SAMPLE QUESTION PAPER

The set of questions given below will familiarize the candidates with the type of Questions in the FRI Deemed to be University Admission Test. These questions are only indicative of the nature of the test and it is possible that the type of questions not illustrated here may appear in the test.

ANSWER ALL THE QUESTIONS

- 1. What is the weight of body at the centre of earth?
 - a. Infinite
 - b. Constant
 - c. Zero
 - d. None of the above
- 2. The work done by moon when it revolves around the earth:
 - a. Zero

3.

6.

- b. Infinite
- c. Constant
- d. None of the above
- The surface considered for Gauss's law is called:
 - a. Closed surface
 - b. Spherical surface
 - c. Gaussian surface
 - d. Plane surface
- 4. The force per unit charge is known as:
 - a. Electric flux
 - b. Electric field
 - c. Electric potential
 - d. Electric current
- 5. Beta rays emitted by a radioactive material are:
 - a. Neutral particles.
 - b. Charged particles emitted by nucleus.
 - c. Electromagnetic radiations.
 - d. Electrons orbiting around the nucleus.
 - The binding energy per nucleon is almost constant for many nuclei. It shows that nuclear forces are:
 - a. Charge independent
 - b. Saturated in nature
 - c. Short range in nature
 - d. Attractive in nature

- 7. When a ray of light from air enters a denser medium, it:
 - a. Bends away from the normal
 - b. Bends towards the normal
 - c. Goes undeviated
 - d. Is reflected back
 - The highest refractive index is of:
 - a. Glass

8.

- b. Water
- c. Diamond
- d. Ruby
- 9. For an ideal-step-down transformer, the quantity which is constant for both the coils is:
 - a. Current in the coils
 - b. Voltage across the coils
 - c. Resistance of coils
 - d. Power in the coils
- 10. In a pure capacitive circuit if the frequency of ac source is doubled, then its capacitive reactance will be:
 - a. Remains same
 - b. Doubled
 - c. Halved
 - d. Zero
- 11. In an alternating current circuit consisting of elements in series, the current increases on increasing the frequency of supply. Which of the following elements are likely to constitute the circuit?
 - a. Only resistor
 - b. Resistor and inductor
 - c. Resistor and capacitor
 - d. Only inductor
- 12. In which of the following circuits the maximum power dissipation is observed
 - a. Pure capacitive circuit
 - b. Pure inductive circuit
 - c. Pure resistive circuit
 - d. None of these
- 13. Formation of large molecule by joining small molecules is :
 - a. Fusion
 - b. Polymerization
 - c. Crystallization
 - d. Subtraction
- 14. One horse power is equal to:
 - a. 1000 W
 - b. 500 W
 - c. 764 W
 - d. 746 W

- 15. IUPAC name of $CH_2 = CH CH_2 CH_2 C \equiv CH_2 C$
 - a. Hex-5-en-1-yne
 - b. Hex=1-en-5-yne
 - c. Hex-6-en-1-yne
 - d. Hex-1-en-6-yne
- 16. Aspirin is obtained by the reaction of acetyl chloride with
 - a. Benzene
 - b. Phenol
 - c. Benzaldehyde
 - d. Salicylic acid
- 17. In a reaction proceeded $bySN^1$ mechanism the stereo chemical nature of product is
 - a. Racemic mixture
 - b. Retention of configuration
 - c. Inversion of configuration
 - d. None of these
- 18. The sugar present in DNA and RNA, respectively, are
 - a. 2-deoxyribose and ribose
 - b. Ribose and 2-deoxyribose
 - c. 2- deoxyribose in both
 - d. Ribose in both
- 19. In Etard reaction, toluene gives
 - a. Benzoic acid
 - b. Chloro toluene
 - c. Benzaldehyde
 - d. Benzyl alcohol
- 20. At a certain temperature only 50% HI is dissociated at equilibrium in the following reaction

2HI(g) \longrightarrow H₂ + I₂(g) the equilibrium constant for the reaction is

- a. 0.25
- b. 1.0
- c. 3.0
- d. 0.5
- 21. Which of the following is a fossil fuel for power stations?
 - a. Hydrogen
 - b. Uranium
 - c. Wood
 - d. Oil

- 22. As we proceed from L to R in a period
 - a. Basicity of oxides and hydroxides decreases
 - b. Basicity of oxides and hydroxides increases
 - c. Acidity of oxides and hydroxides decreases
 - d. Acidity of oxides and hydroxides increases
- 23. When ammonia is heated with HCl, H-N-H bond angle
 - a. Decreases
 - b. Increases
 - c. Remains same
 - d. Depend upon temperature
- 24. The electrode potential and the EMF of a cell depend upon
 - a. Nature of the electrode
 - b. Temperature
 - c. Concentration of the ion in the solution
 - d. All of the above.
- 25. Salt of which of the following is used in volumetric analysis?
 - a. Cerium
 - b. Thorium
 - c. Praseodymium
 - d. None of the above
- 26. Hydrogen bomb is based on the principle of
 - a. Nuclear fission
 - b. Nuclear fusion
 - c. Natural radioactivity
 - d. Artificial radioactivity
- 27. Which of the following is a common solvent used in UV-VIS spectroscopy?
 - a. MeOH
 - b. EtOH
 - c. Hexane
 - d. EtOAc
- 28. Vanadium pentaoxide is
 - a. Ferromagnetic
 - b. Antiferromagentic
 - c. Dimagentic
 - d. None of the above

- 29. Turbo is found in:
 - a. Brachiopods
 - b. Trilobites
 - c. Crinoids
 - d. Gastropoda
- 30. Carbonation is caused by :
 - a. Physical Weathering
 - b. Chemical Weathering
 - c. Biological Weathering
 - d. None of the Three
- 31. Chemical composition of mineral Siderite is:
 - a. Calcium Carbonate
 - b. Potassium Carbonate
 - c. Iron Carbonate
 - d. Sodium Carbonate

32. Average specific gravity of mineral Augite is:

- a. 1.5
 - b. 2.5
 - c. 3.5
 - d. 4.5
- 33. Name the mountain of Peninsular India:
 - a. Pir Panjal
 - b. Aravali mountains
 - c. Zanskar range
 - d. Karakoram
- 34. Common type of mineral Beryl belongs to which System:
 - a. Tetragonal System
 - b. Hexagonal System
 - c. Triclinic System
 - d. Orthorhombic System
- 35. Rocks with 45 –55% of silica are:
 - a. Acid rocks
 - b. Intermediate rocks
 - c. Ultra Basic rocks
 - d. Basic rocks
- 36. Composition of Arkose is
 - a. Sand grains, quartz and feldspar
 - b. Sand and feldspar grains
 - c. Silt or clay particles
 - d. Gravel with rounded pebbles

- 37. Submarine earthquakes which causes a considerable change in the level of ocean floor is known as:
 - a. Sea caves
 - b. Spouting horn
 - c. Chasms
 - d. Tsunamis

38. A large Syncline with numerous minor folds is known as:

- a. GeoSyncline
- b. Synclinorium
- c. Anticlinorium
- d. All the Three
- 39. The Strike Slip Fault is also known as :
 - a. Rotary Fault
 - b. Hinge Fault
 - c. Block Fault
 - d. Wrench Fault
- 40. Admantine is the typical luster of:
 - a. Quartz
 - b. Galena
 - c. Diamond
 - d. Topaz
- 41. A diploid parent plant body produces _____ gametes and a haploid parent plant body produces _____ gametes.
 - a. diploid, haploid
 - b. haploid, diploid
 - c. diploid, diploid
 - d. haploid, haploid
- 42. The male gametes of rice plant have 12 chromosomes in their nucleus. The chromosome number in the female gamete, zygote and the cells of the seedling will be, respectively
 - a. 12,24,12
 - b. 24,12,12
 - c. 12, 24, 24
 - d. 24, 12, 24.

43. Which of the following steps in transcription is catalysed by RNA polymerase?

- a. Initiation
- b. Elongation
- c. Termination
- d. All of the above

- 44. Fossils are generally found in
 - a. igneous rocks
 - b. sedimentary rocks
 - c. metamorphic rocks
 - d. any type of rock.
- 45. Antivenom against snake poison contains
 - a. Antigens
 - b. antigen-antibody complexes
 - c. antibodies
 - d. enzymes
- 46. Which of the following is the bacterial disease in humans?
 - a. Dysentery
 - b. Malaria
 - c. Plague
 - d. Both (a) & (c)
- 47. Svalbard Global seed vault for conservation of world's crop diversity is situated in
 - a. Finland
 - b. Sweden
 - c. Norway
 - d. Iceland
- 48. 8.33 percent of India's GDP (Gross Domestic Product) comes from
 - a. Industry
 - b. Agriculture
 - c. Export
 - d. small-scale cottage industries
- 49. What was the world's first ever mammal to be successfully cloned from an adult cell?
 - a. Sheep
 - b. Monkey
 - c. Cow
 - d. Calf
- 50. Genetically engineered bacteria have been used in commercial production of
 - a. Thyroxine
 - b. Testosterone
 - c. Human insulin
 - d. Melatonium

- 51. The pyramid of energy is always upright for any ecosystem. This situation indicates the fact that:
 - a. producers have the lowest energy conversion efficiency
 - b. carnivores have a better energy conversion efficiency
 - c. energy, conversion efficiency is the same in all trophic level
 - d. herbivores have a better energy conversion efficiency than carnivores.
- 52. Maximum productivity is found in
 - a. Grassland
 - b. Desert
 - c. Ocean
 - d. Tropical rain forest
- 53. Bacterial role in carbon cycle is
 - a. Chemosynthesis
 - b. Photosynthesis
 - c. Breakdown of organic matter
 - d. Assimilation of nitrogen compounds
- 54. The last stable community in succession that is in equilibrium with the environment, is called
 - a. climax community
 - b. pioneer community
 - c. seral community
 - d. all of these
- 55. Which of the following methods of surface irrigation is considered as water and fertilizer efficient and ideal for several crops?
 - a. Check basin and border strip irrigation
 - b. Raised bed planting method of irrigation
 - c. Surge irrigation
 - d. Furrow irrigation
- 56. Which one of the following is not a commercial crop
 - a. Sugarcane
 - b. Cotton
 - c. Banana
 - d. Bajra
- 57. Which of the following is not an insecticide?
 - a. Parathion
 - b. Aldrin
 - c. Triazines
 - d. Baygon

- 58. Which of the following terms is associated with Dairying?
 - I. Pasturisation
 - II. Homogenisation
 - III. Cream Neutralisation

Correct code is -

- a. Only I
- b. Only I and II
- c. I, II and III
- d. Only II and III
- 59. Dry land farming in India is largely confined to areas with rainfall less than
 - a. 100 cm
 - b. 85 cm
 - c. 80 cm
 - d. 75 cm
- 60. The leaf curl disease in Chilli, Tobacco, Papaya and Tomato is a
 - a. Difeciency of Zinc
 - b. Virus borne disease
 - c. Difeciency of Phosphoras
 - d. Difeciency of Iron
- 61. Pusa RH-10 is a hybrid variety of
 - a. Basmati rice
 - b. Wheat
 - c. Mustard
 - d. Soyabin
- 62. The vegetable crop highly tolerant to low pH is
 - a. Radish
 - b. Carrot
 - c. Potato
 - d. Cauliflower
- 63. The Agroclimatic zone XIII, comprising the state gujarat represents type climate.
 - a. Semi arid
 - b. Arid and semi arid
 - c. Sub humid
 - d. Humid

- 64. The type of eyes found in larvae is _____
 - a. Ocelli
 - b. Stemmata
 - c. Compound eyes
 - d. Ommatidia

65. Chromosomes present in Eukaryotic cell are composed of ______ a. RNA + DNA b. DNA + Protein

- c. Only RNA
- d. Only DNA
- 66. Deficiency of which element in soil causes chlorosis in plants?
 - a. Iron
 - b. Potassium
 - c. Carbon
 - d. Sodium

67. Product are at the maximum for a farm business when output is at a level where _____

- a. MC = AC b. MR=AR c. MR = AC
- d. MC = MR

68. International Potato Research Centre at _____

- a. Shimla
- b. Peru
- c. Rome
- d. USA
- 69. Boucherie process is related to
 - a. Charcoal making
 - b. Preserving of wood
 - c. Seasoning of wood
 - d. Pulping of wood
- 70. The famous book 'Silviculture of Indian Trees' was written by
 - a. R.S. Troup
 - b. W. Schlich
 - c. H.G. Champion
 - d. Dietrich Brandis

- 71. Which of the following is not a minor forest produce
 - a. Charcoal
 - b. Fodder
 - c. Lac
 - d. None of these
- 72. Pressler's borer is primarily used to determine
 - a. Bark thickness
 - b. Age of tree
 - c. Tree diameter
 - d. Damage to wood due to stem borer insect
- 73. Which of the following systems is applied to a highly unevenaged forest crop
 - a. Clearfelling system
 - b. Selection system
 - c. Shelterwood system
 - d. Coppice with standards
- 74. The forest policy presently followed in India was enacted in the year
 - a. 1878
 - b. 1927
 - c. 1988
 - d. 2014
- 75. Hoplocerambyx spinicornis is associated with
 - a. Tectona grandis
 - b. Santalum album
 - c. Corymbia species
 - d. None of these
- 76. Tracheids are usually present in
 - a. Softwoods
 - b. Hardwoods
 - c. Shrubs
 - d. All of the above
- 77. Which major natural chemical in the wood increases its resistance against decay
 - a. Hemicellulose
 - b. Cellulose
 - c. Lignin
 - d. Ash

- 78. Ratio of additive genetic variance to total phenotypic variance is known as
 - a. Narrow-sense heritability
 - b. Broad-sense heritability
 - c. Genetic gain
 - d. Co-heritability
- 79. Which among the following tree species is found at the highest altitudes in the Himalayas a. *Betula utilis*
 - b. Pinus wallichiana
 - c. Abies pindrow
 - d. Ailanthus altissima
- 80. In a silviculture system with four periodic blocks PB-1, PB-2, PB-3 and PB-4, and regeneration period of 160 years, which PB will have trees of age class 1-40 years
 - a. PB-1
 - b. PB-2
 - c. PB-3
 - d. PB-4

81. National Income in India measured in terms of

- a. Gross National Product
- b. Gross Domestic Product
- c. Net National Product at Market Price
- d. Net National Product at Factor Cost

82. India is regarded as a country with Demographic Dividend. This is due to

- a. Its high population in the age group below 15 years
- b. Its high population in the age group of 15-64 years
- c. Its high population in the age group above 65 years
- d. Its high population in the age group 15-59 years
- 83. The Climate and associated weather conditions in India are governed by the following atmospheric conditions.
 - 1. Pressure and surface winds
 - 2. Upper air circulation
 - 3. Western cyclonic disturbance
 - 4. Temperate cyclones

Select the correct answer from the code given below:

- a. 1 and 2 only
- b. 3 and 4 only
- c. 1, 2 and 3 only
- d. All the above

84. As one goes from Equator towards Poles air temperature generally decreases. What is/are the reason/reasons?

- 1. Presence of strong winds in sub-tropical zone
- 2. Due to curvature of earth, amount of solar energy received varies according to the latitude
- 3. The influence of polar ice
- 4. Cold currents in polar region

Select the correct answer using the codes below:

- a. 1 only
- b. 1, 3 and 4 only
- c. 2 only
- d. All the above

85. Which of the following explains the importance of shelter belts?

- a. Shelter belts are flat steps made on the steep slopes
- b. Shelter belts are rows of trees planted in coastal or dry regions to check wind movement to protect soil cover.
- c. Shelter belts are water harvesting structures in dry areas.
- d. Shelter belts are rows of trees planted to protect the soil from rain wash.

86. Which of the following statements is/are correct about Smelting?

- a. Smelting is the process in which metals are extracted from their ores by cooling below the boiling point.
- b. Smelting is the process in which metals are extracted from their ores by heating beyond the melting point.
- c. Smelting is the process of producing refined goods.
- d. Smelting is the major process used in Nuclear Reactors.
- 87. With which of the following countries of South East Asia, India shares a maritime boundary?
 - a. Indonesia
 - b. Malaysia
 - c. Singapore
 - d. Vietnam
- 88. Which among the following rivers originates from the Amarkantak?
 - a. Betwa
 - b. Mahi
 - c. Narmada
 - d. Tapti

- 89. The Chamera Dam is located in which state/UT?
 - a. Puducherry
 - b. Uttar Pradesh
 - c. Himachal Pradesh
 - d. Jharkhand
- 90. The constitution of India does not provide for impeachment of which of the following?
 - a. Chief Justice of India
 - b. President of India
 - c. Vice President of India
 - d. Governor of an Indian State
- 91. Which of the following is not the recommendation of the Simon Commission?
 - a. Abolition of diarchy
 - b. Extension of responsible government in the provinces
 - c. Establishment of federation of British India and princely states
 - d. Discontinuation of communal electorate
- 92. All India Kisan Sabha was founded by whom in 1936?
 - a. Mahatma Gandhi
 - b. Sardar Vallabhbhai Patel
 - c. JB Kriplani
 - d. Sahajanand Saraswati
- 93. Who among the following is known as the "Grand Old Lady of the Independence movement"?
 - a. Aruna Asaf Ali
 - b. Renuka Ray
 - c. Matangini Hazra
 - d. Sarojini Naidu
- 94. The person who established British rule in India
 - a. Robert Clive
 - b. Duplex
 - c. Mirjafer
 - d. Hestings
- 95. The official language of Pallavas was
 - a. Tamil
 - b. Pali
 - c. Sanskrit
 - d. Kharosti

- 96. Khajuraho' temple was built by
 - a. Sandelas
 - b. Chauhans
 - c. Prathiharas
 - d. Rajputs
- 97. Iconography was introduced by
 - a. Cholas
 - b. Later Cholas
 - c. Pallavas
 - d. Later Pallavas
- 98. The Article which deals with 'Education for All'
 - a. Article 41
 - b. Article 43
 - c. Article 45
 - d. Article 44
- 99. The significance of the presence of 'Great bath' in Harappan Civilization
 - a. Importance of water
 - b. Holiness of water
 - c. Water Harvest
 - d. Utility of water

100. The Atmospheric layer responsible for weather changes

- a. Stratosphere
- b. Troposphere
- c. Ionosphere
- d. Exosphere

101. The square root of all positive integers is irrational.

- a. Not exist
- b. No
- c. Yes
- d. 0
- 102. The difference of each observation of a series from the mean is....
 - a. Zero
 - b. Infinite
 - c. No of observations
 - d. 1

- 103. If $x^{\frac{1}{12}} = 49^{\frac{1}{24}}$, find the value of x.
 - a. 12
 - b. 5
 - c. 6
 - d. 7
- 104. A truck covers a distance of 376 km at a certain speed in 8 hours. How much time would a car take at an average speed which is 18 kmph more than that of the speed of the truck to cover a distance which is 14 km more than that travelled by the truck ?
 - a. 6 hr
 - b. 5 hr
 - c. 7 hr
 - d. 4 hr
- 105. It was Sunday on Jan 1, 2006. What was the day of the week Jan 1, 2010?
 - a. Sunday
 - b. Friday
 - c. Saturday
 - d. Wednesday
- 106. A ship sails out into the sea at the rate of 15 km/hr and sails back at the rate of 20 km/hr. What will be the average rate of sailing?
 - a. 16.85 km
 - b. 17.85 km
 - c. 17.14 km
 - d. 18 km
- 107. What is the greatest possible length which can be used to measure exactly the lengths 8 m, 4 m 20 cm and 12 m 20 cm?
 - a. 10 cm
 - b. 25 cm
 - c. 30 cm
 - d. 20 cm
- 108. If the S.P. of an article for is 4/3 times its C.P. the profit percent is.....
 - a. 33 1/3%
 - b. 20 ½ %
 - c. 25 1/4 %
 - d. 20 ³⁄₄ %

- 109. A man had seven children. When their average age was 12 years a child aged 6 years was lost. Find the average age of the remaining 6 children.
 - a. 12 yrs
 - b. 14 yrs
 - c. 11 yrs
 - d. 13 yrs
- 110. What least number must be added to 859622, to get a number exactly divisible by 456? a. 485
 - a. 485 b. 467
 - 0. 40/
 - c. 394
 - d. 387
- 111. X and Y start from the same point and run around a circular stadium, whose circumference is 2800 m, at the rate of 250 m and 350 m per minute respectively in the opposite direction. They will meet each other in?
 - a. 16/3 min
 - b. 14/3 min
 - c. 18/5 min
 - d. 12/5 min
- 112. Which is largest amongst 5/8, 2/3, 7/9, 3/5?
 - a. 5/8
 - b. 2/3
 - c. 7/9
 - d. 3/5
- 113. Find the percentage decrease of 500 to 240
 - a. 50%
 - b. 52%
 - c. 48%
 - d. 24%
- 114. The average age of the 6 students is 11 years. If 2 more students of age 14 and 16 years join than their average will become
 - a. 10 years
 - b. 12 years
 - c. 14 years
 - d. 8 years

- 115. 30 apples and 75 oranges were purchased for Rs. 510. If the price per apple is Rs. 2 than the average price of the oranges was
 - a. Rs. 12
 - b. Rs. 10
 - c. Rs. 15
 - d. Rs. 14
- 116. The main advantage of hexadecimal numbers is the case of conversion from hexadecimal to.....
 - a. Decimal
 - b. ASCII
 - c. Binary
 - d. BCD
- 117. Walking 5/6 of its usual speed, a train is 10 minutes late. Find its usual time to cover the journey?
 - a. 20 min
 - b. 30 min
 - c. 40 min
 - d. 50 min
- 118. The average income of Suraj and Gopal is Rs. 3000 and that of Alay and Vinit is Rs. 500. What is the average income of all the four people?
 - a. Rs. 2500
 - b. Rs. 1000
 - c. Rs. 1850
 - d. Rs. 1750
- 119. How many odd days are there from 13th May, 2005 to 19th August 2005 (both inclusive)?
 - a. 1
 - b. 2
 - c. 3
 - d. 4
- 120. Correlation ranges between
 - a. 0 to 1
 - b. -1 to 0
 - c. -1 to 1
 - d. Not defined
- 121. 4/7 of 2/3 of 5/6 of 5/8 of 1008 is
 - a. 100
 - b. 144
 - c. 200
 - d. 64

- 122. The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 kms in 4 hours, then the speed of the first train is:
 - a. 70.5 km/hr
 - b. 87.5 km/hr
 - c. 75.5 km/hr
 - d. 84 km/hr
- 123. Rahul is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.?
 - a. 8 km/hr
 - b. 10 km/hr
 - c. 12 km/hr
 - d. 14 km/hr
- 124. In a class 3/4th of the students do not know either English or Hindi. But 1/6th of the students know English. How much students know both English and Hindi if students who know Hindi are 1/8th of total students in the class?
 - a. 100/24
 - b. ¼
 - c. 10/12
 - d. 1/24
- 125. Mode isnumber
 - a. Highest frequency
 - b. Most times occurring
 - c. Highest time repletion
 - d. None
- 126. The graph of y = 4 is a line
 - a. Making an intercept 4 on the x –axis
 - b. Making an intercept 4 on the y-axis
 - c. Parallel to the x-axis at a distance of 4 units from the origin
 - d. Parallel to the y-axis at a distance of 4 units from the origin
- 127. If one angle of a triangle is equal to the sum of the other two angles, then the triangle is
 - a. Right angled
 - b. An equilateral triangle
 - c. An isosceles triangle
 - d. None
- 128. The angles of a triangle are in the ratio 3; 5; 7. The triangle is
 - a. Acute angled
 - b. Right angled
 - c. Obtuse angled
 - d. An isosceles triangle

- 129. The number of interwoven isosceles triangles in Sriyantra is
 - a. Five
 - b. Seven
 - c. Eight
 - d. Nine
- 130. What is length of its period for 15/7.
 - a. 4
 - b. 5
 - c. 6
 - d. 7
- 131. Euclid belongs to the country
 - a. India
 - b. Greece
 - c. Japan
 - d. Egypt

132. The number of plane passing through 3 noncollinear points is

- a. 0
- b. 1
- c. 2
- d. 3
- 133. Median is
 - a. Arithmetic average
 - b. Geometric average
 - c. Positional average
 - d. None
- 134. How many dimensions does a point have
 - a. 0
 - b. 1
 - c. 2
 - d. Infinite
- 135. The linear equation 3x 5y = 15 has
 - a. A unique solution
 - b. Infinitely many solutions
 - c. Two solutions
 - d. No solution

- The point of the form (a, -a), $a\neq 0$ lies on 136.
 - The x axis a.
 - The line y = xb.
 - c. The line Y – axis
 - d. The line x + y = 0
- Which of the following in binomial? 137.
 - $\frac{X^2 + x + 3}{3x^2}$ a.
 - b.
 - c. $X^2 + 4$
 - d. X + 3 + 1/x
- 138. Variance of 20 equal observations is
 - a. One
 - b. Infinite
 - c. Zero
 - d. None
- What is degree of a zero polynomial? 139.
 - Not defined a.
 - b. Infinite
 - c. 0
 - d. 1

140. Which are not nonterminating and nonrepeating?

- $\sqrt{2}$ a.
- $\sqrt{3}$ b.
- c. Both a and b
- d. None
- 141. Betwa is a tributary of
 - a. Ganga.
 - b. Yamuna
 - c. Son
 - d. Chambal
- 142. The World Meteorological Organisation is headquartered in which country
 - Vienna. a.
 - Rome b.
 - c. New York
 - d. Geneva

- 143. The Bhoodan or the Land Gift Movement was founded by
 - a. Baba Amte.
 - b. Aurobindo Ghosh
 - c. Vinoba Bhave
 - d. Rabindranath Tagore
- 144. If there were no atmosphere, the length of the day would
 - a. decrease
 - b. remain unaffected
 - c. increase
 - d. remain almost half
- 145. To which movement was 'Teenkathiya Contract' related
 - a. Non- cooperation Movement
 - b. Salt Satyagraha
 - c. Champaran Satyagraha
 - d. Quit India Movement
- 146. The quorum in Lok Sabha is
 - a. 50
 - b. 55
 - c. One- fourth of the strength
 - d. One- tenth of the strength
- 147. Heat from the sun reaches the earth by
 - a. Convection
 - b. Radiation
 - c. Conduction
 - d. Friction
- 148. The venue of 2022 ICC Women Cricket World Cup is
 - a. India
 - b. Australia
 - c. New Zealand
 - d. South Africa

149. When were the India States first organised on a linguistic basis

- a. 1947
- b. 1950
- c. 1952
- d. 1956

150. What kind of soil is treated with gypsum to make it suitable forcropping

- a. Alkaline
- b. Acidic
- c. Water logged
- d. Soil with excess clay content
- 151. Which among the following is known as the "home of Asiastic lion"
 - a. Gir National Park
 - b. Dudhwa National Park
 - c. Kanha National Park
 - d. Corbett National Park
- 152. Venue of 2028 Olympics games is
 - a. Paris
 - b. Rome
 - c. Los Angeles
 - d. Moscow
- 153. Which country is the largest sugar exporter of the world
 - a. Thailand
 - b. Brazil
 - c. India
 - d. Australia
- 154. India's first Open Rock Museum is located in which city
 - a. Mysuru
 - b. Trivandrum
 - c. Varanasi
 - d. Hyderabad

- 155. International Youth Day is celebrated on
 - a. 12 August
 - b. 18 August
 - c. 25 August
 - d. 5 September
- 156. Maharana Pratap fought against the Mughals in the historic battle of
 - a. Chittorgarh
 - b. Lahore
 - c. Haldighati
 - d. Mewar
- 157. Which poisonous gas killed thousands of people in the Bhopal Gas Tragedy
 - a. Methyl iso cyanate
 - b. Methane
 - c. Carbide iso cyanate
 - d. Ethyl iso cyanate
- 158. Dandi March had inaugurated which movement
 - a. Swadeshi- boycott movement
 - b. Civil disobedience movement
 - c. Quit India movement
 - d. Non cooperation movement
- 159. 'Red Sanders' is a
 - a. Bird species
 - b. Tree species
 - c. Mammal species
 - d. Amphibian species
- 160. 'Ohm' is a unit of measuring
 - a. Voltage
 - b. Current
 - c. Gravity
 - d. Resistance

- 161. The metal having highest melting point is
 - a. Osmium
 - b. Chromium
 - c. Tungsten
 - d. Aluminium
- 162. Ohm is a unit of measuring
 - a. Resistance
 - b. Voltage
 - c. Current
 - d. Luminous Intensity
- 163. The famous World Heritage site "Basilica of Bomb Jesus" is located in
 - a. Pondicherry
 - b. Mahe
 - c. Daman
 - d. Goa
- 164. "Statue of Equity" at Hyderabad features which Bhakti saint
 - a. Vallabhacharya
 - b. Chaitanya Mahaprabhu
 - c. Ramajunacharya
 - d. Madhvacharya
- 165. "Jallikattu" a bull taming event is celebrated in which state
 - a. Karnataka
 - b. Tamil Nadu
 - c. Andhra Pradesh
 - d. Odisha
- 166. The World Happiness Report is published by
 - a. The World Bank
 - b. World Health Organization
 - c. NITI Aayog
 - d. United Nations
- 167. Blood is red in colour due to the presence of
 - a. Cytochrome
 - b. Chlorophyll
 - c. Haemoglobin
 - d. Hemocyanin

- 168. The study of relation of animals and plants to their surroundings is called
 - a. Ethology
 - b. Ecology
 - c. Iconology
 - d. Genealogy
- 169. Article 368 in the Indian Constitution is related to
 - a. Amendment of the Constitution
 - b. Proclamation of Emergency
 - c. Presidential rule
 - d. Panchayats
- 170. Which poisonous gas killed thousands of people in Bhopal Gas Tragedy
 - a. Methane
 - b. Carbide iso cyanate
 - c. Ethyl iso cyanate
 - d. Methyl iso cyanate

Q171- Q173. Select the word closest in meaning to the given words:

171. Raucous

- a. Rough
- b. Orderly
- c. Amenable
- d. Soft

172. **Rickety**

- a. Shaky
- b. Firm
- c. Unshakable
- d. Strong

173. **Diabolic**

- a. Kind hearted
- b. Pleasant
- c. Cruel
- d. None of these

Q174- Q176. Select the opposite of the given words:

174. **Proscribe**

- a. Ban
- b. Reject
- c. Veto
- d. Sanction

175. Spurious

- a. Genuine
- b. Counterfeit
- c. Forged
- d. Bogus

176. Mediocre

- a. Average
- b. Pedestrian
- c. Ordinary
- d. Superior

Q177- Q179. Mark the most appropriate word for the given description:

- 177. A person who brings goods illegally into the country
 - a. Importer
 - b. Loader
 - c. Smuggler
 - d. Slumber

178. Study of birds

- a. Ornithology
- b. Penology
- c. Anthropology
- d. Otology
- 179. That which cannot be read
 - a. Illegible
 - b. Illiterate
 - c. Incorrigible
 - d. Illegitimate

Q180-Q182. Match the given idioms with the most appropriate meanings:

180. Early to bed and early to rise makes a man healthy, wealthy and wise.

- a. Going to bed early and waking up early leads to all good things in life.
- b. Only if you go to bed early do you get all good things in life.
- c. Only if you wake up early, you get all what you desire.
- d. None of the above.

181. If you want a thing done well, do it yourself.

- a. Others do not do things as well as you can do.
- b. Only do those things yourself which you want to be done well.
- c. You cannot always rely on other people to do things the way you want.
- d. None of the above.

182. Out of question

- a. resemble
- b. easy
- c. impossible
- d. for the end

Q183- Q184. Read each of the components of the given sentences and mark the component with the **grammatical error:**

- 183. P. With their hard work and dedication,
 - Q. from a tiny room in the slums, they have
 - R. progressed to move to a big
 - S. house in a posh locality.
 - a. P
 - b. Q
 - c. R
 - d. No Error
- 184. P. Ever since the government
 - Q. Announced its new education policy
 - R. All the private institutions had
 - S. Run into heavy weather.
 - a. P
 - b. Q
 - c. R
 - d. No Error

Q185-186. Choose the correct alternative out of the four options.

185. She is so ______ that she always believes my fairy tales.

- a. credible
- b. vociferous
- c. credulous
- d. innocent

186. On the ______occasion of Laxmi Puja the Mathurs bought a new car.

- a. officious
- b. auspicious
- c. fortuitous
- d. prosperous

Q187-Q188. Mark the option with the correct spelling of the word:

- 187. a. Anasthetic
 - b. Anesthetic
 - c. Aeneshtetic
 - d. Anaesthetic
- 188. a. Committee
 - b. Committee
 - c. Comitee
 - d. Committee

Q189-Q191. Mark the option with the **incorrect spelling** of the word:

189. a. Appraize

- b. Apprise
- c. Appraise
- d. None of these

190. a. Complacent

- b. Complaisant
- c. Complascent
- d. None of these

191. a. Wait

- b. Weight
- c. Waite
- d. None of these

Q192-193. Punctuate the given sentences:

- 192. monica let me show you how to do it
 - a. Monica let me show you how to do it?
 - b. Monica, let me show you how to do it.
 - c. Monica let me show you how to do it.
 - d. Monica, let me show you how to do it

193. whos that man wearing a red tie and a blue hat

- a. Whos that man wearing a red tie and a blue hat.
- b. Who's that man wearing a red tie and a blue hat!
- c. Who's that man wearing a red tie and a blue hat?
- d. Who's that man wearing a red tie, and a blue hat;

Q194-195. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an **error** and select the appropriate. If a sentence is free from error, select '**No Error**'

194. Either Ravi (a)/ or Raj forgot (b)/ to take (c)/ their pen (d)/ No error (e)

195. There are certain animals (a)/ that can live without any effort (b)/ both in water and land (c)/No error (d)

Q196- Q197. Fill in the blanks with the most **appropriate determiners** from the options that follow:

196. _____books from the library are missing.

- a. Fewer
- b. Several
- c. Both
- d. All

197. ______the twins have green eyes.

- a. Fewer
- b. Several
- c. Both
- d. All

Q198- Q200. Change the Direct Narration to Indirect Narration:

198. He said, "I have found the files."

- a. He said I have found the files.
- b. He said that he had found the files.
- c. He said that I had found the files
- d. None of the above

199. My father said to me. "Don't be careless in studies."

- a. My father said to me don't be careless in studies
- b. My father said to me to be careful in studies
- c. My father told me not be careless in studies
- d. None of the above

200. "You are late for the examination", he told us.

- a. He told us that you are late of the examination
- b. He told us we were late for the examination
- c. He told them that they were late for the examination.
- d. None of the above.