OSSC

SCEW(Main) – 2017 – Set – 5
Technical Paper

PAPER – II

08210

: INSTRUCTIONS TO CANDIDATES :

THIS BOOKLET CONTAINS 120 QUESTIONS OF 1 MARK EACH IN 24 PAGES. PLEASE CHECK THE QUESTION-SET BEFORE USE. IF ANY DEFECTS ARE NOTICED, PLEASE BRING IT TO THE NOTICE OF THE INVIGILATOR.

1. Read the instructions carefully before using the OMR answer sheet provided.

2. Fill in Part – A of the OMR answer sheet first, mentioning the Roll No., Set Code and other data as applicable in the place(s) indicated therein and darken the appropriate circles in blue or black ball point pen only.

3. While darkening the circle in Part – B of the OMR answer sheet, use blue or black ball point pen only. Use of pencil is not allowed in the Test. Darkening of more than one circle/option shall not be taken for evaluation.

4. Do not write any name/surname or put any symbol, sign, slogan, prayer or any mark of identification in Part – B of the OMR answer sheet. **Any such act is liable to render the answer sheet unfit for evaluation**.

5. Do not use any other form except the OMR answer sheet provided along with the question-set.

6. Do not tamper with the bar code or any other portion of the OMR answer sheet.

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9. Return the OMR answer sheet only to the Invigilator before leaving the examination hall.

10. Candidates may take with them the respective question-sets after the examination is over.

11. Mobile Phone or any Communication Devices is not allowed inside the Examination Hall. The candidates are strictly advised **not to carry** any Mobile Phone or Communication Devices with them into the Examination Hall. Any candidate who is in **possession of Mobile Phone/Communication Devices** inside the Examination Hall is liable to be debarred from the valuation of his/her answer paper.

12. Violation of these instructions shall **entail disqualification of the candidate**.

13. **There will be negative marking @ 0.25 mark for each wrong answer.**

SCEN(Main) – 2017 – Set – 5
Technical Paper
PAPER – II

Time : $1\frac{1}{2}$ hours

Full Marks : 120

Each question carries 1 mark.

Answer all questions, choosing the correct one from the alternatives suggested and darken the appropriate circle using BLUE or BLACK BALL POINT PEN.

There will be negative marking @ 0.25 for each wrong answer.

1. What will be the maturity amount of an investment of Rs. 25,000 invested for 3 years at varying rates of compound interest of 6%, 8% and 10% in the successive years ?

    (1) Rs. 28,620

    (2) Rs. 29,150

    (3) Rs. 29,700

    (4) Rs. 30,178

    (5) Rs. 31,482

2. A shopkeeper sales an article for Rs. 5,400 at a loss of 10%. But he gains 15% by selling another article. If, on the whole, he neither loses nor gains, find the cost price of the second article :

    (1) Rs. 3,600

    (2) Rs. 4,000

    (3) Rs. 4,500

    (4) Rs. 5,400

    (5) Rs. 6,000

3. A retailer purchases pure sulphuric acid at the rate of Rs. 240 per litre. He adds 20% water in it and sales the mixture to earn a profit of 25%. What is his selling price of the mixture per litre ?

    (1) Rs. 240

    (2) Rs. 250

    (3) Rs. 288

    (4) Rs. 300

    (5) Rs. 360

4. The capital invested by three partners –Ashok, Moonis and Chand are p, q and r respectively. If $4p = 6q = 10r$ and total profit in a month amounts to Rs. 27,900, find Chand's share in the profit :

    (1) Rs. 5,400

    (2) Rs. 9,000

    (3) Rs. 13,500

    (4) Rs. 14,500

    (5) Rs. 18,500

KY – 2E/18   (3)   (Turn over)

5. Shankar starts a business with a capital of Rs. 28,000. After five months Bibhas joins him as the partner. If after one year the profit is shared between the two in the ratio of 2:3, what is the capital contribution of Bibhas ?

(1) Rs. 60,000

(2) Rs. 64,000

(3) Rs. 68,000

(4) Rs. 72,000

(5) Rs. 76,000

6. In two different alloys the ratio of tin and lead are 2:3 and 5:3 respectively. In what ratio are the two alloys to be mixed such that the content of tin in the new alloy becomes 60 percent ?

(1) 1 : 6

(2) 1 : 8

(3) 6 : 1

(4) 7 : 1

(5) 8 : 1

7. An airline allows a free baggage allowance to each passenger, beyond which charges at a fixed rate. Amit and Tushar had to pay Rs. 1,100 together for their excess baggage. Had each of them carried double the luggage, they would have paid Rs. 2,000 and Rs. 1,000 respectively.

What is the amount paid by Amit for his excess baggage ?

(1) Rs. 500

(2) Rs. 600

(3) Rs. 700

(4) Rs. 800

(5) Rs. 900

8. The number $(7^6 - 6^6)$ is exactly divisible by four of the following numbers. Which is the other number ?

(1) 13

(2) 43

(3) 127

(4) 559

(5) 686

9. Find the value of 8x + 3y, if 3x + 2y = 25 and $\dfrac{y}{x+y} = \dfrac{8}{11}$:

(1) 48

(2) 55

(3) 60

(4) 64

(5) 73

10. If the sum of two numbers is 5 and the sum of their cubes is 35, find the sum of squares of the two numbers :

(1) 5

(2) 10

(3) 13

(4) 17

(5) 20

11. If $a - \dfrac{1}{a} = 8$, find the value of

$a^2 - \dfrac{1}{a^2}$:

(1) $\pm \sqrt{17}$

(2) $\pm 2\sqrt{17}$

(3) $\pm 8\sqrt{17}$

(4) $\pm 10\sqrt{17}$

(5) $\pm 16\sqrt{17}$

12. If the numerator of a fraction is decreased by 1, its value becomes $\dfrac{2}{3}$. However, if the denominator is increased by 5 the fraction becomes $\dfrac{1}{2}$. What is the fraction ?

(1) $\dfrac{5}{7}$

(2) $\dfrac{6}{7}$

(3) $\dfrac{7}{8}$

(4) $\dfrac{7}{9}$

(5) $\dfrac{8}{9}$

13. Find the value of x and y, if $x + y = 2xy$

and $x - y = 6xy$:

(1) $-\dfrac{1}{4}$ and $\dfrac{1}{2}$

(2) $-\dfrac{1}{2}$ and $\dfrac{1}{4}$
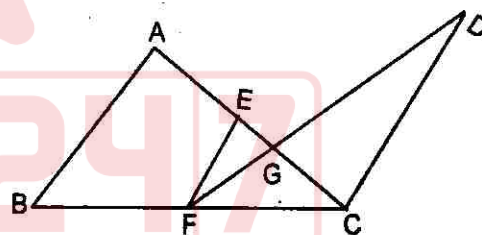
(3) $-\dfrac{1}{2}$ and $\dfrac{1}{3}$

(4) $\dfrac{1}{2}$ and $\dfrac{1}{4}$

(5) $\dfrac{1}{4}$ and $\dfrac{1}{2}$

14. If ABCDE is a regular pentagon, find the $\angle DBE$:

(1) 36°

(2) 48°

(3) 54°

(4) 72°

(5) 108°

15. In the following figure AB, EF and CD are parallel to each other.

The lengths of AB, EG, GC and DC are 7.5 cm, 2.5 cm, 5 cm and 9 cm respectively. Calculate the length of AC.

(1) 4.5 cm

(2) 7.5 cm

(3) 9.0 cm

(4) 12.5 cm

(5) 15 cm

16. The sides of a triangular field are in the ratio of 5 : 3 : 4 and its perimeter is 240 m. Find the altitude of the triangle corresponding to the largest side :

(1) 32 m

(2) 40 m

(3) 44 m

(4) 48 m

(5) 52 m

17. A triangular plot ABC is located on a map drawn to a scale of 1 : 25,000. If $\angle ABC = 90°$, and the map distance of AB and AC are 8 cm and 10 cm respectively, what is the actual area of the plot ?

(1) 2.0 km^2

(2) 2.5 km^2

(3) 3.0 km^2

(4) 3.5 km^2

(5) 4.0 km^2

18. ABCD is a quadrilateral in which the angle ABD = 90° and BCD is an equilateral triangle. If the sides CD and DA measure 24 cm and 26 cm respectively, what is the area of the quadrilateral ? (take $\sqrt{3}$ = 1.732)

(1) 249.41 cm^2

(2) 369.41 cm^2

(3) 489.41 cm^2

(4) 498.82 cm^2

(5) 738.82 cm^2

19. The area of a parallelogram ABCD is 900 square centimeters. AP and AQ are perpendiculars on BC and CD respectively. If lengths of AP and AQ are 24 cm and 30 cm respectively, find the area of the quadrilateral APCQ :

(1) 112.5 cm^2

(2) 216.0 cm^2

(3) 234.0 cm^2

(4) 337.5 cm^2

(5) 346.5 cm^2

20. Two circles with radius of 4.5 cm and 12.5 cm respectively touch externally. If a tangent, common to both the circles, touches them at points P and Q respectively, find the length of PQ :

(1) 12.5 cm

(2) 14.0 cm

(3) 15.0 cm

(4) 17.0 cm

(5) 21.5 cm

21. In a right angled triangle ABC, the $\angle ABC = 90°$. If the sides AC and BC are 13 cm and 5 cm respectively, find $\sec^2 C - \tan^2 C$:

(1) $\dfrac{25}{169}$

(2) $\dfrac{25}{119}$

(3) 1

(4) $\dfrac{169}{119}$

(5) $\dfrac{119}{25}$

22. Find the angles A and B if $2\cos(A + B)$
$= 2\sin(A - B) = 1$:

(1) $15°$ and $45°$

(2) $45°$ and $0°$

(3) $45°$ and $15°$

(4) $60°$ and $30°$

(5) $90°$ and $30°$

23. If $A + B + C = 180°$ and $\cos A = (\cos B . \cos C)$, find the value of $(\tan B . \tan C)$:

(1) 1

(2) $\dfrac{1}{\sqrt{3}}$

(3) $\sqrt{3}$

(4) 2

(5) $2\sqrt{3}$

24. Evaluate :

$$\left(\frac{\cos 47°}{\sin 43°}\right)^2 + \left(\frac{\sin 72°}{\cos 18°}\right)^2 + 2\cos^2 45°$$

(1) 0

(2) 1

(3) 2

(4) 3

(5) 4

25. The angle of inclination of the top of a telephone tower from the top of a 10 metre tall building is $45°$, while the angle of declination from the top of

the same building to the base of the tower is $30°$. Find the height of the building. ((take $\sqrt{3} = 1.732$)

(1) 15.77 m

(2) 17.32 m

(3) 26.32 m

(4) 27.32 m

(5) 31.55 m

26. The mean of 15 observations is 200. If one observation is excluded, the mean becomes 198. Find the value of the excluded observation :

(1) 222

(2) 224

(3) 226

(4) 228

(5) 230

27. Which of the following is **not true** for the following data ?

11, 12, 7, 3, 2, 8, 4, 10, 7, 6

(1) Sum total = 70

(2) Range = 11

(3) Mode = 7

(4) Median = 7

(5) Mean = 7

28. The natural numbers from 1 to 25 are split into 5 groups of five each. If the average of the medians of the five groups is M, what are the smallest and largest possible values of M ?

   (1) 7 and 19

   (2) 8 and 18

   (3) 9 and 17

   (4) 10 and 16

   (5) 11 and 15

29. The mean of six distinct positive numbers is 33 and the median of three largest of these numbers is 43. What is the difference between the highest and the lowest possible medians of the six numbers ?

   (1) 35

   (2) 36

   (3) 38

   (4) 39

   (5) 41

30. The following table gives the distribution of normal annual rainfall in 100 places in Odisha. What is the normal annual rainfall in the state ?

Rainfall Class (in cm)	No. of Places
70 – 90	10
90 – 110	20
110 – 130	40
130 – 150	20
150 – 170	10

   (1) 110 cm

   (2) 115 cm

   (3) 120 cm

   (4) 125 cm

   (5) 130 cm

31. What is the sum of the two numbers 11101 and 10111 expressed in binary format ?

   (1) 100001

   (2) 100100

   (3) 110011

   (4) **110101**

   (5) 110101

32. Find the remainder of $\frac{K}{12}$, if K = 1421 × 1423 × 1425 :

   (1) 0

   (2) 1

   (3) 3

   (4) 6

   (5) 9

33. If N = 46 × 47 × 48 × 49 ×51 × 52 × 53 × 54, what will be the last digit of the number N ?

   (1) 3

   (2) 4

   (3) 5

   (4) 6

   (5) 7

34. Two alarm clocks ring their alarms at intervals of 48 seconds and 50 seconds respectively. If both beep together at 6.30 AM then at what time next are they going to beep together again ?

(1) 6.35 AM

(2) 6.40 AM

(3) 6.45 AM

(4) 6.50 AM

(5) 6.55 AM

35. The sum of four two digit consecutive odd numbers, when divided by 10, yields a perfect square. Which of the following can possibly be the smallest of the four numbers ?

(1) 19

(2) 37

(3) 51

(4) 73

(5) 93

36. An orchard owner picked some oranges and tried to put those into three types boxes of capacity of 32, 40 and 72 respectively. As he tried different boxes he found remainders of 10, 18 and 50 respectively. What is the minimum number of oranges he would have collected ?

(1) 1418

(2) 1420

(3) 1440

(4) 1422

(5) 1518

37. The HCF of two three digit numbers is 17, while their LCM is 714. What is the ratio between the two numbers ?

(1) 4 : 7

(2) 5 : 6

(3) 5 : 7

(4) 6 : 7

(5) 7 : 8

38. Simplify the following equation to find the value of x.

Equation : $x = \sqrt{6 \times 10^2 + 2 \times 10^1 + 5 \times 10^0}$

(1) 24.49

(2) 24.90

(3) 25

(4) 25.45

(5) 26

39. Evaluate : $\dfrac{\sqrt{0.01 + \sqrt{0.0225}}}{0.1 \times 0.4}$:

(1) 0.1

(2) 1

(3) 10

(4) 100

(5) 1000

40. Find the value of :

$$\sqrt{47\sqrt{47\sqrt{47\sqrt{47\sqrt{47\ldots\ldots\ldots}}}}}$$

(1) ∞

(2) 47

(3) 23.5

(4) 6.86

(5) $\sqrt{47}$

41. Find the value of $\sqrt{\dfrac{19}{7}}$ upto 3 decimal places. (take $\sqrt{133}$ = 11.53)

(1) 0.623

(2) 1.024

(3) 1.496

(4) 1.647

(5) 2.714

42. Which of the following pairs of numbers and their squares is not correctly matched ?

(1) 132 – 17424

(2) 133 – 17689

(3) 134 – 17956

(4) 135 – 18225

(5) 136 – 18498

43. What is the smallest number by which the number 222264 is to be divided such that the quotient becomes a perfect cube ?

(1) 2

(2) 3

(3) 4

(4) 5

(5) 6

44. A weaver had 5100 towels of same size, which he tried to pack in N number of boxes containing N number of towels in each. What is the minimum number of towels he has to weave more to do so ?

(1) 59

(2) 84

(3) 98

(4) 118

(5) 229

45. Suresh spends 40 percent of his monthly salary on food and 25 percent of the balance amount on clothings and miscellaneous expenses. If he pays 55 percent of the balance amount towards house rent and finally saves Rs. 3,645 in a month, then what is his monthly salary ?

(1) Rs. 15,000

(2) Rs. 16,000

(3) Rs. 17,000
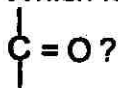
(4) Rs. 18,000

(5) Rs. 20,000

46. The ratio between a two digit number and the number obtained by reversing its digits is 4 : 7. What is the sum of all such possible pairs of numbers ?

   (1) 99
   (2) 120
   (3) 132
   (4) 210
   (5) 330

47. Two varieties of Mung dal are priced at Rs. 64 and Rs. 80 per kg respectively. What is the ratio in which the two are to be mixed such that the price per kg. will be Rs. 70.00 ?

   (1) 4 : 5
   (2) 5 : 3
   (3) 5 : 4
   (4) 6 : 5
   (5) 7 : 4

48. What is the average of the numbers from 324 to 366 ?

   (1) 344
   (2) 345
   (3) 346
   (4) 347
   (5) 348

49. There were five continuous days of rainfall in Bhubaneswar. The average rainfall of the first four days and the last four days was 40 cm and 45 cm respectively. What is the difference between the minimum possible and maximum possible average rainfall of all the five days ?

   (1) 2.0 cm
   (2) 2.5 cm
   (3) 3.0 cm
   (4) 3.5 cm
   (5) 4.0 cm

50. An amount is deposited in a bank of 10% rate of interest, compounded annually. It at the end of three years the interest amont is Rs. 2,648, then find the amount invested :

   (1) Rs. 6,500
   (2) Rs. 8,000
   (3) Rs. 8,827
   (4) Rs. 10,000
   (5) Rs. 12,610

51. What type of vision defect occurs when the focal length of the lens of the eye is decreased ?

   (1) Hypermetropia
   (2) Presbyopia
   (3) Astigmatism
   (4) Hypermetropia and Astigmatism
   (5) Myopia

52. For which property of a material, it is used as a fuse wire in an electric current ?

(1) High melting point

(2) High ductility

(3) Low resistivity

(4) Low melting point

(5) Low conductivity

53. Out of the following, which phenomenon of light do occur in the formation of the rainbow ?

(1) Dispersion, Scattering and Refraction

(2) Dispersion, Diffraction and Scattering

(3) Refraction, Reflection and Dispersion

(4) Reflection, Scattering and Diffraction

(5) Reflection, Scattering and Dispersion

54. From among the following media in which the speed of the light is the least ?

(1) Water

(2) Ice

(3) Alcohol

(4) Kerosene

(5) None of these

55. Which is a required tool for producing electric current ?

(1) Galvanometer

(2) Generator

(3) Ammeter

(4) Motor

(5) Anemometer

56. Which planet is nearest to the sun basing on distance ?

(1) Venus

(2) Earth

(3) Mercury

(4) Mars

(5) Jupiter

57. Whose unit is Calvin ?

(1) Distance

(2) Temperature

(3) Weight

(4) Volume

(5) Pressure

58. How much electricity is generated from one solar cell?

   (1) 0.3W

   (2) 0.5W

   (3) 0.7W

   (4) 0.9W

   (5) 1.1W

59. Due to what phenomenon of light, the clear sky looks blue?

   (1) Refraction

   (2) Dispersion

   (3) Reflection

   (4) Scattering

   (5) Diffraction

60. 'VA' is the unit of which one?

   (1) Electric resistance

   (2) Electric energy

   (3) Electric power

   (4) Electric current

   (5) Electric transmission

61. Which is the type of application procedure in Ultrasonography and Echocardiography?

   (1) Infrasonic

   (2) Ultrasound

   (3) Reverberation

   (4) Echo

   (5) Sonic boom

62. Whose refractive index is the maximum?

   (1) Ruby

   (2) Saffire

   (3) Diamond

   (4) Crown glass

   (5) Water

63. What does this electrical sign, —(·)— represent?

   (1) Electric bulb

   (2) Ammeter

   (3) Connected wire

   (4) Switch on

   (5) Resistance

64. Who discovered 'Electron microscope'?

   (1) Robert Hooke

   (2) Zernicke

   (3) Knoll and Ruska

   (4) Aristotle

   (5) Newton

65. Select the scientist connected with discovery of X-rays ?

(1) Einstein

(2) Rontgen

(3) Faraday

(4) Archimedes

(5) Dalton

66. Which law / principle signifies that good absorbers are good emitters ?

(1) Newton's

(2) Archimedes'

(3) Pascal's

(4) Kepler's

(5) Kirchhoff's

67. Which is the best conductor of heat ?

(1) Ebonite

(2) Rubber

(3) Silver

(4) Glass

(5) Air

68. Which of the following is related to Mass × Velocity ?

(1) Momentum

(2) Force

(3) Acceleration

(4) Torque

(5) Volume

69. Which is not a scalar quantity ?

(1) Mass

(2) Speed

(3) Volume

(4) Power

(5) Velocity

70. Which one in the laboratory does the same work as that of a regulator in an electric fan ?

(1) Rheostat

(2) Galvanometer

(3) Ammeter

(4) Voltmeter

(5) Speedometer

71. What is the ratio in volume between concentrated hydrochloric acid and concentrated nitric acid respectively in aqua regia ?

(1) 2 : 3

(2) 1 : 3

(3) 3 : 1

(4) 3 : 2

(5) 1 : 1

72. Which functional group's formula is

$\overset{\mid}{\underset{\mid}{C}} = O$?

(1) Halo

(2) Carboxyl

(3) Aldehyde

(4) Alcohol

(5) Ketone

73. Which type of material is silicon ?

(1) Metal

(2) Non-metal

(3) Metalloid

(4) Compound

(5) Mixture

74. Which is the main acidic component part of vinegar ?

(1) Lactic

(2) Pyruvic

(3) Citric

(4) Formic

(5) Acetic

75. Which is used as food preservative ?

(1) Aspartate

(2) Saccharine

(3) Sodium benzoate

(4) Sucralose

(5) Alitame

76. Which type of glass is used for spectacles as it absorbs UV rays ?

(1) Jena glass

(2) Crook's glass

(3) Soft glass

(4) Hard glass

(5) Glass laminates

77. Which type of chemical reaction is the following ?

$MnO_2 + 4HCl \rightarrow MnCl_2 + 2H_2O + Cl_2$

(1) Neutralisation

(2) Displacement

(3) Combination

(4) Double Displacement

(5) Oxidation and Reduction

78. How much less pH of rain water is called 'Acid rain' ?

(1) 5.6

(2) 6.0

(3) 7.0

(4) 7.5

(5) 7.8

79. Which is the formula of propane molecule ?

(1) CH_4

(2) C_2H_6

(3) C_3H_8

(4) C_4H_{10}

(5) C_5H_{12}

80. Which is used for the treatment of indigestion ?

(1) Antibiotics

(2) Antacid

(3) Analgesic

(4) Antipyretic

(5) Antiseptic

81. Which is unrelated and separate ?

(1) Turmeric

(2) Phenolpthalein

(3) Red cabbage leaf

(4) pH paper

(5) Methyl orange

82. Which one is based on the principle of Archimedes ?

(1) Manometer

(2) Auxanometer

(3) Odometer

(4) Lactometer

(5) Colorimeter

83. Which is used in external radiation therapy for cancer treatment ?

(1) Iodine^{131}

(2) Carbon^{14}

(3) Phosphorus^{32}

(4) Cobalt^{60}

(5) Sodium^{24}

84. What is called the reaction in which oxidation and reduction occurs simultaneously ?

(1) Redox

(2) Exothermic

(3) Endothermic

(4) Coupling

(5) Catalysis

85. Which gas is mainly present in CNG ?

    (1) Gobar

    (2) Coal

    (3) Dihydrogen

    (4) Petroleum

    (5) Methane

86. Which element has been placed in the modern periodic table in place of Eka-aluminium ?

    (1) Sc

    (2) Ga

    (3) Ge

    (4) Si

    (5) Be

87. Which pair of elements are liquid at room temperature ?

    (1) Calcium and Magnesium

    (2) Sodium and Potassium

    (3) Argon and Neon

    (4) Copper and Zinc

    (5) Mercury and Bromine

88. Which method is mostly used for the separation and purification of solid substances ?

    (1) Crystallization

    (2) Evaporation

    (3) Sublimation

    (4) Distillation

    (5) Condensation

89. Which is an example of Aerosol ?

    (1) Jelly

    (2) Foam

    (3) Butter

    (4) Sponge

    (5) Fog

90. For which, chemical reactions need energy ?

    (1) Entropy

    (2) Oxidation

    (3) Enthalpy

    (4) Activation

    (5) Reduction

91. Against which foreign organism, antibiotic is effective ?

    (1) Virus

    (2) Bacteria

    (3) Fungal infection

    (4) Protozoa

    (5) Helminthes

92. Which is secreted during allergic reaction ?

(1) Allergens

(2) Histamines

(3) Immunoglobulins

(4) Pyrogens

(5) Hormones

93. Which is the term used for 'Programmed cell death' ?

(1) Cell lysis

(2) Autonomy

(3) Phagocytosis

(4) Hemimixis

(5) Apoptosis

94. Which one is antioxidant vitamin ?

(1) Vitamin D

(2) Vitamin E

(3) Vitamin B

(4) Vitamin K

(5) Vitamin C

95. Whose content is more in 'Golden rice' ?

(1) High Lysine

(2) High Methionine

(3) High Vitamin-C

(4) High Vitamin-B

(5) High Vitamin-A

96. From which plant, quinine is obtained ?

(1) Tamarind

(2) Lemon

(3) Cinchona

(4) Neem

(5) Bryophyllum

97. Which leaves are used for flavouring the food ?

(1) Cabbage

(2) Spinach

(3) Lettuce

(4) Banana

(5) Coriander

98. Which revolution is related to excessive production of crop and agricultural product ?

(1) Blue

(2) White

(3) Green

(4) Yellow

(5) Red

99. National Rice Research Institute (NRRI) is situated in which of the following ?

(1) Delhi

(2) Lucknow

(3) Mysore

(4) Coimbatore

(5) Cuttack

100. Which type of crops are Potato, Sugarcane and Colocasia ?

(1) Stem crop

(2) Fruit crop

(3) Root crop

(4) Leaf crop

(5) Cereal crop

101. Croton and Jasmine belong to which type of ornamental plant ?

(1) Shrubs

(2) Climbers

(3) Bulbous

(4) Indoor

(5) Tree

102. Which is an indigenous mushroom growing in September to November in India ?

(1) Winter

(2) Shutake

(3) White button

(4) Paddy straw

(5) Oyster

103. What is the technique for growing plants in nutrient medium ?

(1) Hydrology

(2) Hydrophonics

(3) Hydroponics

(4) Hydrosere

(5) Terrarium

104. What is called the production and marketing of vegetables ?

(1) Floriculture

(2) Arboriculture

(3) Olericulture

(4) Oenology

(5) Pomology

105. Which instrument is more useful for digging more bulky and lifting heavy items in small scale farms on a regular basis ?

(1) Buckhoe

(2) Front-end loader

(3) Wagon

(4) Farm truck

(5) ATV/UTV

106. The characters of which two are seen in Archaeopteryx ?

(1) Fishes and Amphibia

(2) Amphibia and Mammal

(3) Reptile and Mammal

(4) Bird and Mammal

(5) Reptile and Bird

107. Which is not a part of the flower ?

(1) Calyx

(2) Corolla

(3) Callus

(4) Androecium

(5) Gynoecium

108. Which one does maintain ionic balance of the body ?

(1) Vitamins

(2) Carbohydrates

(3) Proteins

(4) Minerals

(5) Fats

109. Who is known as the 'Father of Genetics' ?

(1) George Mendel

(2) T. H. Morgan

(3) Charles Darwin

(4) James Watson

(5) A. I. Oparin

110. Which can be used to measure root pressure ?

(1) Thermometer

(2) Speedometer

(3) Sphygmomanometer

(4) Manometer

(5) Generator

111. Which is the main component of gobar gas ?

(1) Carbon dioxide

(2) Methane

(3) Hydrogen

(4) Nitrogen

(5) Oxygen

112. When was National Biodiversity Law enacted in our country ?

(1) 1927

(2) 1988

(3) 1972

(4) 2004

(5) 1991

113. What are required for light reaction of photosynthesis ?

(1) Chlorophyll, Water, Light

(2) Chlorophyll, Carbon dioxide, Water

(3) Chlorophyll, Carbon dioxide, Oxygen

(4) Chlorophyll, Light, Oxygen

(5) Chlorophyll, Light, Carbon dioxide

114. How do bacteria generally propagate ?

(1) Binary fission

(2) Budding

(3) Sporulation

(4) Fertilization

(5) Fragmentation

115. Testes of which animal are found inside the body ?

(1) Tiger

(2) Lion

(3) Monkey

(4) Elephant

(5) Horse

116. Generally, what is the number of chromosomes in endosperm ?

(1) n

(2) 2n

(3) 3n

(4) 4n

(5) 5n

117. Who proposed 'Every person has a specific blood group' ?

(1) Harvey

(2) Mendel

(3) Darwin

(4) Landsteiner

(5) Lamarck

118. What is the name of the virus present in RNA of AIDS ?

(1) Vitro virus

(2) Retro virus

(3) Pox virus

(4) Tobacco virus

(5) Influence virus

119. Which is a carnivorous plant ?

(1) Rafflesia

(2) Pitcher

(3) Cactus

(4) Dodder

(5) Mistletoe

120. Which is the first transgenic fish that was used as food ?

(1) Andi

(2) Dolly

(3) Salmon

(4) Polly

(5) Molly

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

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