

EXAM NUMBER:

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COMMON QUARTERLY EXAMINATION - 2023

Model question paper – 3

SUBJECT: ZOOLOGY

TIME: 3:00 hrs

CLASS: XII

MAX-MARKS: 70

Instructions:

- Check the question paper for fairness of printing.
- If there is any lack of fairness, inform the Hall Supervisor immediately.
- Use blue or black ink to write and underline and pencil to draw diagrams.

SECTION – A

Choose the most suitable answer from the given four alternatives and write the option code and the corresponding answer. 15 x 1 = 15

1. A haemophilia man marries a homozygous normal woman. What would be the possible condition to their children?
 - a) Sons would be normal but daughters would be sufferers
 - b) Sons would be sufferers but daughters would be normal
 - c) Both sons and daughters would be normal
 - d) Both sons and daughters would be normal but daughters would be carrier
2. UAA, UAG and UGA codons are designated as
 - a) Stops codons
 - b) Non- sense codons
 - c) Both (a) and (b)
 - d) initiator codons
3. Plasmotomy means
 - a) Mono nucleated parent divides into two Mono nucleated individuals
 - b) Mono nucleated parent divides into two mono nucleated individuals
 - c) Mono nucleated parent divides into many mono nucleated individuals
 - d) Mono nucleated parent divides into many mono nucleated daughter individuals
4. Before coming out of nucleus, hnRNA is added (A) as capping and (B) as tailing
 - a) A – ATP - B – ADP
 - b) A. Methyl guanosine triphosphate - B. adenylate residues
 - c) A. diadenylate guanosine diphosphate - B. guanosine residues
 - d) A. ethyl methane triphosphate - B. methyl guanosine residues
5. The right order of reproductive events in human being is
 - a) Gametogenesis → fertilization → blastocyst → gastrulation → organogenesis → parturition
 - b) Gametogenesis → Cleavage → gastrulation → blastocyst → organogenesis → parturition
 - c) Gametogenesis → fertilization → blastocyst → cleavage → gastrulation → Parturition → organogenesis
 - d) Gametogenesis → fertilization → cleavage → organogenesis → blastocyst → gastrulation → parturition
6. Which one of the following is not true regarding cervical cancer?
 - a) Primary prevention begins with HPV vaccination
 - b) A voiding tobacco usage
 - c) Preventing early marriage
 - d) Practicing polygamy
7. Which one of the following is an incorrect statement regarding uterus?
 - a) It is an inverted pear shaped structure
 - b) It lies between urinary bladder and rectum
 - c) The uterus opens into the vagina through fundus
 - d) The wall of uterus has three layers
8. What is the sex of Drosophila, which contains 12 autosomes and 3 'X' Chromosomes?
 - a) Male
 - b) Female
 - c) Gynandromorphs
 - d) Super male

SECTION - C

Answer any six the following in about 50 words each. Q.NO: 33 are compulsory.

6 X 3 = 18

25. Classify fertilization based upon the place of occurrence
26. What is Colostrum? Write any one of its significances.
27. Compare and contrast bacillary dysentery and amoebic dysentery.
28. What are the three structural differences between RNA and DNA?
29. How will you prevent erythroblastosis foetalis?
30. Write short notes on microbial fuel cell.
31. How does lactational amenorrhoea serve as a natural birth control method?
32. What are Operons? How many operon groups are present in *E.coli* ?
33. Whenever a dose of penicillin injection is given, doctors use a needle to prick the fore arm of the patients to given a weak dose of penicillin. Why? Give the reasons.

SECTION - D

Answer all the questions in brief.

5 X 5 = 25

34. a) Explain the role of oxytocin and relaxin in parturition and lactation.
(OR)
(b) Define infertility. Write its causes.
35. (a) Give an account of allosomal abnormalities in human beings.
(OR)
(b) 'Darwin's finches and Australian marsupials are suitable examples of adaptive radiation' – Justify this statement.
36. (a) List out the salient features of genetic code.
(OR)
(b) Explain the process of transcription in eukaryotes.
37. (a) Describe the structure of the human ovum with a neat labelled diagram.
(OR)
(b) Describe the origin of life with the experiment by Urey and Miller.
38. (a) Describe the structure of the lymph node with a diagram.
(OR)
(b) What are the two most prevalent helminthic diseases in human beings? Explain them.