

COMMON P. G. ENTRANCE TEST – 2023 (CPET-2023)Test Booklet No. : **014**Subject Code : **46**Hall Ticket No. : Subject : **WILDLIFE AND BIODIVERSITY CONSERVATION****TEST BOOKLET**Time Allowed : **60 Minutes**Full Marks : **80****: INSTRUCTIONS TO CANDIDATES :**

1. The Test Booklet contains **16** pages including the cover page and **80** (Question No. 1 to 80) multiple choice questions.
2. DO NOT break the seal of the Test Booklet until the invigilator instructs to do so.
3. The candidates must check discrepancy, if any (like up-printed or torn or missing pages or missing questions) in the Test Booklet immediately after breaking the seal of the Test Booklet. If detected, the invigilator may be requested to replace the same.
4. Candidates are required to fill up and darken the **Hall Ticket No, Test Booklet Serial No.** and OMR Answer Sheet Serial No. in attendance sheet carefully. Wrongly filled in OMR Answer Sheet is liable for rejection.
5. Each question has four choices / answers marked (A), (B), (C), (D). Candidate has to select the most appropriate choice / answer to each question and darken the oval completely against the question number provided in the OMR Answer Sheet.
6. Indicate only one choice / answer from the options provided by darkening the appropriate oval in the OMR Answer Sheet. More than one response to a question shall be treated as a wrong answer.
7. Use only **Black Ball Point Pen** for darkening the oval for answering.
8. All the questions are compulsory and they carry equal marks. The total marks scored by a candidate depends on the number of correct choices / answers darkened in the OMR Answer Sheet. There will be no negative marking for wrong answers.
9. No candidate shall be allowed to leave the Examination Hall / Room till all OMR Answer Sheets have been collected by the invigilator.
10. On completion of the entrance test, the original OMR Answer Sheet be handed over to the invigilator. Candidates are allowed to take the second copy of the OMR Answer Sheet along with the used Test Booklet for reference.
11. Candidates are not allowed to carry any personal belongings including electronic devices such as scientific calculator, cell phones, headphones, ear buds, or any other type of devices that allow communication of any kind inside the Examination Room / Hall.
12. The candidates are advised not to scribble or make any mark on the OMR Answer Sheet except marking the answers at the appropriate places and filling up the details required. Rough work, if any, may be done in the blank sheet(s) provided at the end of the Test Booklet.
13. Any malpractice / use of unfair means will lead to your disqualification from the entrance test / admission process and may also lead to appropriate legal action as deemed fit.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

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(Turn over)

SEAL

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TEST BOOKLET

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1. Select the mismatch pair :
 - (A) *Panthera leo* — Belongs to class Mammalia
 - (B) *Musca domestica* — The common house lizard, a reptile
 - (C) *Entamoeba coli* — Commonly occurring protozoan in human intestine
 - (D) *Solanum tuberosum* — A dicotyledonous plant
2. The 'birds' taxonomically represents a :
 - (A) Family
 - (B) Order
 - (C) Class
 - (D) Phylum
3. Which of the following characters are mainly considered for declaring a new plant species ?
 - (A) Characters of endosperm
 - (B) Anatomical characters
 - (C) Physiological characters
 - (D) Floral characters
4. Two animals belong to the same kingdom but different classes. They may belong to the same :
 - (A) Phylum
 - (B) Order
 - (C) Division
 - (D) Species
5. In biological terminology, a group of similar organisms which are capable of interbreeding and producing fertile offspring is called :
 - (A) Species
 - (B) Genus
 - (C) Tribe
 - (D) Family

6. Match Column – I with Column – II and select the correct option :

Column – I	Column – II
(a) Royal Botanical garden	(i) Lucknow
(b) Indian botanical garden	(ii) England
(c) National Botanical Research Institute	(iii) Howrah
(d) Llyod Botanical Garden	(iv) Darjeeling
(A) (a)-(ii), (b)-(iii), (c)-(i), (d)-(iv)	(B) (a)-(i), (b)-(iii), (c)-(ii), (d)-(iv)
(C) (a)-(iv), (b)-(ii), (c)-(i), (d)-(iii)	(D) (a)-(iv), (b)-(iii), (c)-(ii), (d)-(i)

7. Match Column – I with Column – II and select the correct option :

Column – I	Column – II
(a) Botanical garden	(i) Preserved plant specimen
(b) Zoological Park	(ii) Preserved plant and animal specimen
(c) Museum	(iii) Living plants
(d) Herbarium	(iv) Living wild animal
(A) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)	(B) (a)-(iii), (b)-(iv), (c)-(ii), (d)-(i)
(C) (a)-(iii), (b)-(iv), (c)-(i), (d)-(ii)	(D) (a)-(i), (b)-(ii), (c)-(iv), (d)-(iii)

8. Read the following statements regarding biological museums :

- (i) Biological museums are generally setup in educational institutes such as school and colleges
- (ii) Museums have collection of preserved plant and animal specimen for study and reference
- (iii) Specimens are preserved in the containers or jars preservative solutions
- (iv) Insects are preserved in insect box after collecting, killing and pinning
- (v) Larger animals like birds and mammals are usually stuffed and preserved
- (vi) Skeletons of mammals are not allowed to be kept in museums

Which of the above statements is /are not correct ?

- (A) (ii) and (iii)
- (B) (i) and (vi)
- (C) (v) only
- (D) (vi) only

9. Arboretum is a part of botanical gardens where :

- (A) Bonsai are made
- (B) Beautification is done
- (C) Palms are grown
- (D) Big trees are cultivated in the form of forests

10. Study the following statements regarding the preparation of herbarium sheets :

- (i) Plants should be collected in flowering stage
- (ii) Every detail regarding the plants such as locality, ecological conditions, vegetative and floral characters, etc. should be noted
- (iii) Plants are evenly pressed by unfolding all the plant parts between blotting papers with the help of plant pressers
- (iv) Blotting papers need not to be changed until the plants gets dried
- (v) After drying, the plant specimen is carefully mounted/pasted on the herbarium sheets
- (vi) The herbarium sheet is labelled on the lower light-hand corner representing the number of plant specimen, date of collection etc.

Which of the above statements is /are not correct ?

- (A) (i) only
- (B) (iv) only
- (C) (i) and (iv)
- (D) (iii) and (iv)

11. Which of the following statements is incorrect with regard to bilateral symmetry ?

- (A) Body can be divided into two equal halves by single plane only
- (B) The organisms that show bilateral symmetry have paired body organs that occur on the two sides of a central axis
- (C) It is found in all invertebrates and few vertebrates
- (D) Spider and crab show bilateral symmetry

12. In which one of the following, the genus name, its two characters and its phylum are not correctly matched ?

Genus name	Characters	Phylum
(A) Pila	(i) Body segmented (ii) Mouth with radula	Mollusca
(B) Asterias	(i) Spiny Skinned (ii) Water vascular system	Echinodermata
(C) Sycon	(i) Pore bearing (ii) Canal system	Porifera
(D) Periplaneta	(i) Jointed appendages (ii) Chitinous exoskeleton	Arthropoda

13. Read the following statements and select the incorrect ones :

- (i) Circulatory system in arthropods is of closed type
 - (ii) Parapodia in animals help in swimming
 - (iii) Phylum mollusca is the second largest animal phylum
 - (iv) Aschelminthes are dioecious
- (A) (i) and (iii) (B) (i) only
- (C) (iii) only (D) (iii) and (iv) only

14. Which of the following statements is correct for sponges without exception ?

- (A) They all have calcareous spicules
- (B) They have high regenerative power
- (C) They are found only in marine water
- (D) They are all radially symmetrical

15. Among the following organisms which is a completely non-parasitic form ?

(A) Sea anemone

(B) Tapeworm

(C) Leech

(D) Mosquito

16. Which of the following pairs are correctly matched ?

(i) Crocodile

— 4 chambered heart

(ii) Sea urchin

— Parapodia

(iii) Obelia

— Metagenesis

(iv) Lemur

— Thecodont

(A) (ii), (iii) and (iv)

(B) (i) and (iv)

(C) (i) and (ii)

(D) (i), (iii) and (iv)

17. Which of the following statements is incorrect about the occurrence of notochords ?

(A) It is present only in larval tail in ascidian

(B) It is replaced by a vertebral column in adult frog

(C) It is absent throughout life in humans from the very beginning

(D) It is present throughout life in **Amphioxus**

18. Match Column – I with Column – II and select the correct option :

Column – I

Column – II

(a) Cartilaginous fishes

(i) Usually external fertilization

(b) Bony fishes

(ii) Internal fertilization

(iii) Mostly oviparous

(iv) Some are viviparous

(v) Direct development

(A) (a)-(i), (iii), (v) ; (b)-(i), (ii)

(B) (a)-(ii), (iv) ; (b)-(i), (iii), (v)

(C) (a)-(iii), (v) ; (b)-(i), (ii), (iv)

(D) (a)-(i), (ii), (iv) ; (b)-(iv), (v)

19. Which of the following represents the correct sequence of various taxonomic categories ?

- (A) Class-Phylum-Tribe-Order-Family-Genus-Species
- (B) Division-Class-Family-Tribe-Order-Genus-Species
- (C) Division-Class-Order-Family-Tribe-Genus-Species
- (D) Phylum-Order-Class-Tribe-Family-Genus-Species

20. Diatomaceous earth is used for all, except :

- (A) Polishing
- (B) Filtration of oil and syrups
- (C) Making sound and fire proof rooms
- (D) Biogas production

21. Siliceous frustules of diatoms being indestructible, piled up at the bottom of ocean and formed a thick bed over billions of years. Such a thick bed is known as :

- (A) Red sea
- (B) Diatomaceous earth
- (C) Pseudorocks
- (D) Red tides

22. A slide under microscope shows following features :

- (i) Unicellularity
- (ii) Well defined nucleus
- (iii) Biflagellate-one flagellum lying longitudinally and the other transversely

What would you identify it as ?

- (A) Protozoan
- (B) Bacterium
- (C) Euglenoid
- (D) Dinoflagellate

23. Select the incorrect match :
- (A) Morels and truffles – Phycomycetes
 - (B) Puff ball and toad stools – Basidiomycetes
 - (C) Early blight of potato – *Alternaria solani*
 - (D) Late blight of potato – *Phytophthora infestans*
24. Which of the following statements is incorrect about the class Deuteromycetes ?
- (A) They reproduce only by asexual spores (conidia).
 - (B) Mycelium in these fungi is branched and septate.
 - (C) They have only parasitic forms
 - (D) Example of these fungi are *Alternaria*, *Colletotrichum* and *Trichoderma*.
25. Match Column – I with Column – II and select the correct option from the codes given below :

Column – I	Column – II
(a) Ecology	(i) Relationship of organisms and environment
(b) Herbarium	(ii) Original specimen cited by an author
(c) Holotype	(iii) A hierarchial unit
(d) Taxon	(iv) Collection of wild and domestic plants
(A) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)	(B) (a)-(i), (b)-(ii), (c)-(iv), (d)-(iii)
(C) (a)-(i), (b)-(iv), (c)-(ii), (d)-(iii)	(D) (a)-(iv), (b)-(ii), (c)-(iii), (d)-(i)

26. Packing of substances for export from the cell occurs in the :
- (A) SER (B) Golgi bodies
(C) Lysosomes (D) Nucleolus
27. Which of the following is correct for the origin of Lysosome (L) ?
- (A) ER > Golgi bodies > L
(B) Golgi bodies > ER > L
(C) Nucleus > Golgi bodies > L
(D) Mitochondria > ER > Golgi bodies > L
28. All plastids have essentially the same structure because :
- (A) They have to perform the same function
(B) They are localised in the aerial parts of plants
(C) One type of plastids can differentiate into another type of plastids depending upon the cell requirements
(D) All plastids have to store starch, lipids and proteins
29. _____ are the microbodies, which take part in glyoxylate pathway, bounded by a single membrane and are usually present in germinating fatty seeds.
- (A) Glyoxysomes (B) Peroxisomes
(C) Sphaerosomes (D) Lysosomes
30. Which of the following characters does not fit for Aves ?
- (A) Skin is dry, without glands except oil/preen glands at the base of tail.
(B) Alimentary canal has 2 additional chambers, crop and gizzard.
(C) Hind limbs are modified for walking, swimming or clasping. Fore limbs are modified into wings
(D) Beak has teeth

31. The transforming substance of *Pneumococcus* in Griffith experiment was :

- (A) Protein (B) Polysaccharide
(C) RNA (D) DNA

32. Fraenkel Conrat and Singer (1957) showed that the genetic material in tobacco mosaic virus is :

- (A) DNA (B) Protein
(C) RNA (D) DNA

33. Match Column – I with Column – II and select the correct option :

Column – I	Column – II
(a) Complimentary ratio	(i) 9 : 7
(b) Supplementary ratio	(ii) 9 : 3 : 4
(c) Epistatic ratio	(iii) 12 : 3 : 1
(d) Inhibitory ratio	(iv) 13 : 3

Codes :

- (A) (a)-(iv), (b)-(i), (c)-(iii), (d)-(ii) (B) (a)-(i), (b)-(ii), (c)-(iii), (d)-(iv)
(C) (a)-(iv), (b)-(i), (c)-(ii), (d)-(iii) (D) (a)-(i), (b)-(iii), (c)-(iii), (d)-(iv)

34. The sequence of bases in one strands of DNA is AAATGGCCCTT, and then the complementary sequence of the basis of the other side of the strand of DNA would be :

- (A) TTTACCGGGAA (B) TTTTGGCCAAA
(C) TTTTGGCCCAA (D) ATATGGCCCCA

35. The difference among A, B and Z forms of DNA is in the :

- (A) Base sequence (B) Internucleotide distances
(C) Hydrogen bonding (D) Parallelism of chains

36. The uncoiling of the double helix is done by :
- (A) Topoisomerase (B) Single strand binding protein
(C) Primase (D) Okazaki fragments
37. The RNA polymerase is responsible for the formation of RNA from a strand of DNA. Which of the following types of RNA polymerase catalyses the formation of transfer RNA ?
- (A) RNA polymerase I (B) RNA polymerase II
(C) RNA polymerase III (D) RNA polymerase I and III
38. The RNA polymerase starts transcription by binding to :
- (A) Enhancer (B) Promoter
(C) Operator (D) Regulator
39. In man the two types of sperm differ in :
- (A) Number of chromosomes
(B) Number of autosomes
(C) Number of sex chromosomes
(D) The types of sex chromosomes
40. Crocodile and penguin are similar to whale and dog fish in which one of the following features ?
- (A) Possess a solid single stranded central nervous system
(B) Lay eggs and guard them till they hatch
(C) Possess bony skeleton
(D) Have gill slits at some stage

41. The characteristics given below are associated with :

- (i) Body is covered by dry and cornified skin, epidermal scales or scutes
- (ii) They have no external ear.
- (iii) Crawling, creeping habit
- (iv) 3 chambered heart

(A) Reptiles

(B) Birds

(C) Amphibia

(D) Mammals

42. Read the given statements and select the correct options :

Statement 1 : Amphibians often hibernate in winter and aestivate in summer.

Statement 2 : They are poikilothermic animals and cannot regulate body temperature.

- (A) Both statements 1 and 2 are correct but statement 2 is the correct explanation of statement 1
- (B) Both statements 1 and 2 are correct and statement 2 is the not correct explanation of statement 1
- (C) Statement 1 is correct and statement 2 is incorrect
- (D) Both statements 1 and 2 are incorrect

43. What is the total no. of species present on Earth as estimated by Robert May ?

(A) 3 million

(B) 5 million

(C) 7 million

(D) 9 million

44. Genetic variations affect the production of the drug reserpine in the medicinal plant *Rauwolfia vomitoria* growing in different Himalayan ranges. What kind of diversity does it indicate ?

(A) Species diversity

(B) Genetic diversity

(C) Ecological diversity

(D) None of these

45. Read the given statements and select the correct option :

Statement 1 : Indian elephants are confined to terai and the foothills.

Statement 2 : Elephants are herbivores and require succulent grass and plenty of water.

- (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 the not correct explanation of statement 1
- (C) Statements 1 is correct and statement 2 is incorrect
- (D) Both statements 1 and 2 are incorrect

46. 'Broadly utilitarian' argument for the conservation of biodiversity does not include :

- (A) Bioprospecting
- (B) Pollination
- (C) Aesthetic value
- (D) Climatic regulation

47. _____ is the exploration of molecular, genetic and species level diversity for gaining the products of economic importance.

- (A) Exploitation
- (B) Bioprospecting
- (C) Co-extinction
- (D) Patenting

48. Which of the following statement regarding biodiversity hotspots are incorrect ?

- i. High endemism
- ii. High level of species richness
- iii. Total no. is 34 in the world
- iv. 5 of these occur in India
- v. High alien species invasion
- vi. Cover less than 2% of the Earth's land area ; but if properly conserved, they can reduce extinctions by about 30%

- (A) iii and iv
- (B) iv and v
- (C) iv, v and vi
- (D) iii, iv, v and vi

49. Which of the given statements is true ?
- (A) National parks are meant for the protection of fauna only
 - (B) Wildlife sanctuaries are meant for the protection of both flora and fauna
 - (C) Activities like collection of forest products, harvesting of timber, private ownership of land etc. are allowed in national parks
 - (D) None of these
50. One of the ex-situ conservation methods for endangered species is :
- (A) Wildlife sanctuaries
 - (B) Biosphere reserve
 - (C) Cryopreservation
 - (D) National parks
51. Biosphere reserve differ from national parks and wildlife sanctuaries because in the former :
- (A) Human beings are not allowed to enter
 - (B) People are an integral part of the system
 - (C) Plants are paid greater attention than the animals
 - (D) Living organisms are brought from all over the world and preserved for posterity
52. Peroxyacetyl nitrates (PAN) are formed through photochemical reactions between :
- (A) Sulphur oxides and hydrocarbons
 - (B) Nitrogen oxides and hydrocarbons
 - (C) Nitrogen oxides and O_3
 - (D) $CFCl_3$ and O_3
53. Contamination of water with sewage is indicated by cysts of :
- (A) *Escherichia*
 - (B) *Entamoeba*
 - (C) *Pseudomonas*
 - (D) *Leishmania*

54. Which among the following is likely to have the highest level of DDT deposition in its body ?
- (A) Sea gull (B) Phytoplankton
(C) Eel (D) Crab
55. A white eyed male *Drosophila* is crossed with a red-eyed female *Drosophila*. All the females and male produced in F_1 are red eyed. When the red-eyed males and females of F_1 are crossed among themselves, the F_2 generation has 50% white eyed males but not females are white eyed. This shows that the :
- (A) Gene for white eye dominance
(B) Gene for white eye is recessive and located in autosomes
(C) Gene for white eye is recessive and located on Y-Chromosome
(D) Gene for white eye is recessive and located on X-Chromosome
56. If a colour blind male married to a normal female, what percentage of their children are like to be colour blind ?
- (A) 50 (B) 25
(C) 100 (D) 0
57. In a chromosome the sequence of the genes is abcdefg; if it changed to a b c d e f g e f g. This is termed :
- (A) Deletion (B) Duplication
(C) Translocation (D) Inversion
58. According to the condition specified it would be the proportion of dwarf plants to wrinkled seeds in F_2 generation ?
- (A) $\frac{1}{2}$ (B) $\frac{1}{4}$
(C) $\frac{1}{16}$ (D) 1

59. The number of types of gametes produced by an organism having a genotype AaBbCc would be :
- (A) 8 (B) 4
(C) 2 (D) 9
60. The end product of a metabolic pathway binds to a repressor to make the latter active enough to bind to the operator. The end product in such case is called :
- (A) Co-repressor (B) Aporepressor
(C) Inducer (D) Suppressor
61. Match correctly between column (A) and column (B) :

Column A	Column B
I. Triple trisomic	(A) $2n - 1 - 1 - 1$
II. Triple monosomic	(B) $2n + 1 + 1 + 1$
III. Transversion	(C) Substitution of purine by pyrimidine
IV. Transition	(D) Substitution of purine by another purine or pyrimidine by another pyrimidine

Codes :

- (A) I-B, II-A, III-C, IV-D (B) I-B, II-A, III-C, IV-D
(C) I-D, II-C, III-B, IV-A (D) I-A, II-D, III-C, IV-B
62. A Genetic engineer wishes to construct a shuttle vector for these experiments. What essential requirements should it possess to integrate with the host system ?
- I. Different origins of replication of DNA
II. cos sites for incorporation of DNA
III. Polylinker site for insertion of foreign DNA of these above statement
- (A) I and II are correct (B) II is correct
(C) I and III are correct (D) II and III are correct

63. Consider the following steps during recombinant DNA technology :

- (1) Breaking of donor DNA using restriction enzyme
- (2) Culture and recombinant bacteria to obtain its clone
- (3) Isolation of suitable plasmid
- (4) Insertion of recombinant DNA through cloning
- (5) Joining of donor DNA with a suitable plasmid using ligase

The correct sequence of these is :

- (A) 1, 3, 2, 4, 5 (B) 3, 2, 1, 4, 5
(C) 1, 3, 5, 4, 2 (D) 5, 1, 3, 4, 2

64. Match List I with List II and select the correct answer using this code given below in the list :

List – I

- (I) Gel electrophoresis
(II) Serology
(III) DNA-DNA hybridisation
(IV) Restriction site analysis

List – II

- (A) Annealing
(B) Isozymes
(C) Southern blots
(D) Antiserum
(E) Sequencing

Codes :

- (A) I-E, II-B, III-A, IV-D (B) I-B, II-A, III-C, IV-D
(C) I-C, II-D, III-B, IV-E (D) ????

65. Match List I with List II and select the correct answer using the code given below the list :

List – I

- (I) Recobinant DNA
(II) Agrobacterium
(III) Sticky ends
(IV) Plasmids

List – II

- (A) Marker gene/reporter
(B) DNA linkage
(C) T-DNA
(D) Restriction enzymes

Codes :

- (A) I-C, II-D, III-A, IV-B (B) I-C, II-D, III-A, IV-B
(C) I-D, II-C, III-A, IV-B (D) I-D, II-C, III-B, IV-A

66. Match List I with List II and select the correct answer using this code given below in the list :

List – I

- (I) Autotetraploid
- (II) Ac-DS system
- (III) Segmental
- (IV) Genetic Cinderella

List – II

- (A) *Triticum aestivum*
- (B) *Drosophila melanogaster*
- (C) Secale cereal allopolyploid
- (D) *Zea mays*

Codes :

- (A) I-C, II-D, III-A, IV-B
- (B) I-C, II-D, III-A, IV-B
- (C) I-C, II-A, III-D, IV-B
- (D) I-B, II-D, III-A, IV-C

67. Match List I with List II and select the correct answer using this code given below in the list :

List – I

- (I) Failure of spindle
- (II) Dissolution of cell wall
- (III) Fusion of plant
- (IV) Induction of mutation

List – II

- (A) Nitrous acid organise
- (D) Cellulose
- (C) Colchicine protoplasts
- (D) Colchicine protoplasts

Codes :

- (A) I-C, II-B, III-D, IV-A
- (B) I-C, II-B, III-A, IV-D
- (C) I-B, II-C, III-D, IV-A
- (D) I-B, II-C, III-A, IV-D

68. Pollution from animal excreta and organic waste from kitchen can be most profitably minimized by :

- (A) Storing them in underground storage tanks
- (B) Using them for producing biogas
- (C) Dumping them in river
- (D) Using them directly as biofertilizers

69. Amrita Devi Bishnoi Wildlife Protection award is for the individuals or the communities from the rural areas that have shown extraordinary courage in :
- (A) Reducing environmental pollution
 - (B) Reducing global warming
 - (C) Protecting wildlife
 - (D) Reforestation in deforested area
70. A sectional view of mammary gland shows :
- (i) Nipple + Areola
 - (ii) Mammary lobe, Alveolus and Duct
 - (iii) Antibodies + Pectoralis major muscles + Ribs
 - (iv) Ampulla + Lactiferous duct
- (A) i, ii and iv
 - (B) i, ii and iii
 - (C) iii and iv
 - (D) i, ii, iii and iv
71. The principal tail piece of human sperm shows the microtubular arrangement of :
- (A) 7+2
 - (B) 9+2
 - (C) 11+2
 - (D) 13+2
72. At menopause there is rise in urinary excretion of :
- (A) FSH
 - (B) STH
 - (C) MSH
 - (D) None of these
73. The sex of the foetus will be decided at :
- (A) Fertilization by male gamete
 - (B) Implantation
 - (C) Fertilization by female gamete
 - (D) The start of cleavage

74. The main function of trophoectoderm in mammalian embryo is :
- (A) Formation of future endoderm
 - (B) Formation of the body of developing embryo
 - (C) Formation of future ectoderm
 - (D) Formation of placenta
75. Which one among the following is an example for homology ?
- (A) Eye of octopus and mammals
 - (B) Wings of butterfly and birds
 - (C) Flippers of penguins and dolphins
 - (D) Thorns of *Bougainvillea* and tendrils of *Cucurbita*
76. The preserved fossil remains of Archaeopteryx show that :
- (A) It was flying reptile from the Permian period
 - (B) Reptiles gave rise to birds during Jurassic period
 - (C) It was flying reptile in the Triassic period
 - (D) Reptiles gave rise to birds during Permian period
77. Allopatric speciation occurs when :
- (A) Genetically related populations inhabit widely separated geographical area
 - (B) Genetically unrelated populations inhabit widely separated geographical area
 - (C) Genetically related populations inhabit the same geographical area
 - (D) Genetically unrelated populations inhabit the same geographical area

78. What is the correct arrangement of periods of palaeozoic era in ascending order in geological time scale ?

- (A) Cambrian → Devonian → Ordovician → Silurian → Carboniferous → Permian
- (B) Cambrian → Ordovician → Silurian → Devonian → Carboniferous → Permian
- (C) Cambrian → Ordovician → Devonian → Silurian → Carboniferous → Permian
- (D) Silurian → Devonian → Cambrian → Ordovician → Permian → Carboniferous

79. Golden age of reptile was :

- (A) Proterozoic era
- (B) Palaeozoic era
- (C) Mesozoic era
- (D) Coenozoic era

80. Amphibian were dominant during _____ period.

- (A) Carboniferous
- (B) Silurian
- (C) Ordovician
- (D) Cambrian



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