



Roll No.....

Total No. of Questions : 16]

[Total No. of Printed Pages : 4

12thARF(SZ)JKUT2024-25

311-Z

ZOOLOGY

(Biology)

Time : 1½ Hours]

[Maximum Marks : 35

General Instructions :

This question paper contains four Sections :

(i) **Section-A** contains *five* Very Very Short Answer Type Questions of 1 mark each.

$1 \times 5 = 5$ marks

(ii) **Section-B** contains *five* Very Short Answer Type Questions of 2 marks each to be answered in **20-30** words.

$2 \times 5 = 10$ marks

(iii) **Section-C** contains *five* Short Answer Type Questions of 3 marks each to be answered in **100-150** words.

$3 \times 5 = 15$ marks

(iv) **Section-D** contains *one* Long Answer Type Question to be answered in **150-200** words.

$5 \times 1 = 5$ marks

12thARF(SZ)JKUT2024-25—311-Z

B-11-Z

Turn Over

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1 each

1. The permissible use of technique amniocentesis is for :
 - (A) Detecting any genetically abnormality
 - (B) Detecting sex of unborn foetus
 - (C) Artificial insemination
 - (D) Transfer of embryo into the uterus of surrogate mother
2. Name the evolutionary of man with brain capacity 900 C.C.
3. The Trisomic condition is represented by :
 - (A) $2X + 1$
 - (B) $2X - 1$
 - (C) $2X + 2$
 - (D) $2X - 2$
4. The causative agent of Amoebic dysentery is

(Fill in the blank)
5. Providing a functional gene to overcome a defective gene.

(Substitute one word)

12thARF(SZ)JKUT2024-25-311-Z

B-11-Z

(3)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. Differentiate between Tubectomy and Vasectomy.
7. Write short note on adaptive radiation.
8. How is sex determined in Human beings ?
9. What do you mean by Biosafety issues ?
10. Give the applications of genetically engineered insulin.

SECTION-C

(SHORT ANSWER TYPE QUESTIONS) 3 each

11. With the help of diagram explain the microscopic anatomy of Testis.
12. What steps are involved in DNA fingerprinting.
13. Write a short note on Klinefelter's Syndrome.
14. Write a short note on Drug abuse. <https://www.jkboseonline.com>
15. How sexual diseases can be prevented ?

12thARF(SZ)JKUT2024-25-311-Z

B-11-Z

Turn Over

(4)

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

16. Explain the need of reproductive Health. Also add a note on medical termination of pregnancy.

Or

Describe human male reproductive system with the help of diagram.

12thARF(SZ)JKUT2024-25—311-Z

B-11-Z

(B-11-Y)

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12thARF(SZ)JKUT2024-25

311-Y.

ZOOLOGY

(Biology)

Time : 1½ Hours]

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12thARF(SZ)JKUT2024-25—311-Y

B-11-Y

Turn Over

(2)

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1 each

1. Site of fertilization in mammals is :
(A) Ovary
(B) Uterus
(C) Vagina
☒ (D) Fallopian tube
2. Name the evolutionary of man with brain capacity 900 C.C.
3. The Trisomic condition is represented by :
☒ (A) $2X + 1$
(B) $2X - 1$
(C) $2X + 2$
(D) $2X - 2$
4. The causative agent of Ascariasis is (Fill in the blank)
5. Providing a functional gene to overcome a defective gene.

(Substitute one word)

12th APR (SZ) JKUT2024-25-311-Y

B-11-Y

(3)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS)

2 each

6. Write down the missuse of technique Amniocentesis.
7. Write short note on adaptive radiation.
8. How is sex determined in Human beings ?
9. What do you mean by Biosafety issues ?
10. Give the applications of genetically engineered insulin.
<https://www.jkboseonline.com>

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. With the help of diagram explain the microscopic anatomy of Testis.
12. Explain Hardy Weinberg's principle in brief.
13. Write a short note on Down's Syndrome.
14. Write a short note on Drug abuse.
15. How sexual diseases can be prevented ?

12thARF(SZ)JKUT2024-25-311-Y

B-11-Y

(4)

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

- 16.** Explain the need of Reproductive Health. Also add a note on medical termination of pregnancy.

Or

Describe human male reproductive system with the help of diagram.

[B-11-X]

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12thARF(SZ)JKUT2024-25

311-X

ZOOLOGY

(Biology)

Time : 1½ Hours]

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12thARF(SZ)JKUT2024-25-311-X

B-11-X

Turn Over

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1 each

1. Which one is found in males only ?
(A) X-Chromosome
(B) Y-Chromosome
(C) 2X-Chromosome
(D) None of these
2. Name the evolutionary of man with brain capacity 900 C.C.
3. The Trisomic condition is represented as :
(A) $2X + 1$
(B) $2X - 1$
(C) $2X + 2$
(D) $2X - 2$
4. The causative agent of Filariasis is (Fill in the blank)
5. Providing a functional gene to overcome a defective gene.

(Substitute one word)

(3)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. Write down the functions of oxytocin hormone in human females.
7. Write short note on adaptive radiation.
8. How is sex determined in Human beings ?
9. What do you mean by Biosafety issues ?
10. Give the applications of genetically engineered insulin.

SECTION-C

(SHORT ANSWER TYPE QUESTIONS) 3 each

11. With the help of diagram explain the microscopic anatomy of Testis.
12. Write short note on Gene flow and Genetic drift.
13. Write a short note on Turner's Syndrome.
14. Write a short note on Drug abuse.
15. How sexual diseases can be prevented ?

12thARF(SZ)JKUT2024-25-311-X

B-11-X

Turn Over

(4)

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

16. Explain the need of Reproductive Health. Also add a note on medical termination of pregnancy.

Or

Describe human male reproductive system with the help of diagram.

D-11-Z

Roll No.....

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12thARM(H/Z)JKUTL2024-25

611-Z

ZOOLOGY

(Biology)

Time : 1½ Hours]

[Maximum Marks : 35

SECTION-A

(OBJECTIVE TYPE QUESTIONS)

1 each

1. After spermiogenesis sperm heads become embedded in the 'Sertoli cells'.
(Yes/No)
2. Expand the terms 'BAC' and 'YAC'
3. The B-lymphocytes produce an army of proteins in response to pathogens into our blood. The proteins are called :
(A) Cytokine Barriers
(B) Antibodies
(C) Antigens
(D) None of these

(Choose the correct one)

12thARM(H/Z)JKUTL2024-25-611-Z

D-11-Z

Turn Over

(2)

4. Adolescence is related to period and the process. (True/False)

5. The formation of copies of a particular Gene is known as :

(A) Gene therapy

(B) Gene Library

(C) Gene cloning

(D) All of these

(Choose the correct one)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. ✓ What do you mean by Implantation ?

7. ✓ Write down *two* uses of Contraceptives.

12thARM(H/Z)JKUTL2024-25-611-Z

D-11-Z

(3)

8. . What do you mean by 'Drug Abuse' ?
9. . Name *two* principles of Biotechnology.
10. Write down *two* applications of Gene Therapy.

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a neat and labelled diagram of Anatomy of Testis.
12. Write down *three* preventive measures of STDs.
13. Give *three* points of difference between Linkage and Crossing over. <https://www.jkboseonline.com>
14. Write down the goals of 'Human Genome Project'.
15. What are Vaccines ? Give their significance.

12thARM(H/Z)JKUTL2024-25—611-Z

Turn Over

D-11-Z

(4)

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

- 16.** What do you mean by Sex-linked Inheritance ? Elaborate your answer with reference to Haemophilia and Color blindness.

Or

Define Evolution. Write down in brief Modern Synthetic theory of Evolution.

D-11-Y

Roll No.....

Total No. of Questions : 16]

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12thARM(H/Z)JKUTL2024-25

611-Y

ZOOLOGY

(Biology)

Time : 1½ Hours]

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SECTION-A

(OBJECTIVE TYPE QUESTIONS)

1 each

1. Non-occurrence of Menses is named as (Fill up)
2. Expand the term 'VNTR'.
3. Trichophyton and Epidermophyton are responsible for :
(A) Elephantiasis
(B) ✓ Ringworms
(C) Typhoid
(D) Pneumonia

(Choose the correct one)

12thARM(H/Z)JKUTL2024-25—611-Y

D-11-Y

Turn Over

(2)

4. *Atropa belladonna* has a haullucinogenic property. (True/False)
5. The term referred by Multinational Companies for the use of bio-resources is called :
- (A) Biopatent
- (B) Bioethics
- (C) ☒ Biopiracy
- (D) None of these
- (Choose the correct one)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. What do you mean by 'Blastocyst formation' ?
7. Write down the significance of Intrauterine Devices.

12thARM(H/Z)JKUTL2024-25-611-Y

D-11-Y

(3)

8. Write down *two* preventive measures of Amoebiasis.
9. Name *two* principles of Biotechnology.
10. Write down *two* applications of Gene Therapy.

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a neat diagram of Microscopic Anatomy of Testis.
12. Write down *three* preventive measures of AIDS.
13. Give *three* points of difference between Linkage and Crossing

over. <https://www.jkboseonline.com>

14. What are the goals of 'Human Genome Project' ?
15. What are Vaccines ? Give their significance.

12thARM(H/Z)JKUTL2024-25—611-Y

D-11-Y

Turn Over

(4)

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

10. What do you mean by Sex-linked Inheritance ? Elaborate your answer with reference to Haemophilia and Color blindness.

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Define Evolution. Write down in brief Modern Synthetic theory of Evolution.

D-11-X

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12thARM(H/Z)JKUTL2024-25

611-X

ZOOLOGY

(Biology)

Time : 1½ Hours]

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SECTION-A

(OBJECTIVE TYPE QUESTIONS)

1 each

1. Name the finger like projections that appear on the trophoblast after Implantation.
2. Expand the term 'SNPs'
3. 'Mary Mallon' is nicknamed as 'Typhoid Mary' for which of the following :
(A) Influenza
(B) Widal Test
(C) Malaria
(D) AIDS

(Choose the correct one)

12thARM(H/Z)JKUTL2024-25-611-X

Turn Over

D-11-X

4. What is the common name of 'Heroin' ?
5. The capacity to generate a whole plant from any cell / explant is called :

(A) Tissue culture

(B) Totipotency

(C) Hybrid

(D) None of these

(Choose the correct one)

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. Define Spermiogenesis and Spermiation.
7. What do you mean by Lactational Amenorrhea ?

12thARM(H/Z)JKUTL2024-25-611-X

D-11-X

(3)

8. Write down *two* preventive measures of 'Hepatitis'
9. Name *two* principles of Biotechnology
10. Write down *two* applications of Gene Therapy

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a neat and labelled diagram of Anatomy of Testis.

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12thARM(H/Z)JKUTL2024-25-611-X

D-11-X

Turn Over

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

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12thARF(SZ)JKUT2024-25-311-X

B-11-X

Turn Over

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1 each

1. Which one is found in males only ?
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12thARF(SZ)JKUT2024-25-311-X

B-11-X

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(LONG ANSWER TYPE QUESTIONS)

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16. Explain the need of Reproductive Health. Also add a note on medical termination of pregnancy.

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