DATE: **Centum Special Questions Paper 2024** TIME:1½ HRS STD: XII **BIO-ZOOLOGY MARKS** : 35 PART-1 Note: i) answer all the questions ii) choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer 1. **Statement 1:** Diaphragms, cervical caps and vaults are made of rubber and are inserted into the female reproductive tract to cover the cervix before coitus. **Statement 2:** They are chemical barriers of conception and are reusable. (a) Both statements 1 and 2 are correct and statement 2 is the correct explanation of statement 1. (b) Both statements 1 and 2 are correct but statement 2 is not the correct explanation of statement 1. (c) Statement 1 is correct but statement 2 is incorrect. (d) Both statements 1 and 2 are incorrect. 2. The primary host of tape worm is a. pig b. man c. sheep d. mosquito 3. Y-Chromosome was discovered by a. Henking b. Stevens c. Barr and Bertram d. Tjio and Levan 4. Evolutionary history of an organism is called a) ancestry b) ontogeny c) phylogeny d) paleontology 5. Bactericidal especially used against Mycobacterium tuberculosis. a) Tetracycline b) Chlortetracycline c) Streptomycin d) erythromycin 6. The most important hormone in intiating and maintaining lactation after birth is a. Oestrogen b. FSH c. Prolactin d. Oxytocin 7. In prokaryotes, which also known as Kornberg enzyme a) DNA polymerase I b) DNA polymerase II c) DNA polymerase III d) DNA ligase 8. Amphetamines are stimulants of the CNS, whereas barbiturates are ---a) CNS stimulant b) both a and b c) hallucinogenic d) CNS depressants PART-II **Note:** Answer any 4 of the questions 4x2=89. Define vaccination. 10. What is called repeated fission? 11. Define superbugs? 12. Differentiate Pedigree and Pedigree analysis? 13. Define Mayer-Rokitansky syndrome. 14. What is Sewall Wright Effect? **PART-III** Note: Answer any 3 of the questions. Question No.19 is compulsory 3x3=915. Write the events of fertilization? 16. Write about one protozoan and fungal sexual transmitted disease? 17. Explain the formation of a nucleosome? 18. Write the two principles of Lamarckian theory? 19. Give any two bioactive molecules produced by microbes and state their uses. **PART-IV** Note: Answer all the questions. 2x5=1020. Briefly discuss about different types of antigen and antibody reactions. (OR) Write the salient features of genetic code? 21. Explain the Allosomal abnormalities in human beings? (**OR**) Describe the process of Fertilization and implantation? Prepared by Mr. R. Sivakumar