



← संच क्रमांक

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प्रश्नपुस्तिका क्रमांक

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प्रश्नपुस्तिका-II

GENERAL SCIENCE AND  
NATURE CONSERVATION

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वेळ : 1 ( एक ) तास

### सूचना

- (1) सदर प्रश्नपुस्तिकेत 100 अनिवार्य प्रश्न आहेत. उमेदवारांनी प्रश्नांची उत्तरे लिहिण्यास सुरुवात करण्यापूर्वी या प्रश्नपुस्तिकेत सर्व प्रश्न आहेत किंवा नाहीत याची खात्री करून घ्यावी. तसेच अन्य काही दोष आढळल्यास ही प्रश्नपुस्तिका समवेक्षकांकडून लगेच बदलून घ्यावी.
- (2) आपला परीक्षा-क्रमांक ह्या चौकोनांत न विसरता बॉलपेनने लिहावा.
- (3) वर छापलेला प्रश्नपुस्तिका क्रमांक तुमच्या उत्तरपत्रिकेवर विशिष्ट जागी उत्तरपत्रिकेवरील सूचनेप्रमाणे न विसरता नमूद करावा.
- (4) या प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाला 4 पर्यायी उत्तरे सुचविली असून त्यांना 1, 2, 3 आणि 4 असे क्रमांक दिलेले आहेत. त्या चार उत्तरांपैकी सर्वात योग्य उत्तराचा क्रमांक उत्तरपत्रिकेवरील सूचनेप्रमाणे तुमच्या उत्तरपत्रिकेवर नमूद करावा. अशा प्रकारे उत्तरपत्रिकेवर उत्तरक्रमांक नमूद करताना तो संबंधित प्रश्नक्रमांकासमोर छयांकित करून दर्शविला जाईल याची काळजी घ्यावी. ह्याकरिता फक्त काळ्या शाईचे बॉलपेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.
- (5) सर्व प्रश्नांना समान गुण आहेत. यास्तव सर्व प्रश्नांची उत्तरे द्यावीत. घाईमुळे चुका होणार नाहीत याची दक्षता घेऊनच शक्य तितक्या वेगाने प्रश्न सोडवावेत. क्रमाने प्रश्न सोडविणे श्रेयस्कर आहे पण एखादा प्रश्न कठीण वाटल्यास त्यावर वेळ न घालता पुढील प्रश्नाकडे वळावे. अशा प्रकारे शेवटच्या प्रश्नापर्यंत पोहोचल्यानंतर वेळ शिल्लक राहिल्यास कठीण म्हणून वगळलेल्या प्रश्नांकडे परतणे सोईस्कर ठरेल.
- (6) उत्तरपत्रिकेत एकदा नमूद केलेले उत्तर खोडता येणार नाही. नमूद केलेले उत्तर खोडून नव्याने उत्तर दिल्यास ते तपासले जाणार नाही.
- (7) प्रस्तुत परीक्षेच्या उत्तरपत्रिकांचे मूल्यांकन करताना उमेदवारांच्या उत्तरपत्रिकेतील योग्य उत्तरांनाच गुण दिले जातील. तसेच " उमेदवाराने वस्तुनिष्ठ बहुपर्यायी स्वरूपाच्या प्रश्नांची दिलेल्या चार उत्तरांपैकी सर्वात योग्य उत्तरेच उत्तरपत्रिकेत नमूद करावीत. अन्यथा त्यांच्या उत्तरपत्रिकेत सोडविलेल्या प्रत्येक चार चुकीच्या उत्तरांसाठी एका प्रश्नाचे गुण वजा करण्यात येतील'.

### ताकीद

ह्या प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपेपर्यंत ही प्रश्नपुस्तिका आयोगाची मालमत्ता असून ती परीक्षाकक्षात उमेदवारांला परीक्षेसाठी वापरण्यास देण्यात येत आहे. ही वेळ संपेपर्यंत सदर प्रश्नपुस्तिकेची प्रत/प्रती, किंवा सदर प्रश्नपुस्तिकेतील काही आशय कोणत्याही स्वरूपात प्रत्यक्ष वा अप्रत्यक्षपणे कोणत्याही व्यक्तीस पुरविणे, तसेच प्रसिद्ध करणे हा गुन्हा असून अशी कृती करणाऱ्या व्यक्तीवर शासनाने जारी केलेल्या "परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचा अधिनियम-82" यातील तरतुदीनुसार तसेच प्रचलित कायद्याच्या तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/किंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल. तसेच ह्या प्रश्नपत्रिकेसाठी विहित केलेली वेळ संपण्याआधी ही प्रश्नपुस्तिका अनधिकृतपणे बाळगणे हा सुद्धा गुन्हा असून तसे करणारी व्यक्ती आयोगाच्या कर्मचारीवृंदापैकी, तसेच परीक्षेच्या पर्यवेक्षकीयवृंदापैकी असली तरीही अशा व्यक्तीविरुद्ध उक्त अधिनियमानुसार कारवाई करण्यात येईल व दोषी व्यक्ती शिक्षेस पात्र होईल.

पुढील सूचना प्रश्नपुस्तिकेच्या अंतिम पृष्ठावर पहा

पर्यवेक्षकांच्या सूचनेविना हे सील उघडू नये

SEAL

कच्च्या कामासाठी जागा /SPACE FOR ROUGH WORK

1. What is the resistivity of tungsten ?

- (a)  $1.7 \times 10^{+8}$  ( $\Omega.m$ ) at  $0^\circ C$  (b)  $3.5 \times 10^{+18}$  ( $\Omega.m$ ) at  $0^\circ C$   
(c)  $1.1 \times 10^{-16}$  ( $\Omega.m$ ) at  $0^\circ C$  (d)  $5.6 \times 10^{-8}$  ( $\Omega.m$ ) at  $0^\circ C$

**Answer Options :**

- (1) (a) and (b) both (2) Only (b) (3) (b) and (c) only (4) (d) only
- 

2. An electric bell depends for its action on :

- (1) a permanent magnet (2) reversal of current  
(3) an electromagnet (4) a hammer and a gong
- 

3. For providing our own GPS system a constellation of satellites was launched by ISRO from 2013 to 2016. The name given to this program is 'NavIC'. Which of the following statement is correct in this regard ?

- (1) There are 3 polar, 2 equatorial and 2 inclined plane orbits of these satellites.  
(2) All seven satellites have Geosynchronous orbits moving after each other at an angle of  $29^\circ$  to equator at  $83^\circ$  East.  
(3) 3 Geostationary at  $32.5^\circ$ ,  $83^\circ$  and  $131.5^\circ$  East and 4 Geosynchronous transfer orbits at an angle of  $29^\circ$  to equator at  $55^\circ$  and  $111.75^\circ$  East.  
(4) All seven have Geostationary orbits spaced equally on the equatorial plane around the Earth at a distance of 36,000 km from the sea level.
- 

4. A person using a lens as a simple microscope sees an :

- (1) upright virtual image (2) inverted virtual image  
(3) upright real image (4) inverted real image
- 

5. The magnifying power of a simple microscope can be increased by :

- (1) Decreasing the focal length of the lens  
(2) Increasing the focal length of the lens  
(3) Decreasing the power of lens  
(4) None of the above
-

6. Rainbow is formed due to :

- (1) refraction and internal reflection (2) absorption and dispersion  
(3) interference and scattering (4) dispersion and interference
- 

7. What is the effect of temperature on velocity of sound ?

- (1) Velocity of sound in air decreases with increase in temperature  
(2) Velocity of sound in air increases with increase in temperature  
(3) Velocity of sound in air increases with decrease in temperature  
(4) None of the above
- 

8. The SI Unit of Planck's constant ' $h$ ' is Js. What will be the dimensional formula ?

- (1)  $M^1L^2T^{-2}$  (2)  $M^{-1}L^2T^{-1}$  (3)  $M^1L^2T^{-1}$  (4)  $M^1L^1T^{-2}$
- 

9. In sulfuric acid manufacture, sulfur dioxide is converted to sulfur trioxide using following catalyst :

- (1) Zinc oxide (2) Vanadium oxide  
(3) Magnesium carbonate (4) Copper sulfate
- 

10. Which Anion is more polarizable ?

- (1)  $F^-$  (2)  $Cl^-$  (3)  $Br^-$  (4)  $I^-$
- 

11. Zeolites are extensively used in water purification, detergents, catalyst etc. They are chemically :

- (1) Borosilicates (2) Aluminosilicates  
(3) Sodium silicate (4) Potassium silicate
- 

12. One of the following is **not** a greenhouse gas :

- (1) Nitrogen dioxide (2) Sulfur dioxide  
(3) Carbon dioxide (4) Argon
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

13. The products of the reaction between metallic copper and hot concentrated sulphuric acid are :

- (1)  $\text{CuSO}_4 + \text{H}_2$  (2)  $\text{CuSO}_4 + \text{SO}_2 + \text{H}_2\text{O}$   
(3)  $\text{CuO} + \text{H}_2\text{O} + \text{SO}_2$  (4) None of these
- 

14. Oxidation of which of the following substances will yield a stronger acid ?

- (1)  $\text{H}_2\text{CO}_3$  (2)  $\text{HNO}_3$  (3)  $\text{HIO}$  (4)  $\text{H}_4\text{SiO}_4$
- 

15. A Liquid boils when :

- (1) enough salt has been added to it.  
(2) the vapour pressure of the liquid is equal to the atmospheric or surrounding pressure.  
(3) the vapour pressure of the liquid reaches 760 mm Hg.  
(4) conditions favour the liquids molecules to be closer together.
- 

16. The most important mineral of aluminium is :

- (1) Borax (2) Kernite (3) Bauxite (4) Chalcopyrite
- 

17. Endosulfan is effective against :

- (1) Caterpillars (2) Red spider (3) Flies (4) Mites and bugs
- 

18. Who proposed the first natural system of plant classification ?

- (1) Asa Gray (2) A.P. de Candolle  
(3) A.L. de Jussieu (4) Bentham and Hooker
- 

19. Consider the following Statements.

**Statement (I) :** Alpha, Beta, Gamma and Omega taxonomy are typically based on morphological characters.

**Statement (II) :** The concept of Alpha-Omega taxonomy is conceptually more appropriate as they are complementary to each other.

**Answer Options :**

- (1) Both statements are correct. (2) Statement (I) is correct, (II) is incorrect.  
(3) Both statements are incorrect. (4) Statement (II) is correct, (I) is incorrect.
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

P.T.O.

20. The average pH of soil suitable for mineral absorption by plants is :

- (1) 4.5 to 5.5      (2) 5.5 to 6.5      (3) 6.5 to 7.5      (4) 7.5 to 8.5
- 

21. Trichogramma, a biopesticide mostly parasitize the eggs of following insect group :

- (1) Hymenoptera      (2) Coleoptera      (3) Lepidoptera      (4) Trichoptera
- 

22. According to Takhtajan's system of plant classification, which of the following order was considered most primitive, which gave rise to all other branches of angiosperm ?

- (1) Ranales      (2) Parietales      (3) Geraniales      (4) Magnoliales
- 

23. Which of the following organisms cause the wart disease of potato ?

- (1) Bacteria      (2) Mycoplasma      (3) Fungus      (4) Virus
- 

24. Lepas and Balanus are included under the order :

- (1) Decapoda      (2) Thoracica      (3) Rhizocephala      (4) Amphipoda
- 

25. The red and green colourblindness are also called as :

- (1) Protonopia and Deutoranopia      (2) Deutoranopia and Protonopia  
(3) Anemia and Phenylketoneuria      (4) Xerophthalmia and Exophthalmia
- 

26. Teeth in Indian bull Frog are \_\_\_\_\_.

- (1) Acrodont      (2) Homodont      (3) Polyphyodont      (4) All the above
- 

27. The sum of total genes of all the individuals of mendelian population constitutes the :

- (1) Gene pool      (2) Gene Frequency  
(3) Genetic drift      (4) Genetic Equilibrium
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

28. Honey is a sugar rich compound having the following constituents :

- (a) Levulose, Dextrose and Maltose (b) Enzymes, Pigments and Ash  
(c) Protein, Enzymes and Water (d) Starch, Glucose and Sucrose

**Answer Options :**

- (1) (a) only (2) (a) and (b) only (3) (c) only (4) (d) only
- 

29. Identify the correct sequence of taxa in Linnean hierarchy.

- (1) class, order, family, genus, species  
(2) class, family, species, genus, order  
(3) species, genus, phylum, family, class  
(4) phylum, class, family, species, order
- 

30. Who proposed the term Hemichordata to replace Enteropneusta proposed by Gagenbaur ?

- (1) Bateson (2) Hyman (3) Gagenbaur (4) Horst
- 

31. Partially decomposed organic matter found in which horizon ?

- (1) A<sub>1</sub> (2) OL<sub>2</sub> (3) OL<sub>1</sub> (4) None of the above
- 

32. Solonchak is also known as :

- (a) Sodic soil (b) Saline sodic soil (c) Alkaline soil (d) Saline soil

**Answer Options :**

- (1) (a) and (b) (2) (a) and (c) (3) (c) only (4) (d) only
- 

33. Minor shallow channels formed due to water erosion are called \_\_\_\_\_.

- (1) Gullies (2) Ravines (3) Rills (4) Valley
- 

34. If 100 g of certain clay is capable of exchanging a total of 250 meq. of calcium, the cation exchange capacity is \_\_\_\_\_.

- (1) 25 meq. per 100 g soil (2) 15 meq. per 100 g soil  
(3) 12.5 meq. per 100 g soil (4) 30 meq. per 100 g soil
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

P.T.O.

35. Which of the following mineral group possess single chain tetrahedral linkages ?

- (1) Pyroxenes      (2) Amphibotes      (3) Mica      (4) Quartz
- 

36. The removal of surface soil takes place in a much faster rate than it can be built up by the soil forming processes is known as \_\_\_\_\_.

- (1) geological erosion      (2) accelerated erosion  
(3) both (1) and (2)      (4) none of above
- 

37. Strip cropping consists of a series of alternate strips of various types of crops laid out so that all tillage and crop management practices are performed :

- (a) across the slope      (b) along the slope

**Answer Options :**

- (1) Only (a) is true      (2) Only (b) is true  
(3) Both (a) and (b) are true      (4) Both (a) and (b) are not true
- 

38. In case of wind erosion, deposition of sediment occurs when the\_\_\_\_\_.

- (1) Viscous force is greater than the gravitational force  
(2) Gravitational forces are constant  
(3) Forces holding the particle in the air are greater than gravitational forces  
(4) Gravitational force is greater than the forces holding the particles in the air
- 

39. \_\_\_\_\_ phase covers the task of selection of best solutions and their application for watershed management.

- (1) Recognition      (2) Restoration      (3) Protection      (4) Improvement
- 

40. *Cynodon dactylon* is suitable for \_\_\_\_\_.

- (1) Check dam      (2) Rill control  
(3) Gully control      (4) Grassed water way
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK



41. The points of closest approach to the sun is called :

- (1) Aphelion (2) Perihelion  
(3) Zonation (4) None of the above
- 

42. The symbiotic bacteria \_\_\_\_\_ fixes atmospheric nitrogen biologically in leguminous point.

- (1) Rhizobium (2) Azotobactor  
(3) Nitrosomonas (4) (1) and (3) both
- 

43. \_\_\_\_\_ plant nutrient is essential in formation and transformation of starch and sugars in plant system.

- (1) Potassium (2) Nitrogen (3) Calcium (4) Sulfur
- 

44. Diammonium Phosphate (DAP) is available in two grades, those are \_\_\_\_\_.

- (1) 16:48:0 and 18:46:0 (2) 12:61:0 and 12:46:0  
(3) 16:20:0 and 16:46:0 (4) None of the above
- 

45. Which of the following statements is/are correct in case of Rabies disease ?

- (a) The source of infection is always an infected animal and method of spread is almost always by the bite of Rabid animal.  
(b) The virus is truly neurotropic and causes lesions only in nervous tissue.  
(c) Rabies is an acute, viral encephalomyelitis.  
(d) Negri bodies are not always present in Rabies.

**Answer Options :**

- (1) (a) only (2) (a) and (b) (3) (c) and (d) (4) All are correct
- 

46. *Sphacelotheca reiliana* causing head smut of sorghum is :

- (1) Seed borne (2) Air borne  
(3) Soil borne (4) Both soil and seed borne
- 

कच्च्या कामासाठी जागा /SPACE FOR ROUGH WORK

P.T.O.

47. Therapeutic value of thick fluid extracted from wood roots of *Heterophragma quadriloculare* (Bignoniaceae) is :
- (1) Diarrhoea and dysentry                      (2) Anti-inflammatory and anti-arthritic  
(3) Anti-diabetic                                      (4) Skin diseases
- 
48. Halogenated hydrocarbons affect organisms because they are soluble in \_\_\_\_\_.
- (1) Lipids                      (2) Proteins                      (3) Carbohydrates                      (4) None of these
- 
49. Which of the following weed spreads fast due to stolons and sexual reproduction in water bodies ?
- (1) *Ageratum conyzoides*                      (2) *Salvinia molesta*  
(3) *Eichhornia crassipes*                      (4) *Chenopodium album*
- 
50. Rice crop is mostly associated with \_\_\_\_\_ weed.
- (1) *Cleome viscosa*                      (2) *Phalaris minor*  
(3) *Avena fatua*                      (4) *Echinochloa colonum*
- 
51. Eutrophication of water bodies is because of :
- (1) High level of nitrate nitrogen content in the surface water  
(2) High level of oxygen content in the surface water  
(3) High level of methane content in the surface water  
(4) None of the above
- 
52. Which of the following statement is **incorrect** regarding IUCN ?
- (1) In 1948, International Conference on Conservation resulted in formation of International Union for Protection of Nature  
(2) In 1956, the name was changed to International Union for Conservation of Nature and Natural resources (IUCN)  
(3) IUCN headquarter is based in Toronto, Canada  
(4) It is the World's Largest Conservation Organisation
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

53. Large quantities of sulphur and nitrogen oxides are emitted into atmosphere from the various industries which in turn results into :

- (1) Acid rain (2) Soil pollution  
(3) Air pollution (4) Volcanic eruption
- 

54. Strip mining of metal ores produce vast quantities of residues called \_\_\_\_\_.

- (1) Mine rock (2) Mine ore (3) Mine spoils (4) None of the above
- 

55. Major El Nino events are intimately related to large scale changes of atmospheric circulation in the \_\_\_\_\_.

- (1) Pacific ocean (2) Atlantic ocean (3) Indian ocean (4) None of these
- 

56. When the Kyoto Protocol came into Force ?

- (1) 20<sup>th</sup> March, 1994 (2) 1<sup>st</sup> January, 2001  
(3) 16<sup>th</sup> February, 2005 (4) 14<sup>th</sup> February, 2009
- 

57. Following one is the species of hedgehog which is mostly found in India :

- (1) Desert hedgehog (2) European hedgehog  
(3) Long-eared hedgehog (4) Short-eared hedgehog
- 

58. Aves or the birds have been descended from their immediate ancestors, the reptiles. What special character entitled to :

- (a) Main characteristic feature is their feather.  
(b) Feather grow from dermis and all made up of keratine.  
(c) Feet are covered with scales.

Which of the statement given above are correct ?

- (1) (a) and (b) only (2) (b) and (c) only (3) (a) and (c) only (4) (a), (b) and (c)
- 

59. Fine gray cattle breed found in the entire basin of river Ganga in the eastern Uttar Pradesh and adjoining parts of Bihar is :

- (1) Ganga (2) Gangathadi (3) Gangatiri (4) Gangapari
- 

कच्चा कामासाठी जागा /SPACE FOR ROUGH WORK

P.T.O.

60. Dangi cattle breed, an important cattle breed of Maharashtra has following features :
- (a) Milch breed of heavy rainfall area      (b) Large body size  
(c) Oily secretion from skin      (d) Horns are short and ears are small

**Answer Options :**

- (1) Only (a) is correct      (2) (a) and (b) are correct  
(3) Only (c) is correct      (4) (c) and (d) are correct

61. Mangroves produces blind roots or pneumatophores so as to overcome the \_\_\_\_\_ soil condition.

- (1) anaerobic      (2) aerobic      (3) saline      (4) alkaline

62. Cinchona ( *cinchona officinalis* Linn. ) is used commercially for its bark which is the source of :

- (1) Withamine      (2) Somniferine  
(3) Quinine      (4) Andrographolide

63. Tree species selected for energy plantation should be \_\_\_\_\_.

- (1) Fast growing      (2) Cylindrical crown  
(3) Wood with high calorific value      (4) All the above

64. The center for Forest Productivity is located at \_\_\_\_\_.

- (1) Dehradun      (2) Jodhpur      (3) Jabalpur      (4) Ranchi

65. \_\_\_\_\_ fibre finds extensive use in shipping industry because of its good tensile strength and high degree of resistance to sea water attack.

- (1) Simul      (2) Sisal      (3) Palmyra      (4) Sunhemp

66. Current Annual Increment, Periodic Annual Increment and Mean Annual Increment are the common measures for estimating which of the following :

- (1) Site quality      (2) Soil runoff  
(3) Rainfall estimate      (4) Growth and Yield

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67. According to champion of seth classification of Forest types, Southern dry mixed deciduous forest is put in which sub-group and with what number ?

- (1) 5AC<sub>3</sub>                      (2) 4DSS<sub>4</sub>                      (3) 5AC<sub>1</sub>                      (4) L<sub>1</sub>
- 

68. \_\_\_\_\_ means the species composition in the forest which is considered useful for determination of minor types and units within a forest type.

- (1) Silvicultural              (2) Function                      (3) Floristics                      (4) Dynamics
- 

69. Black soils in Western Ghats are deficient in organic matter, Nitrogen and Phosphoric acid, but generally have enough \_\_\_\_\_.

- (1) titanium and maganese                      (2) aluminium and titanium  
(3) lime and potash                                      (4) iron and lime
- 

70. \_\_\_\_\_ is a unique feature of the energetics of terrestrial ecosystems.

- (1) Evapotranspiration                                      (2) Aquifers  
(3) Canopy    (4) Erosion
- 

71. Which is the largest National Park in India in terms of its geographic area in square kilometers ?

- (1) Papikonda National Park                                      (2) Silent Valley National Park  
(3) Hemis National Park    (4) Satpura National Park
- 

72. An area of land and/or sea especially dedicated to protection and maintenance of biological diversity and of natural and associated cultural resources and managed through legal or other effective means is termed as :

- (1) Protected area              (2) Niche                                      (3) Ecotone                                      (4) Cover
- 

73. How many species of animals in India was considered to be globally threatened by IUCN during 1993 ?

- (1) 55                                      (2) 6    (3) 172    (4) more than 3000
- 

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74. Ministry of Forest and Environment estimated the highest number of Elephants in one of the following Indian state as per census figures of 2007 :

- (1) Karnataka      (2) Assam      (3) Kerala      (4) Tamil Nadu
- 

75. Gir National Park established by Government of Gujarat in 1972 aims at conservation of which animal ?

- (1) Lion      (2) Tiger      (3) Leopard      (4) Bison
- 

76. Consider the following statements regarding Ideotype in Agroforestry :

- (a) it is a physiological model  
(b) it was coined by C.M. MacDonald  
(c) it was originally developed for forestry crops

Which of these is/are true ?

- (1) All three      (2) Only (b)      (3) Only (c)      (4) None
- 

77. In India the most common host plants of lac insect are \_\_\_\_\_.

- (1) Palas, Raintree, Babool      (2) Palas, Ber, Kusum  
(3) Raintree, Babool, Mulberry      (4) Pigeon Pea, Barbados nut, Ber
- 

78. In Agroforestry, importance of allelochemicals is clearly recognized. Which of the following statements about allelochemicals is/are true ?

- (a) They are secreted by some plants as defence mechanism  
(b) They are mostly primary metabolites  
(c) They can inhibit growth of other plants

**Answer Options :**

- (1) Only (a)      (2) Only (a) and (c)  
(3) Only (a) and (b)      (4) All (a), (b), (c)
- 

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79. Genetically improved clonal planting stock of \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ has transformed the productivity and profitability of plantations, in agroforestry, which yields 20 to 25 times higher compared to average productivity of Forests in India.

- (1) Poplars, Bamboos, *Ailanthus* (2) *Eucalyptus*, *Casuarina*, Poplars  
 (3) *Eucalyptus*, Poplars, *Acacias* (4) Poplars, *Casuarina*, *Ailanthus*

80. Agri-horti-silviculture system is prominent in \_\_\_\_\_ region of India.

- (1) Upper Gangetic Plains (2) Middle Gangetic Plains  
 (3) Lower Gangetic Plains (4) West Coast Plains and Ghats

81. Which of the following forest policies stressed on the production and revenue generation aspects of forests ?

- (a) 1894 (b) 1952 (c) 1988

**Answer Options :**

- (1) Only (a) (2) Only (c)  
 (3) Both (a) and (b) (4) Both (b) and (c)

82. For proper administration and management of forest department of Maharashtra State has \_\_\_\_\_ Territorial Forest Circles.

- (1) 9 (2) 10 (3) 11 (4) 12

83. NFP, 1984 was the first formal policy statement of India based on the report of \_\_\_\_\_.

- (1) J.A. Voelcker (2) Dietrich Brandis  
 (3) Sir Herbert Howard (4) T. Cooke

84. A villager volunteers to conserve wildlife and its habitat on his 50 ha. land. Under the Wildlife (Protection) Act, 1972, which category of protected area it best qualifies for ?

- (1) Wildlife Sanctuary (2) National Park  
 (3) Conservation Reserve (4) Community Reserve

85. Which of the following pairs are **correctly** matched ?

Wild Animal	-	Schedule of Wildlife (Protection) Act, 1972
(a) Golden Langur	-	I
(b) Lion-tailed Macaque	-	II
(c) Bonnet Macaque	-	II
(d) Hoolock	-	III

**Answer Options :**

- (1) (a), (b), (c), (d)    (2) (a) and (b)    (3) (a) and (c)    (4) (b) and (c)

86. The Institute came into existence in April 1988 at Jabalpur to undertake the research problems of the Forest of Central India comprising the States of Madhya Pradesh, Chhattisgarh and Maharashtra is \_\_\_\_\_.

- (1) Bombay Natural History Society  
 (2) National Environmental Engineering Research Institute  
 (3) Salim Ali Centre for Ornithology and Natural History  
 (4) Tropical Forest Research Institute

87. Choose the **correct** pair :

- |  |                |
|--|----------------|
| (a) Wildlife Institute of India (WII)                                  | (i) Bhopal     |
| (b) Indian Institute of Forest Management (IIFM)                       | (ii) Ahmedabad |
| (c) Indian Plywood Industries Research and Training Institute (IPIRTI) | (iii) Dehradun |
| (d) Centre for Environment Education (CEE)                             | (iv) Bengaluru |

**Answer Options :**

- |     | (a)   | (b)   | (c)  | (d)   |
|-----|-------|-------|------|-------|
| (1) | (ii)  | (iii) | (i)  | (iv)  |
| (2) | (iv)  | (ii)  | (i)  | (iii) |
| (3) | (i)   | (iv)  | (ii) | (iii) |
| (4) | (iii) | (i)   | (iv) | (ii)  |

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88. Forest Survey of India (FSI) is responsible for :

- (a) Assessment of the forest resources of the Country
- (b) Monitoring of forest resources of the Country
- (c) Providing services of training, research and extension
- (d) Provide education in forestry

**Answer Options :**

- (1) (a) and (b) only
- (2) (b) and (c) only
- (3) (a), (b) and (c)
- (4) (a), (b), (c) and (d)

89. The Headquarters of International Union for Conservation of Nature and Natural Resources is located in which of the following country ?

- (1) United States of America
- (2) Switzerland
- (3) Phillipines
- (4) Japan

90. The International Journal publish by Food and Agriculture Organization (FAO) of United Nations :

- (1) Unasyuva
- (2) Earth Biota
- (3) Journal of Sustainable Forestry
- (4) Forest Ecology and Management

91. Match the Activity and Application area of GIS.

- | <b>Activity</b>              | <b>Application area</b>           |
|------------------------------|-----------------------------------|
| (a) Socio - Economic         | (i) Intelligence data integration |
| (b) Defence Agencies         | (ii) Natural hazard assessment    |
| (c) Commerce and Management  | (iii) Urban management            |
| (d) Environmental Management | (iv) Market share analysis        |

**Answer Options :**

- (a) (b) (c) (d)
- (1) (iii) (i) (iv) (ii)
- (2) (ii) (iv) (iii) (i)
- (3) (i) (iii) (ii) (iv)
- (4) (iv) (ii) (i) (iii)

92. Which of the following is **not** the element useful in image interpretation ?

- (1) Aperture      (2) Pattern      (3) Tone      (4) Shape

93. Give the sequence of procedure involved in data processing of Satellite Image Map :

- (a) Preprocessing  
 (b) Combination of multisensor data  
 (c) Digital screening  
 (d) Geometric rectification  
 (e) Radiometrical mosaicking  
 (f) Cartographical processing  
 (g) Post-processing

**Answer Options :**

- (1) (b), (f), (g), (a), (d), (e), (c)      (2) (e), (a), (f), (c), (d), (g), (b)  
 (3) (a), (d), (e), (b), (g), (f), (c)      (4) (c), (f), (b), (a), (d), (e), (g)

94. Full form of GOES :

- (1) Geo Stationary Operational Environmental Satellite  
 (2) Geomorphic Operational Environmental System  
 (3) Geoglacial Operational Environmental Satellite  
 (4) Geographical Optional Environmental System

95. The species can adapt better to the changed environmental condition if it has more :

- (1) Species diversity      (2) Genetic diversity  
 (3) Community diversity      (4) Ecosystem diversity

96. As per Convention on Biological Diversity (CBD), biological diversity includes :

- (a) diversity within species  
 (b) diversity between species  
 (c) diversity of ecosystems

Which of these **correctly** complete(s) this sentence ?

- (1) Only (a)      (2) Only (b)  
 (3) Only (a) and (b)      (4) All (a), (b) and (c)

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97. The geographical region particularly rich in endemic, rare and threatened species found in relatively small areas but facing significant threats of habitat loss is termed as :

- (1) Nich (2) Hotspot  
(3) Heterogeneity (4) Genetic diversity

98. Which of the following is/are false statement(s) regarding plant tissue culture technology ?

- (a) Totipotency is the genetic potential of plant cell to produce the entire plant.  
(b) Callus refers to a mass of organized regenerated cells.  
(c) Somaclonal variation is the genetic variation generated during tissue culture.

Choose the correct option.

- (1) (a) and (b) only (2) (a), (b) and (c) (3) (b) only (4) (c) only

99. The Forest Rights Act was :

- (a) enacted in the year 2006  
(b) meant for recognition of Forest rights  
(c) meant to serve scheduled tribes exclusively

**Answer Options :**

- (1) Only (a) is correct (2) Only (c) is correct  
(3) (a) and (b) are correct (4) (a) and (c) are correct

100. Match the Pair :

- | ‘A’                   | ‘B’   |
|-----------------------|---|
| (a) Gene              | (i) Variability between genotype of species                       |
| (b) Genotype          | (ii) Basic unit of inheritance                                    |
| (c) Genetic diversity | (iii) Increase in productivity following change in gene frequency |
| (d) Genetic gain      | (iv) Entire genetic constitution of an organism                   |

**Answer Options :**

- |     | (a)   | (b)   | (c)   | (d)   |
|-----|-------|-------|-------|-------|
| (1) | (i)   | (ii)  | (iii) | (iv)  |
| (2) | (iv)  | (iii) | (ii)  | (i)   |
| (3) | (iii) | (i)   | (iv)  | (ii)  |
| (4) | (ii)  | (iv)  | (i)   | (iii) |

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### सूचना — ( पृष्ठ 1 वरून पुढे.... )

- (8) प्रश्नपुस्तिकेमध्ये विहित केलेल्या विशिष्ट जागीच कच्चे काम (रफ वर्क) करावे. प्रश्नपुस्तिकेव्यतिरिक्त उत्तरपत्रिकेवर वा इतर कागदावर कच्चे काम केल्यास ते कॉपी करण्याच्या उद्देशाने केले आहे, असे मानले जाईल व त्यानुसार उमेदवारावर शासनाने जारी केलेल्या “परीक्षांमध्ये होणाऱ्या गैरप्रकारांना प्रतिबंध करण्याबाबतचे अधिनियम-82” यातील तरतुदीनुसार कारवाई करण्यात येईल व दोषी व्यक्ती कमाल एक वर्षाच्या कारावासाच्या आणि/किंवा रुपये एक हजार रकमेच्या दंडाच्या शिक्षेस पात्र होईल.
- (9) सदर प्रश्नपत्रिकेसाठी आयोगाने विहित केलेली वेळ संपल्यानंतर उमेदवाराला ही प्रश्नपुस्तिका स्वतःबरोबर परीक्षाकक्षाबाहेर घेऊन जाण्यास परवानगी आहे. मात्र परीक्षा कक्षाबाहेर जाण्यापूर्वी उमेदवाराने आपल्या उत्तरपत्रिकेचा भाग-1 समवेक्षकाकडे न विसरता परत करणे आवश्यक आहे.

### नमुना प्रश्न

Pick out the correct word to fill in the blank :

Q.No. 201. I congratulate you \_\_\_\_\_ your grand success.

- |         |           |
|---------|-----------|
| (1) for | (2) at    |
| (3) on  | (4) about |

ह्या प्रश्नाचे योग्य उत्तर “(3) on” असे आहे. त्यामुळे या प्रश्नाचे उत्तर “(3)” होईल, यास्तव खालीलप्रमाणे प्रश्न क्र. 201 समोरील उत्तर-क्रमांक “(3)” हे वर्तुळ पूर्णपणे छायंकित करून दाखविणे आवश्यक आहे.

प्र. क्र. 201. (1) (2) (3) (4)

अशा पद्धतीने प्रस्तुत प्रश्नपुस्तिकेतील प्रत्येक प्रश्नाचा तुमचा उत्तरक्रमांक हा तुम्हाला स्वतंत्ररीत्या पुरविलेल्या उत्तरपत्रिकेवरील त्या त्या प्रश्नक्रमांकासमोरील संबंधित वर्तुळ पूर्णपणे छायंकित करून दाखवावा. ह्याकरिता फक्त काळ्या शाईचे बॉलपेन वापरावे, पेन्सिल वा शाईचे पेन वापरू नये.

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