. (d) : The part of the heart which is used to transport blood is left ventricle.

The oxygen-rich blood from the lungs then enters the left atrium and is pumped to the left ventricle.

So, none of these option is correct.

4. To which part of the heart does oxygenated blood come ?

हृदय के किस भाग में ऑक्सीजन युक्त रक्त आता है ?

- (a) Right atrium/दायां अलिंद
- (b) Right ventricle/दायां निलय
- (c) Left atrium/बायां अलिंद
- (d) Left ventricle /बायां निलय

CG-FSL-Lab-Attendant-2024

Ans. (c) : Oxygenated blood from the lungs travels through the pulmonary veins and enters the left atrium of the heart. From there, it is pumped into the left ventricle, which then distributes it to the rest of the body through the aorta.

5. Heparin is produced by :
हिपेरिन उत्पन्न किया जाता है :

- (a) Kidney cells/किडनी सेल्स द्वारा
- (b) Blood cells/रक्त कोशाओं द्वारा
- (c) Bone marrow/बोन मैरो द्वारा
- (d) Liver cells/यकृत कोशाओं द्वारा

CG Lab Assistant-2019

Ans. (b) : Heparin is produced by blood cells, specially it is synthesized and stored in mast cell and basophils which are types of white blood cells involved in immune response and anticoagulation.

6. When heart beat decreases, the condition is called :

जब हृदय की धड़कन कम हो जाती है तो उसे कहते हैं:

- (a) Bradycardia/ब्रेडिकॉर्डिया
- (b) Tachycardia/टेकिऑर्डिया
- (c) Leucopenia/ल्यूकोपेनिया
- (d) None of the above/उपरोक्त कोई नहीं

CG Lab Assistant-2019

Ans. (a) : When heart beat decrease the condition is called bradycardia. This condition is characterized by a slower than normal heart rate, typically defined as fewer than 60 beats per minute in adults.

7. In man, gall bladder is situated in :
मनुष्य में गॉल ब्लैडर स्थित होता है :

- (a) Left lobe of liver/यकृत के बाँये लोब में
- (b) Caudate lobe/कॉडेट लोब में
- (c) Right lobe of liver/यकृत के दाँये लोब में
- (d) Quadrate lobe/क्वार्टेट लोब में

CG Lab Assistant-2019

Ans. (c) : In man the gall bladder is situated in the right lobe of the liver. The gall bladder is a small organ located on the underside of the liver, storing and concentration bile produced by the liver before releasing it into the small intestine to aid in digestion.

**8. Emergency gland of the body is :
शरीर की अपातकालीन ग्रंथि है :**

- (a) Thymus/थाइमस (b) Testis/टेस्टिस
(c) Adrenal/एड्रीनल (d) Pituitary/पिट्यूटरी

CG Lab Assistant-2019

Ans. (c) : The emergency gland of the body is adrenal gland. It secretes hormones like adrenaline (epinephrine) and cortisol in response to stress, regulating fight-or-flight responses and metabolic process to cope with emergencies and stressful situations.

**9. Which is an angiotensin-II blocker ?
निम्न में से कौन सा एंजियोटेंसिन-II ब्लोकर है?**

- (a) Captopril /कैप्टोप्रिल
(b) Felodine /फेलोफाइडिन
(c) Losartan /लोसारटन
(d) Atenolol /एटनोलोल

HPSSC Laboratory Technician(25.07.2019)

Ans. (c) Losartan is an angiotensin-II blocker used to treat hypertension and other cardiovascular conditions. It works by blocking the action of angiotensin-II, leading to vasodilation and decreased blood pressure.

10. Pick out the correct statements:-

- The first hormone discovered was a substance named secretin
- The adrenal cortex arises from endoderm
- Angiotensin II stimulates vasoconstriction, causing rise in blood pressure
- The posterior lobe of pituitary gland arises from pharyngeal epithelium as an imagination called Rathke's pouch

सही कथन चुनिये:-

- प्रथम खोजा गया हार्मोन सिक्रेटीन है
- अधिवृक्त वल्कुट की उत्पत्ति एंडोडर्मल हैं
- एंजियोटेंसिन द्वितीय वाहिका संकिर्णन को उत्तेजित करता है और रक्त दाब को बढ़ाता है
- पीयूष ग्रन्थि की पश्च पाली गसनीय उपकला से एक अन्तर्वलन (इन्वेजिनेसन) जिसे राथके का धानी कहते हैं, से उत्पन्न होती है

- (a) (b) and (d) are correct / (b) और (d) सही है
(b) (b), (c) and (d) are correct / (b), (c) और (d) सही है
(c) (a) and (c) are correct / (a) और (c) सही है
(d) (a), (b) and (d) are correct / (a), (b) और (d) सही है

RSMSSB Lab Assistant (13.11.2016)

Ans. (c) The option (c) is correct because secretin was indeed the first discovered hormone and Angiotensin II does stimulate vasoconstriction, leading to a rise in blood pressure.

11. Aorta is/महाधमनी क्या है?

- (a) A type of blood vessel/एक प्रकार की रक्त वाहिका
(b) Nerve bundle/तंत्रिका बंडल
(c) A part of kidney/गुर्दे का एक भाग
(d) Vein/शिरा

HPSSC Laboratory Technician (26-06-2017)

Ans. (a) The aorta is a major blood vessel that originates from the heart and distributes oxygen-rich blood to the body. It is not a nerve bundle, part of the kidney or a vein.

12. Which of these below are true for cerebro spinal fluid?/इनमें से कौन सा नीचे प्रमास्तिष्क मेरू द्रव के लिए सत्य है?

- (a) Contains RBCs/ RBCs रहता है
(b) Contains high cellularity/अधिक कोष्ठमय होता है
(c) Contains low cellularity/कम कोष्ठमय होता है
(d) Slightly turbid in appearance/देखने में थोड़ा गंदा होता है।

GSSSB Laboratory Technician(30.11.2019)

Ans. (c) CSF does not normally contains red blood cells (RBCs) and is generally characterized by low cellularity.

**13. _____ is the site of T cell maturation.
_____ T सेल मैच्युरेशन का स्थल है।**

- (a) Bone marrow/अस्थि मज्जा
(b) Thymus/थाइमस
(c) Spleen/स्प्लीन
(d) Lymphocytes/लिम्फोसाइट्स

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) Thymus is the site of T cell maturation. T lymphocyte originate from bone marrow progenitors that migrate to the thymus.

14. The normal blood pressure of a healthy human should be:/एक स्वस्थ मनुष्य का सामान्य रक्तचाप कितना होना चाहिए?

- (a) 80 – 120 mm/Hg
(b) 90 – 130 mm/Hg
(c) 70 – 140 mm/Hg
(d) 90 – 110 mm/Hg

Bihar SHSB Lab Technician (19.03.2016)

Ans.(a) The normal blood pressure range for a healthy individual is typically between 80 to 120 mmHg for systolic pressure (during heartbeats) and 60 to 80 mmHg for diastolic pressure (between beats).

15. Which one of the following is a master endocrine organ?/निम्नलिखित में से कौन-सी मास्टर अन्तः स्त्रावी ग्रंथि है?

- (a) Hypothalamus/हाइपोथैलेमस
(b) Anterior pituitary/अग्र पीयूष ग्रंथि
(c) Adrenal cortex/अधिवृक्क कॉर्टेक्स
(d) Posterior pituitary/पश्च पीयूष ग्रंथि

GSSSB Laboratory Technician(30.11.2019)

Ans. (b) The anterior pituitary gland is considered a master endocrine organ because it secretes several hormones that regulate various physiological processes throughout the body. These hormones include growth hormone, Adrenocorticotrophic hormone, follicle stimulating hormone, luteinizing hormone and prolactin. These hormones play crucial roles in growth, metabolism, reproduction and other bodily functions. Therefore the anterior pituitary gland is essential for maintaining overall hormonal balance and homeostasis in the body.

16. An increase blood flow to atria of human heart stimulates the release of Atrial Natriuretic Factor (ANF) will leads to

मानव हृदय के आलिंद में रक्त प्रवाह बढ़ने से आलिंद नैट्रियूरिटिक कारक (ANF) का स्राव उत्तेजित करता है।

- (i) Vasodilation/वाहिका प्रसरण
(ii) Increase GFR/GFR बढ़ता है।
(iii) Increase urine formation/मूत्र निर्माण बढ़ता है
(iv) Decrease blood pressure./रक्त दाब घटता है।
- (a) Statement (ii) is correct/कथन (ii) सही है
(b) Statements (ii) and (iii) are correct/कथन (ii) और (iii) सही है।
(c) Statement (i) is correct/कथन (i) सही है।
(d) Statements (i) and (iv) are correct/कथन (i) और (iv) सही हैं।

Kerala PSC Lab Technician(21.01.2023)

Ans. (d) The release of Atrial Natriuretic factor (ANF) in response to increased blood flow to the heart's atria leads to vasodilation and a decrease in blood pressure ANF effectively reduces blood volume and pressure by increasing the excretion of sodium and water.

17. The QRS complex in an ECG of a man represents

एक आदमी के ECG में QRS कॉम्प्लेक्स

- (a) Ventricular depolarisation/निलय विभ्रुवीकरण
(b) Atrial depolarisation/आलिंद विभ्रुवीकरण
(c) Ventricular repolarisation /निलय पुनर्भ्रुवीकरण
(d) Atrial repolarisation /आलिंद पुनर्भ्रुवीकरण

Kerala PSC Lab Technician(21.01.2023)

Ans. (a) The QRS complex in ECG (Electro cardiogram) represents ventricular depolarization. This phase indicates the electrical activity that triggers the contraction of the ventricles, which pump blood out of the heart.

- It consists of three main waves: The Q wave, the R wave (the largest) and the S wave.
- The QRS complex is crucial in assessing the electrical conduction through the ventricles and diagnosing various cardiac condition.

18. Name the cells which synthesize and secrete testicular hormones called androgens.

उन कोशिकाओं का नाम बताइये जो एण्ड्रोजन नामक वृषण हार्मोन का संश्लेषण और स्राव करती है।

- (a) Leydig cells/लेडिग कोशिकाएँ
(b) Sertoli cells/सर्टोली कोशिकाएँ
(c) Male germ cells/पुरुष जनन कोशिकाएँ
(d) Spermatids/शुक्राणु नाशक

Kerala PSC Lab Technician(21.01.2023)

Ans. (a) Leydig cells, also known as interstitial cells are found in the testes of males. They are responsible for synthesizing and secreting androgens, primarily testosterone. Androgens play a crucial role in the development and maintenance of male reproductive tissues and secondary sexual characteristics. Therefore, Leydig cells are the cells that synthesize and secrete testicular hormones called androgens.

19. Conn's syndrome is

कॉन सिंड्रोम होता है :

- (a) Hyper aldosteronism /हाइपर एल्डोस्टीरॉनिज्म
(b) Hyper thyroidism /हाइपर थायराइडिज्म
(c) Hypo thyroidism /हाइपो थायराइडिज्म
(d) Hypo pituitarism /हाइपो पिट्यूटेरिज्म

Kerala PSC Lab Technician(21.01.2023)

Ans. (a) Conn's syndrome, also known as primary hyperaldosteronism is characterized by the overproduction of aldosterone hormone by the adrenal glands. This leads to increased sodium retention and potassium excretion, resulting in hypertension (high blood pressure) and low potassium levels.

20. Which disease is caused due to low iodine diet?

निम्न में आयोडिन आहार के कारण कौन सा रोग होता है?

- (a) Goitre/गलगण्ड
(b) Acromegaly/एक्रोमीगैली
(c) Cretinism/क्रीटिनिज्म
(d) Beri-beri/बेरी-बेरी

DSSSB Lab Assistant (10.05.2015)

Ans. (a) Goitre is a disease caused by a deficiency of iodine in the diet. Iodine is essential for the production of thyroid hormones, which regulate metabolism.

21. Breakdown of Glycogen to glucose is termed as

ग्लाइकोजन को ग्लूकोज में विश्लेषण को कहते हैं

- (a) Glycolysis/ग्लाइकोलाइसिस
(b) Glycogenolysis/ग्लाइकोजिनालाइसिस
(c) Glycogenesis/ग्लाइकोजिनेसिस
(d) Gluconeogenesis/ग्लूकोनिओजिनेसिस

DSSSB Lab Assistant (10.05.2015)

Ans. (b) Glycogenolysis is the breakdown of glycogen into glucose molecules.

- This process occurs primarily in the liver and muscles, when blood glucose levels need to be maintained, such as during fasting or intense exercise.

Glucose released from glycogenolysis can then be used for energy production by cells through out the body.

22. **Inflammation of vein complicated by an obstructing clot is known as**
रूकावट पैदा करने वाले थक्के से शिरा में जलन की समस्या को कहते हैं

- (a) Venous thrombosis/वीनस थ्रॉम्बोसिस
- (b) Thrombus/थ्रॉम्बस
- (c) Thrombophlebitis/थ्रॉम्बोफ्लिबिटिस
- (d) Embolus/वाहिका

DSSSB Lab Assistant (10.05.2015)

Ans. (c) Thrombophlebitis refers to inflammation of a vein caused by blood clot. This condition often occurs in the legs but can happen in other parts of the body as well.

- The obstruction caused by the clot can lead to pain, swelling and redness along the affected vein.

23. _____ cell line was used for the production of polio vaccine.

पोलियो टीके के उत्पादन के लिए कोशिका रेखाएँ का उपयोग किया गया था।

- (a) Dog kidney/कुत्ते का वृक्क
- (b) Primate kidney/प्राइमेट वृक्क
- (c) Mouse fibroblast/माउस फाइब्रोब्लास्ट
- (d) Human Stem Cell/मानव मूल कोशिका (मानव स्टेम सेल)

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) Primate kidney cells, specifically from the African green monkey, were used in the production of the polio vaccine.

24. **Which hormone stimulates the adrenal glands to produce hormones?**

कौन सा हार्मोन अधिवृक्क ग्रंथियों को हार्मोन उत्पन्न करने के लिए उत्तेजित करता है?

- (a) Anti-Müllerian Hormone/एंटी-मुलेरियन हार्मोन
- (b) Dehydroepiandrosterone/डिहाइड्रोएपियनड्रोस्टीरॉन
- (c) Adrenocorticotropin hormone/एड्रिनोकोर्टिकोट्रोपिन हार्मोन
- (d) Luteinizing hormone/ल्यूटेनाइजिंग हार्मोन

DSSSB Laboratory Assistant (28.08.2021)

Ans. (c) Adrenocorticotropin hormone (ACTH) also known as corticotropin, stimulates the adrenal glands to produce hormones such as cortisol, aldosterone and adrenal androgens.

- These hormones are essential for various physiological processes in the body, including metabolism, immune response, and stress regulation.

25. _____ is the region of the brain responsible for maintenance of homeostasis and regulation of the endocrine system.

..... मस्तिष्क का वह क्षेत्र है जो समस्थापन के रखरखाव और अंतःस्त्रावी तंत्र के नियमन के लिए जिम्मेदार है।

- (a) Hippocampus/हिप्पोकैम्पस
- (b) Hypothalamus/हाइपोथैलमस
- (c) Thalamus/थैलमस

- (d) Cerebral Hemisphere/प्रमस्तिष्क गोलार्ध (सेरीब्रल हेमिस्फीयर)

DSSSB Laboratory Assistant (28.08.2021)

Ans. (b) The hypothalamus is responsible for maintaining homeostasis by regulating various bodily functions such as body temperature, thirst, hunger, sleep and circadian rhythm. It also controls the endocrine system by secreting hormones that stimulate or inhibit the release of hormones from the pituitary gland, thus regulating hormone levels throughout the body.

26. **Which is the only tissue present in cardiovascular system?**

कार्डियोवैस्कुलर प्रणाली में विद्यमान एकमात्र टिश्यू कौन सा है?

- (a) Cartilage/कार्टिलेज
- (b) Cardiac muscles/कार्डिएक मांसपेशी
- (c) Smooth muscles/समतल मांसपेशी
- (d) Neuroglia tissue/न्यूरोग्लिया ऊतक

Bihar SHSB Lab Technician (19.03.2016)

Ans.(b) The only tissue present in the cardiovascular system is cardiac muscle tissue. This tissue is specifically designed to contract rhythmically and involuntarily to pump blood throughout the body other tissue listed, such as cartilage, smooth muscles, and neuroglia tissue, are not exclusive to the cardiovascular system and serve different functions in the body.

27. **Which of the following is not related to heart attack?**

निम्नलिखित में से कौन सा विकल्प हृदयाघात से संबंधित नहीं है?

- (a) Elevated blood pressure/उच्च रक्तचाप
- (b) Stress/तनाव
- (c) Cholesterol/कोलेस्ट्रॉल
- (d) Marasmus/मेरेस्मस

Bihar SHSB Lab Technician (19.03.2016)

Ans.(d) Marasmus is a severe form of malnutrition, characterized by inadequate intake of calories and protein.

- It is not directly related to heart attack. Elevated blood pressure, stress and high cholesterol levels are all risk factors associated with heart attack.

28. _____ plays an important role in sleep-wake cycle.

सोने-जागने के चक्र में _____ महत्वपूर्ण भूमिका निभता/निभाती है

- (a) Spinal/रीढ़
- (b) Cerebrum/सेरीब्रम
- (c) Hypothalamus/हाइपोथैलमस
- (d) Epithalamus/एपिथैलेमस

Bihar SHSB Lab Technician (19.03.2016)

Ans.(c) The hypothalamus is a small region of the brain located just below the thalamus and above the pituitary gland. It plays a crucial role in regulating various bodily functions including the sleep-wake cycle or circadian rhythm.