

F-11-B

Roll No..

Total No. of Questions : 16+14]

[Total No. of Printed Pages 4

XIIAP/Bi.AUTJKL24

1711-B

ZOOLOGY

(Biology)

(New/Old Course)

Time : 1½ Hours]

[Maximum Marks : 35

NOTE :— The questions in the question paper are based on revised and pre-revised syllabus marked as "New Course" and "Old Course" respectively and candidates are advised to appear in the relevant course meant for them. Candidates who may attempt the questions partly from "New Course" and partly from "Old Course" will not be awarded. Candidates are also advised to record "New Course" or "Old Course" as the case may be, on the front page of the answer-book.

XIIAP/Bi.AUTJKL24—1711-B (New)

Turn Over

F-11-B

(New Course)**General Instructions :**

- (i) Question paper contains four Sections.
- (ii) Section–A contains 5 very very short answer type questions (Objective type/MCQs) of 1 mark each. 1×5=5
- (iii) Section–B contains of 5 very short answer type questions of 2 marks each to be answered in **20–30** words. 2×5=10
- (iv) Section–C contains 5 short answer type questions of 3 marks each to be answered in **100 to 150** words. 3×5=15
- (v) Section–D contains 1 long answer type questions of 5 marks each to be answered in **150–200** words. 5×1=5

Section–A

1 each

1. 'Prostate' is a :
 - (A) Terminal infundibulum
 - (B) Sex duct
 - (C) Accessory sex gland
 - (D) Tubule of nephron
2. Failure of a 'Chromatid' to Segregate during cell division can lead to :
 - (A) Down's syndrome
 - (B) Turner's syndrome
 - (C) Klinefelter syndrome
 - (D) All of these

3. SNP's pronounced as 'Snips' in human DNA occur in about locations.
- (A) 4.1 million
 - (B) 1.4 million
 - (C) 2.4 billion
 - (D) 4.7 million
4. The Toxin 'Haemozoin' usually causes
- (A) Common cold
 - (B) Skin lesions
 - (C) Recurring fever
 - (D) Dysentery
5. Which of the following is a Restriction Enzyme ?
- (A) Hind II
 - (B) Plasmid
 - (C) Ligases
 - (D) E. Coli

Section-B

2 each

6. Draw a neat and well labelled diagram of the structure of human ovary.
7. Write a short note on Haemophilia.

8. What do you mean by Gene Flow ?
9. What are Transgenic Animals ?
10. Enlist some of the applications of Stem Cell Technology.

Section-C

3 each

11. Explain the various stages of development from a Zygote upto a blastocyst. Supplement your answer with the help of diagrammatic sketches.
12. Give an account of the course of human evolution from a toolmaker man to the modern technological one. <https://www.jkboseonline.com>
13. Explain in brief the Anatomical evidence of Biological evolution.
14. What are the remarkable characteristics of Adolescence in Humans ?
What is the need of counselling in this stage ?
15. What is Drug Abuse ? List the various ill-effects of opiods ?

Section-D

5 each

16. Give a comparative graphical sketch of spermatogenesis and oogenesis in humans ?

Or

Define Infertility. Explain the barrier methods of birth control in Human beings.

B-11-X

Roll No.....

Total No. of Questions : 16]

[Total No. of Printed Pages : 4

12thARM(SZ)JKUT2024

, 1111-X

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. $1 \times 5 = 5$ marks

12thARM(SZ)JKUT2024-1111-X

B-11-X

Turn Over

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. Trisomic condition is represented as :
- ☒ (A) $2n + 1$
 - (B) $2n - 2$
 - (C) $2n + 2$
 - (D) None of these
3. Inheritance is controlled by Multiple alleles in :
- (A) Colour-blindness
 - (B) Sickle cell anaemia
 - ☒ (C) Phenyl ketonuria
 - (D) Blood group

4. 'AZT' is used in treatment of :

(A) Malaria

☒ (B) AIDS

(C) T.B.

(D) Kala-Azar

5. The process of vaccination was discovered by :

☒ (A) Edward Jenner

(B) Robert Koch

(C) Louis Pasteur

(D) Von-Behring

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS)

2 each

6. What do you mean by 'Amniocentesis' ?

7. What is Placenta ? Write down its functions.

8. What are Darwin's finches ?
9. Write down preventive measures of 'Hepatitis'.
10. What do you mean by 'Biosafety Issues' ?

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a well labelled diagram of Microscopic anatomy of testis.
12. Write a short note on colour blindness in human beings.
13. Write down the applications of Gene therapy.
14. Explain the term 'MTP' in brief.
15. Write a short note on drug abuse.

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

16. What do you mean by 'DNA Fingerprinting' ? Explain in brief 'Human Genome Project' and its significance.

Or

Explain Hardy-Weinberg's principle. Add a note on adaptive radiation.

B-11-Y

Roll No.

Total No. of Questions : 16]

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12thARM(SZ)JKUT2024

1111-Y

ZOOLOGY

(Biology)

Time : 1½ Hours]

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ARM(SZ)JKUT2024-1111-Y

11-Y

male

4. *Wuchereria bancrofti* is a/an

(A) Annelid

☒ (B) Protozoa

☒ (C) Nematode

(D) None of these

5. The process by which an infection leads to disease is called

(A) Vaccination

(B) Pathogenesis

☒ (C) Virulence

(D) None of these

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS)

2 e

6. Give two points of difference between Endometrium and Myometrium →.

12" ARM(SZ)JKUT2024-1111-Y

B-11-Y

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1

1. Which of the following is responsible for functional maturation of sperms ?

(A) Testes
(B) Epididymis
(C) Vas deferens
(D) None of these
2. Which of the following is caused by Drug Toxicity ?

(A) Protanopia (Red color blindness)-
(B) Tritanopia (Blue color blindness)
(C) Deuteronopia (Green color blindness)
(D) All of these
3. In case of a reptile (Chrysiemia piela) what determines the sex for

7. Write a short note on Morula.
8. Explain the term terminalization in brief.
9. Write down preventive measures of 'Hepatitis'.
10. What do you mean by 'Biosafety Issues'?

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a well labelled diagram of Microscopic anatomy of testis.
12. Write a short note on colour blindness in human beings.
13. Write down the applications of Gene therapy.
14. Explain the term 'MTP' in brief.
15. Write a short note on drug abuse.

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

1. What do you mean by 'DNA Fingerprinting' ? Explain in brief 'Human Genome Project' and its significance.

Or

2. Explain Hardy-Weinberg's principle. Add a note on adaptive radiation.

B-11-Z

Roll No

Page

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12thARM(SZ)JKUT2024

1111-Z

ZOOLOGY

(Biology)

Time : 1½ Hours]

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12thARM(SZ)JKUT2024—1111-Z

B-11-Z

Turn Over

4. Name the pathogen other than 'Streptococcus' that causes Pneumonia
5. The severity of the disease symptoms is referred to as

(A) Pathogenesis

(B) Virulence

(C) Inoculation

(D) None of these

SECTION-B

(VERY SHORT ANSWER TYPE QUESTIONS) 2 each

6. What do you mean by Parturition and Lactation ?
7. Give an elementary Idea of IVF and ZIFT.

SECTION-A

(VERY VERY SHORT ANSWER TYPE QUESTIONS) 1 each

1. Intermingling of chromosomes is called
(A) Syngamy
(B) Amphimixis
(C) Plasmogamy
(D) Karyogamy
2. Which of the following chromosome configuration represents Klinefelter's syndrome ?
(A) $2A + XO$
(B) $2A + XXY$
(C) $2A + XX$
(D) None of these
3. Cystic fibrosis is a/an :
(A) Sex linked disorder
(B) Dominant disorder
(C) Autosomal disorder
(D) None of these

8. Write down *two* symptoms of Turner's syndrome.
9. Write down preventive measures of 'Hepatitis'.
10. What do you mean by 'Biosafety Issues' ?

SECTION-C

(SHORT ANSWER TYPE QUESTIONS)

3 each

11. Draw a well labelled diagram of Microscopic anatomy of testis.
12. Write a short note on colour blindness in human beings.
13. Write down the applications of Gene therapy.
14. Explain the term 'MTP' in brief.
15. Write a short note on drug abuse.

SECTION-D

(LONG ANSWER TYPE QUESTIONS)

5

16. What do you mean by 'DNA Fingerprinting' ? Explain in brief 'Human Genome Project' and its significance.

Or

Explain Hardy-Weinberg's principle. Add a note on adaptive radiation.