

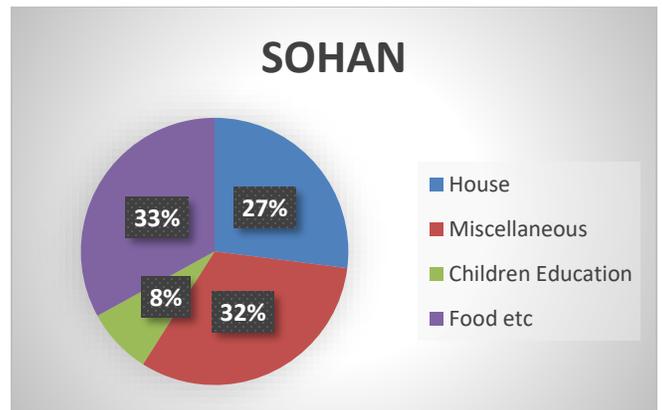
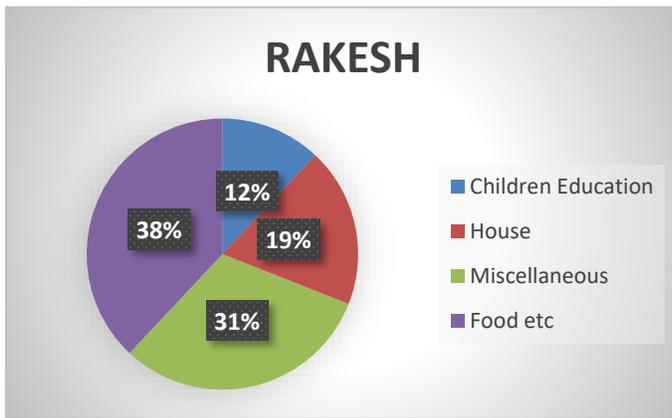
Forest Range Officer (Screening Test)

General Studies & Mental Ability and Mathematics

FINAL KEY

Directions: For question number 1 to 4

The following pie diagram shows the monthly expenditure of Rakesh and Sohan. Rakesh earns Rs. 15,000 per month and Sohan Rs 18,000 per month. Study the diagram and answer the questions given below:



Q: 01. How much more or less does Sohan spend on children's education than Rakesh?

Rs. 360 Less

Q: 02. Who spends more on Food and how much more?

Sohan, Rs. 240 more

Q: 03. What is the ratio of the expenditure on children's education by Rakesh and Sohan?

5: 4

Q: 4. What is the measure of the angle used to represent the expenditure on 'House' by Rakesh in (approximately)?

68°

Q.5. Arrange the following in order of decreasing magnetic moments:

Fe^{2+} Mn^{2+} Cu^{2+} V^{3+}

$\text{Mn}^{2+} > \text{Fe}^{2+} > \text{V}^{3+} > \text{Cu}^{2+}$

Q. 6. Which of the following is/are correct about sigma bond?

- 1) Formed by axial overlapping
- 2) Weaker
- 3) Independent existence
- 4) Free rotation possible

1, 3 and 4

Q. 7. The temperature at which a conductor becomes a super conductor is called:

Transition Temperature

Q. 8. The principal amount which yields a Compound Interest of Rs. 208 in second year at 4% is:

Rs. 5000

Q. 9. A person sold a box of pen at a gain of 15%. Had he bought it for 25% less and sold it for Rs. 60 less he would have made profit of 32%. The cost price of the box of pen was:

Rs. 375

Q.10. There are 40 students in a hostel. If the number of students increases by 5 and the expenses of the mess increased by Rs. 45 per day while the average expenditure per head decreases by Rs. 1 then find the total original expenditure of the mess:

Rs. 720

Q. 11. A and B can complete a work in 5 days. They start working but after 3 days B left the work. if the work is completed after 3 more days B alone can do the work in:

15 days

Q.12. Production of tea requires

moderately hot and humid climate with frequent rains

Q.13. A man is facing north-west. He turns 90° in the clockwise direction, then 180° in the anticlockwise direction and then another 90° in the same direction. Which direction is he facing now?

South East

Q.14. Two bus tickets from city A to B and three tickets from city A to C cost Rs. 77 but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A ?

Rs. 13, Rs. 17

Q.15. A tailor had a number of shirt pieces to cut from a roll of fabric. He cut each roll of equal length into 10 pieces. He cut at the rate of 45 cuts a minute. How many rolls would be cut in 24 minutes?

120 rolls

Q.16. Acid rains occur when atmosphere is heavily polluted with:

SO₂ and NO₂

Q.17. Eutrophication of lakes is caused by

Phosphates

Q.18. Which one of the following is not associated with earthquake?

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Q.19. Fresh water achieves its greatest density at :

4 degree C

Q.20. A 4 cm cube is cut into 1cm cubes. What is the percentage increase in the surface area after such cutting?

300%

Q.21. The surface area of three coterminous faces a cuboid area 6,15,10 sq.cm respectively. What is the volume of the cuboid?

30

Q.22. The sum of the ages of a son and his father is 56 years. After four years the age of father will be three times that of his son. Their present age respectively are:

12 year and 44 years

Q.23. Taj Mahal is threatened due to the effect of

Sulphur dioxide

Q.24. Deathwhile sleeping in closed room with burning coal furnace is caused by

CO

Directions: Consider the following table and answer question 25.

Number of workers	Working hours
20	45-50
15	40-44
25	35-39
16	30-34
04	0-29

Q.25. What percentage worked 40 or more hours?

43.75

Q: 26 Match List – I with List – II and select the correct answer from the codes given below the lists:

List – I

List – II

Four spheres

Greek words

- a. Stone
- b. Air
- c. Water
- d. Life

- 1. Atmo
- 2. Hydro
- 3. Bio
- 4. Litho

Codes:

a b c d
4 1 2 3

Q: 27. Which of the following has pH value 7?

Pure water

Q: 28. Which state government given its in- principle approval to bring 'man- animal conflict' under listed disasters in the State Disaster Response Fund?

Uttar Pradesh

Q: 29. State bird of Andhra Pradesh is:

Rose-ringed parakeet

Q: 30. Which one of the following is the correct ascending sequence of States with regard to sq. km of forest area (2017)?

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Q: 31. According to Indian Forest Status Report released in February, 2018, how much area of India is covered by forests and trees?

24.39%

Q: 32. Which set of data has a mean of 15, a range of 22, a median of 14, and a mode of 14?

3,14,19,25,14

Q: 33. How many inches are there in 5 centimeters?

1.968503937

Q: 34. A graph of a cumulative frequency distribution is called:

Ogive

Q: 35. In the case of classification of data, the class having its upper limit is treated as the lower limit of its next class is called:

Open ended class

Q: 36. Match List- I with List- II and select the correct answer codes given below the lists-

List- I		List- II	
Rupee	Denomination	Motif of Bank Note	
a.	₹ 200	1. Hampi with Chariot	
b.	₹ 50	2. Mangalyaan	
c.	₹ 500	3. Sanchi Stupa	
d.	₹ 2000	4. Red Fort	

Codes:

a	b	c	d
<u>3</u>	<u>1</u>	<u>4</u>	<u>2</u>

Q: 37. Which gas is known as marsh gas?

Methane

Q: 38. Who introduced 'www' to the world?

Sir Tim Berners-Lee

Q: 39. Match List- I with List- II and select the correct answer codes given below the lists-

List- I		List- II	
Gases in atmosphere		Percentage	
a.	Nitrogen	1. 21	
b.	Oxygen	2. 78	
c.	Argon	3. 0.04	
d.	Carbon dioxide	4. 0.93	

Codes:

a	b	c	d
<u>2</u>	<u>1</u>	<u>4</u>	<u>3</u>

Q: 40. _____ is the fourth state of matter.

Plasma

Q: 41. Along with whom, Bhagat Singh threw a bomb in Central Assembly-

Batukeshwar Dutt

Q: 42. The first railway in India was laid down during the period of-
Lord Dalhousie

Q: 43. Which river of India passes the Tropic of Cancer twice?
Mahi

Q: 44. 'Jarawa' and 'Onge' are tribes found in-
Andaman and Nicobar

Q: 45. In which state Milam Glacier is located?
Uttarakhand

Q: 46. What is the minimum age to contest in the Panchayat elections?
21 years

Q: 47. Which statement is not true about India's National Flag?

- a) The ratio of the length and width of the flag is 2: 1
- b) It is designed using three colours – saffron (top most), white (middle) and India green (lower most). The middle band contains navy blue Ashoka Chakra (Wheel of Law) in the centre with 24 spokes to the wheel.
- c) The present form of the national flag was adopted in the meeting of Constituent Assembly on 22nd of July in 1947.
- d) It is also called as 'Tiranga', meaning three colours and is based on Swaraj flag, designed by PingaliVenkayya.

a

Q: 48. How many Sustainable Development Goals were set by the United Nations General Assembly in 2015?

17 Goals

Q: 49. Which is the India's First Solar- Powered Railway station?
Guwahati railway station

Q: 50. Dakshin Gangotri is _____?
Indian Scientific Base Station in Antartica

Q: 51. India has been divided into how many Seismic Risk Zones?

4

Q: 52. Landslides often occur in-

Hilly region

Q.53. Which type of soil water is most useful for plant?

Capillary water

Q.54. Strip of trees and shrubs planted for protection of fields from Winds in coastal areas are called

Shelter Belts

Q.55. A camel can tolerate a loss of water at about _____ of its body weight when exposed to severe desert heat.

30 percent

Q.56. Ringworm is a _____ that attacks the skin, hair and nails of both animals and humans.

Fungus

Q: 57. Raju ranks 7th from the top and 28th from the bottom. How many students are there in the class?

34

Q: 58. Ravi moves 3 Km towards south, then turns to his left and moves 5 Km. Again he turns to his right and goes only 3 Km. Which choice given below indicates the direction in which Ravi is from his starting point?

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Q: 59. The numbers 4, 6, and 8 have the frequencies $(x + 2)$, x and $(x - 1)$, and if their arithmetic mean is 8, the value of x is:

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Q: 60. The median of data 30, 25, 27, 25.8, 29, 35, 38, 28 is :

28.5

Q.61. If 40% of X is equal to Y, then Y% of 40 is equal to X% of

16

Q.62. If $x = 2 + \sqrt{3}$, then $(x^2 + \frac{1}{x^2})$ is equal to:

14

Q.63. If $2x + 3y = 8$ and $4x - y = 2$, then

X=1, Y = 2

Q.64. Let A and B are two sets containing 14 and 22 elements respectively. If A and B have 7 Common Elements, then the number of elements in AUB is

29

Q.65. If $\theta = \frac{2\pi}{3}$, then value of $\cos\theta + \sin\theta$ is :

$\frac{\sqrt{3} - 1}{2}$

Q.66. The angle of elevation of a tower from a distance 50 metre from its foot is 30° . The height of the tower is:

$\frac{50\sqrt{3}}{3}$ metre

Q.67. The height of a tower is $100\sqrt{3}$. The angle of elevation of a tower from a distance 100 metre from its feet is:

60°

Q.68. For a triangle ABC, D and E are two points on AB and AC such that $AD = \frac{1}{3} AB$ and $AE = \frac{1}{3} AC$. If $BC = 15$ c.m., then DE is:

5 c.m.

Q.69. If sides of a triangle are in the ratio 3:4:5, then this triangle is:

Right angled triangle

Q.70. In any triangle, sum of two sides is always

greater than third side

Q.71. If the area of a rhombus is 168 m^2 and the length of one diagonal is 48 m, the length of other diagonal is:

7 m

Q.72. A sphere of 5 cm radius is melted and small spheres of radii 1 cm are made from it. The number of spheres that can be made from it

125

Q.73. If two sides of an isosceles triangle are 7 cm and 13 cm, then which of followings may be perimeter of the triangle

27

Q.74. The ratio of the area of a square and area of a square made on diagonal of the square will be:

1:2

Q.75. A student has got the following grades on the test:

87, 95, 76 and 38.

He wants an average 85 for this exam. The minimum grade he must get on the last test in order to achieve that average is:

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Q.76. Coppice shoot is defined as:

A shoot arising from an adventitious bud at the base of a woody plant that has been cut near the ground

Q.77. Which of the following has excellent pollarding ability:

Hardwickia binata

Q.78. Hydrometeorology is the science which deals with

water in the atmosphere

Q.79. Ardeotis nigriceps is the zoological name of :

Great Indian Bustard

Q.80. Lysimeter is an instrument used to measure

evapotranspiration

Q.81. "Branch Bending in Guava" plants favours :

Better fruiting

Q.82. Rhinos in India have been translocated from Kaziranga to :

Manas National Park

Q.83. In selection system of Silviculture:

The mature crop is removed as single trees or in small groups over the whole of felling series.

Q.84. A soil must have following for supporting plant growth:

Mineral matter, organic matter, soil water and soil air

Q.85. International day for Biological Diversity is observed on :

May 22

Q.86. DNA fingerprinting is used for which of the following:

All of the given options

Q.87. A seed may not germinate, even if all favourable conditions are provided to germinate, it may be due to:

Dormancy

Q.88. Development of fisheries is known as

Blue revolution

Q.89. Salim Ali Centre for Ornithology and Natural History (SACON) is in :

Coimbatore

Q.90. Which one is the most prominent silvicultural tool for manipulation of tree growth in agroforestry system:

Thinning and Pruning

Q.91. Canopy Density of forests is defined as:

The relative completeness of canopy usually expressed as a decimal coefficient, taking closed canopy as unity.

Q.92. Regeneration felling is:

A felling of trees to invite or assist regeneration under a shelterwood system.

Q.93. A Biome is:

A large naturally occurring community of flora & fauna, occupying a major region.

Q.94. Continental drift

The hypothesis, proposed by Alfred Wegener, that today's continents broke off from a single supercontinent

Q.95. A planting graft technique in which scion is inserted in a narrow slit, made in the root stock of the same species is

Notch grafting

Q.96. Volume table is

A table showing the estimated average tree or stand volume based on given tree measurements, usually diameter and height

Q.97. In Ecological succession, Sere means:

The sequence of communities that replace one another in a given area.

Q.98. The progressive dying, usually backwards from the tip, of any portion of a plant; The death of the shoot, the root remaining alive is termed as

Die back.

Q.99. Slender Loris is found in :

Southern India

Q.100. The point, where CAI (Current Annual Increment) and MAI (Mean Annual Increment) meet is the

Rotation of maximum volume production

Q.101. Littoral Forest means

A forest growing at or near the sea-shore.

Q.102. An organism which has its body heat regulated by the temperature of its surroundings is termed as:

Poikilotherm

Q.103. Artificial seed is

Encapsulated somatic embryos.

Q.104. A knee-shaped or spike-like projection of the roots of swamp trees enabling the submerged roots to obtain oxygen.

Pneumatophore

Q.105. Mycorrhiza is a symbiotic association between

Fungi and roots of higher plants

Q.106. The time that elapses between successive main fellings on the same area is known in silvicultural terms:

Felling cycle

Q.107. Rotation is

The planned number of years between the formation or regeneration of crop and its final felling.

Q.108. The salinity in water

reduces the evaporation

Q.109. Magma Chamber is

The subterranean cavity containing the gas-rich liquid magma which feeds a volcano.

Q.110. Most suitable tree species used in afforestation of coastal areas:

Casuarina equisetifolia

Q.111. Icebox is a fruit type of

Watermelon

Q.112. A method of improving soil texture by the use of lime or other soil conditioners, thereby increasing the air content, especially in heavy clay soils.

Flocculation

Q.113. Amphistomatic leaves means

Leaves having stomata on both surfaces.

Q.114. Vegetables are canned in :

Brine

Q.115. What are the state animal, state tree and state flower of Andhra Pradesh

Black buck, Neem and Jasmine

Q.116. What is the ideal direction for a greenhouse to orient, in India?

North-South

Q.117. The most important breeding areas for Olive Ridley turtle along the Bay of Bengal in Indian Ocean is the coast of

Orrissa

Q.118. A forest which has been reproduced through sprouting from stumps of felled trees is called

Coppice forest

Q.119. All lands with tree cover of canopy density between 10% and 40% is called _____

Open forest

Q.120. _____ indicates the productive capacity of a specific area of forest land for a particular tree species.

Site quality

Q.121. A process which removes injured, disease or insect-infested trees is called _____..

Sanitation cutting

Q.122. ICFRE was established during the year _____ and is headquartered at _____

1986, Dehradun

Q.123. A snag is a _____.

A standing dead tree

Q.124. Soil formed from parent material *in situ*

Sedentary soil

Q.125. The rotation which yields the highest net return on the invested capital is called

Financial rotation

Q. 126. One of the following instruments used for tree height measurement is based on the principle of similar triangles – Identify the same

Christen's hypsometer

Q.127. India became a party to CITES in the year _____, which is a body for regulating----

1976 **International Trade in Endangered Species of Wild Fauna & Flora.**

Q.128. An Engineer's chain measures

100 ft long

Q.129. The table showing the distribution of stems by diameter classes for each of the series of crop diameters is called

Stand table

Q.130. The Asiatic lion is included in the following schedule of the Wildlife Protection Act of 1972

I

Q.131. The most important physical property of wood is its

Moisture content

Q.132. The ratio of diameter to girth of trees will be less than

0.3182

Q.133. The second Biosphere Reserve following the Nilgiri Biosphere Reserve was established at

Nanda Devi

Q.134. A pair of appendages that present at the point of attachment of a leaf to the stem is

Stipules

Q.135. Photosynthesis is :

Anabolic process

Q.136. Which of the following is the International agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology?

Cartagena Protocol

Q.137. The floating national park is situated in the state of

Manipur

Q.138. Seeds which cannot be dried to moisture contents below 30% without injury and are unable to tolerate freezing are called

Recalcitrant seeds

Q.139. Which one of the following is the second largest brackish-water lagoon in India?

Pulicat lake

Q.140. Which one of the following four tiger reserves is the largest in India?

Nagarjuna Sagar – Srisailem tiger reserve

Q.141. Which one of the following is a Ramsar site?

Kolleru lake

Q.142. What is the selective removal of certain parts of a plant, such as branches, buds, or roots is called?

Pruning

Q.143. GIS deals with which kind of data

Spatial data

Q.144. Which one of the following is the algebraic difference between discounted benefits and discounted costs as they occur over time?

Net present value

Q.145. Foot and mouth disease in animals is caused by

Virus

Q. 146. Sampling method in which the sampling units are selected according to a pre-determined pattern is

Systematic sampling

Q. 147. Type of survey in which the curvature of the earth is not taken into account is called

Plane survey

Q.148. The vertical distance between any two consecutive contours is known as

Contour interval

Q.149. This Act was to consolidate and amend the law relating to the protection and management of forests in State of Andhra Pradesh.

Andhra Pradesh Forest Act, 1967

Q.150. Maintenance of environmental stability, maintenance of ecological balance including atmosphere equilibrium are the principle objectives of _____.

National Forest Policy, 1988