



TARGET PRELIMS 2023
BOOKLET-4
SCIENCE AND TECHNOLOGY-4
QUESTIONS ON HEALTH

LevelUp IAS

1	<p>Consider the following statements about Anaemia:</p> <ol style="list-style-type: none"> 1. It is a hereditary bleeding disorder caused by a lack of blood clotting factor IX 2. It is a condition in which number of red blood cells are lower than normal 3. It is a condition in which the number of hemoglobin concentration in red blood cells is lower than normal 4. It is a condition where red blood cells are abnormal and thus may not function properly <p>Which of the above statements is/are not correct about Anaemia?</p> <ol style="list-style-type: none"> A. 1 only B. 1 and 2 only C. 2, 3 and 4 only D. 1 and 4 only
2	<p>Which of the following nutrition's deficiencies may cause Anaemia:</p> <ol style="list-style-type: none"> 1. Iron 2. Vitamin B12 3. Vitamin B-9 <p>Choose the correct answer from the codes provided below:</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. 1 and 2 only D. 1, 2 and 3
3	<p>With respect to National Family Health Survey - 5 (NFHS-5), consider the following statements about the Anaemia situation in India:</p> <ol style="list-style-type: none"> 1. More than 50% of India's population is suffering from Anaemia 2. Anaemia situation has worsened in all the states of India between NFHS-4 and NFHS-5 <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2
4	<p>Consider the following statements about Coronaviridae family of viruses:</p> <ol style="list-style-type: none"> 1. Corona viruses are a group of viruses in the Coronaviridae family 2. Most the of these viruses are harmless for humans 3. Coronaviruses were first identified in 1920s 4. Many coronaviruses are zoonotic <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 1 and 2 only C. 2 and 3 only D. 1, 2 and 4 only

5	<p>Consider the following statements about ACE2:</p> <ol style="list-style-type: none"> 1. Angiotensin Converting Enzyme 2 (ACE2) serves as the entry point of virus into human cell 2. The spike protein of the COVID-19 virus has receptor binding domain (RBD) which facilitates the virus' entry into the target cells by binding with the cellular receptor (ACE2) 3. Compared to SARS, the COVID-19 virus' spike protein binds to the ACE2 (cell receptor) with much higher affinity <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 and 2 only B. 2 and 3 only C. 1, 2 and 3 D. 3 only
6	<p>The term ACE2 is talked about in the context of (Prelims 2021):</p> <ol style="list-style-type: none"> A. genes introduced in the genetically modified plants B. development of India's own satellite navigation system C. radio collars for wildlife tracking D. spread of viral diseases
7	<p>"S Gene drop out" and "S Gene mutation amplification" help in identifying which of the following variants of concern of Corona virus?</p> <ol style="list-style-type: none"> A. Alpha B. Beta C. Delta D. Omicron
8	<p>Consider the following statements about Variants of Concern associated with COVID-19 pandemic:</p> <ol style="list-style-type: none"> 1. A variant of virus is classified as a variant of concern by World Health Organization (WHO) if the variant is associated with an increase in transmissibility or detrimental change in COVID-19 epidemiology. 2. XBB lineage is the most latest variant of concern <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2
9	<p>With reference to XBB consider the following statements:</p> <ol style="list-style-type: none"> 1. It is a recombinant lineage which has been emerging in Asia. 2. It has been responsible for recent increase in cases of COVID-19 infections in Asian countries <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2

	D. Neither 1 nor 2
10	<p>K444T and N460 were in news recently. They refer to:</p> <ol style="list-style-type: none"> Genetic mutations of the COVID-19 virus New varieties of wheat created by Indian Council for Agriculture Research New experiments which led to successful fusion reactions for energy productions None of the above
11	<p>Consider the following statements about convalescent Plasma Therapy:</p> <ol style="list-style-type: none"> The whole blood or plasma from a patient who has recovered from a viral disease is taken and is then injected in critically ill patients so that antibodies are transferred which can boost the patients fight against the viral disease This therapy was first used for fighting against EBOLA in 2015 ICMR has recently dropped plasma therapy from the COVID-19 treatment guidelines <p>Which of the above statement(s) is/are correct?</p> <ol style="list-style-type: none"> 1 and 2 only 1 and 3 only 2 only 1, 2 and 3
12	<p>Consider the following statements about Reproduction Number (R_0) of an infectious disease:</p> <ol style="list-style-type: none"> R_0 is used to measure the contagiousness of the disease An R_0 value of 1 means that the disease has the highest possible contagiousness COVID-19 disease has the highest possible R_0 value known so far for any disease <p>Which of the above statement(s) is/are correct?</p> <ol style="list-style-type: none"> 1 only 2 and 3 only 1 and 3 only 1, 2 and 3
13	<p>Consider the following statement about Cytokine Storm Syndrome (CSS):</p> <ol style="list-style-type: none"> CSS may be a cause for a subset of COVID-19 patients developing severe conditions Cytokine is a common complication only in case of infectious Corona virus diseases like COVID-19, SARS and MERS. <p>Which of the above statement(s) is/are correct?</p> <ol style="list-style-type: none"> 1 only 2 only Both 1 and 2 Neither 1 nor 2
14	<p>Consider the following statement(s) about Herd Immunity:</p> <ol style="list-style-type: none"> Herd Immunity for any disease can be achieved only when around 90% of the population develops immunity against the particular disease During the peak of second COVID-19 wave in India, GoI had decided to follow the approach of herd immunity to fight the COVID-19 crisis situation <p>Which of the above statement(s) are not correct?</p> <ol style="list-style-type: none"> 1 only 2 only Both 1 and 2

	D. Neither 1 nor 2
15	<p>Consider the following statements about Mucormycosis:</p> <ol style="list-style-type: none"> 1. It is a bacterial disease which infect people when their immune system is weak 2. It may cause blackish discoloration over bridge of nose/Palate <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2
16	<p>Consider the following statements about Measles in India:</p> <ol style="list-style-type: none"> 1. India has emerged as the measles capital of the world with thousands of cases in first six months of 2022-23 2. Measles is an infectious bacterial disease 3. Measles is an acute respiratory illness 4. No vaccine has been developed for measles yet <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 and 2 only B. 1 and 3 only C. 2 and 4 only D. 1, 2, 3 and 4
17	<p>Which of the following is true about Human Immunodeficiency Virus (HIV)?</p> <ol style="list-style-type: none"> 1. HIV virus is not transmitted among homosexuals 2. The virus weakens the immune system of a person 3. The mother to child transmission of the HIV can almost be fully prevented if both mother and child are provided with anti retroviral therapy drugs <p>Choose the most appropriate answer from the codes provided below:</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. 2 and 3 only D. 1 and 3 only
18	<p>Consider the following statements about HIV virus:</p> <ol style="list-style-type: none"> 1. HIV are the two species of virus in Flaviviridae family and flavivirus genus 2. The virus first emerged in 1980s in the United States of America <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2

19	<p>Consider the following statements about CD4 Cells:</p> <ol style="list-style-type: none"> 1. They are a type of white blood cells that move throughout our body to find and destroy bacterias, viruses and other invading germs 2. HIV attacks and destroy CD4 cells 3. Only those HIV positive patients should take Anti-Retroviral therapy whose CD4 count becomes low <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 and 2 only B. 2 only C. 3 only D. 1, 2 and 3
20	<p>Consider the following statements about Drug Releasing Vaginal Ring Cap:</p> <ol style="list-style-type: none"> 1. The ring releases anti-retroviral drug dapivirine over the course of a month 2. It's use reduces the chance of HIV infection among women to almost zero <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2
21	<p>Consider the following statements about HIV situation in India:</p> <ol style="list-style-type: none"> 1. India has the highest number of HIV positive people in the world 2. India was successfully able to achieve its Millennium Development Goal 6 of halting and reversing the HIV epidemic 3. The HIV and AIDS (Prevention and Control) Act, 2017 provides that an HIV test can't be done without the consent of the individual being tested <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. 2 and 3 only D. 1, 2 and 3
22	<p>Which of the following is not true about the Poliovirus:</p> <ol style="list-style-type: none"> A. Poliovirus is a serotype of the species Enterovirus B. There are three poliovirus serotypes C. Poliovirus genome is a single stranded positive-sense RNA (+ssRNA) genome that is about 7500 nucleotide long D. All three serotypes of poliovirus have been eradicated from wild
23	<p>Which of the following statement is true about Vaccine derived Polio?</p> <ol style="list-style-type: none"> a. Oral Polio vaccination can't cause vaccine derived polio infection b. Cases of vaccine derived polio have been detected in many countries recently c. Inactivated Polio Vaccine may cause vaccine derived polio d. None of the above
24	<p>Consider the following statements about Ebola Virus:</p>

	<ol style="list-style-type: none"> 1. It is a virus of flaviviridae family 2. It can be sexually transmitted 3. It has been eradicated from Africa recently <p>Which of the above statement(s) is/are correct?</p> <ol style="list-style-type: none"> a. 1 only b. 2 only c. 3 only d. 1, 2 and 3
25	<p>Which of the following tests can be used for detection Ebolavirus infections?</p> <ol style="list-style-type: none"> 1. Electron Microscopy 2. ELISA 3. RT-PCR <p>Choose the correct answer from the codes provided below:</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. 2 and 3 only D. 1, 2 and 3
26	<p>Which of the following is/are not true about Ebola virus?</p> <ol style="list-style-type: none"> 1. It has been named after a river 2. Mosquitoes are the primary vector for the virus <p>Choose the most appropriate answer from the codes provided below:</p> <ol style="list-style-type: none"> A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 nor 2
27	<p>Consider the following statements about Marburg Virus Disease:</p> <ol style="list-style-type: none"> 1. The disease is caused by a virus in the same family as Ebola Virus 2. The disease is characterized by the 'ghost like' drawn features 3. Fruit bats of Pteropodidae family are the natural host of the Marburg Virus <p>Which of the above statements is/are correct?</p> <ol style="list-style-type: none"> A. 1 only B. 2 and 3 only C. 1 and 2 only D. 1, 2 and 3
28	<p>Consider the following statements about Rabies:</p> <ol style="list-style-type: none"> 1. It is vaccine preventable viral disease 2. In humans, it can only spread by infected dog bites 3. As per WHO, India is endemic to rabies 4. World's highest number of rabies deaths take place in India <p>Which of the above statements is/are correct?</p>

	<p>A. 1 and 2 only B. 2 and 3 only C. 1, 3 and 4 only D. 1, 2, 3 and 4</p>
29	<p>Consider the following statements about Human Papilloma Virus (HPV):</p> <ol style="list-style-type: none"> 1. HPV is the most important cause of cervical cancer globally 2. It is the most common sexually transmitted disease in the world 3. There is no treatment available for the virus <p>Which of the above statements are correct?</p> <p>A. 1 and 2 only B. 2 and 3 only C. 1 and 3 only D. 1, 2 and 3</p>
30	<p>Which of the following is true about Ceravac vaccine?</p> <ol style="list-style-type: none"> 1. It is a quadrivalent vaccine 2. It is an mRNA vaccine 3. It has been introduced under the Universal Immunization Program of India <p>Choose the correct answer from the code provided below:</p> <p>A. 1 only B. 1 and 2 only C. 2 and 3 only D. 1, 2 and 3</p>
31	<p>Which of the following is/are diseases caused by Viruses?</p> <ol style="list-style-type: none"> 1. Malaria 2. Dengue 3. Chikungunya 4. Zika <p>Choose the correct answer from the codes provided below:</p> <p>A. 2 and 3 only B. 2, 3 and 4 only C. 1, 3 and 4 only D. 1, 2, 3 and 4</p>
32	<p>Consider the following statements: (Pre 2017)</p> <ol style="list-style-type: none"> 1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue. 2. Sexual transmission of Zika virus disease is possible. <p>Which of the statements given above is/are correct?</p> <p>(a) 1 only (b) 2 only (c) Both 1 and 2 (d) Neither 1 nor 2</p>
33	<p>Which of the following viruses are of flaviviridae family?</p> <ol style="list-style-type: none"> 1. Dengue Virus 2. Zika Virus 3. West Nile Virus

	<p>4. Chikungunya Virus</p> <p>5. Japanese Encephalitis Virus</p> <p>Choose the most appropriate answer from the codes provided below:</p> <p>A. 3, 4 and 5 only</p> <p>B. 2, 3, 4, and 4 only</p> <p>C. 1, 2, 4 and 5 only</p> <p>D. 1, 2, 3 and 5 only</p>
34	<p>Consider the following statements about Vector borne diseases:</p> <ol style="list-style-type: none"> 1. Dengue and Kala Azar are carried by the same vector 2. Dengue is the second largest parasitic killer in the world 3. Dengue and Kala Azar are both Neglected Tropical Diseases <p>Which of the above statement(s) is/are correct?</p> <p>A. 1 only</p> <p>B. 3 only</p> <p>C. 1 and 3 only</p> <p>D. 1, 2 and 3</p>
35	<p>Which of the following statements is correct about Japanese Encephalitis?</p> <p>A. It is the main cause of Acute Encephalitis Syndrome in many countries of Asia</p> <p>B. Humans are intermediary host of the Japanese Encephalitis Virus</p> <p>C. Mission Indradhanush has included Japanese Encephalitis vaccination under its mandate</p> <p>D. None of the above</p>
36	<p>Consider the following statements about Aedes Aegypti mosquitoes:</p> <ol style="list-style-type: none"> 1. It is a mosquito native to sub-Saharan Africa 2. Climate change is making the world become more suitable for Aedes Aegypti mosquitoes 3. The mosquito has also developed resistance to a few insecticides <p>Which of the above statements are correct?</p> <p>A. 1 and 2 only</p> <p>B. 2 and 3 only</p> <p>C. 1 and 3 only</p> <p>D. 1,2 and 3</p>
37	<p>Which of the following statements is/are correct? (2016 Pre)</p> <p>Viruses can infect</p> <ol style="list-style-type: none"> 1. bacteria 2. fungi 3. plants <p>Select the correct answer using the code given below.</p> <p>(a) 1 and 2 only</p> <p>(b) 3 only</p> <p>(c) 1 and 3 only</p> <p>(d) 1, 2 and 3</p>
38	<p>Consider the following statements about Nipah Virus:</p> <ol style="list-style-type: none"> 1. Nipah Virus is an emerging Zoonosis 2. Fruit bat of the Pteropodidae family is an end host of the virus 3. The virus was first identified in the Kyasanur forest of Karnataka

	<p>Which of the above statement(s) is/are correct?</p> <p>A. 1 only B. 2 only C. 3 only D. 1, 2 and 3</p>
39	<p>Consider the following statements about Lassa Fever:</p> <ol style="list-style-type: none"> 1. It is an animal borne, viral, hemorrhagic fever 2. Reservoir (host) of Lassa virus is a rodent known as the multimammate rat <p>Which of the above statements is/are correct?</p> <p>A. 1 only B. 2 only C. Both 1 and 2 D. Neither 1 or 2</p>
40	<p>Which of the following virus/bacteria is considered the most common cause of acute gastroenteritis (diarrhea and vomiting illness)?</p> <p>A. Lassa Virus B. Noro Virus C. NIPAH Virus D. None of the above</p>