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DCA ENTRANCE EXAMINATION - XI

DEFENCE CAREER ACADEMY, AURANGABAD.

As an ISO 9001 : 2008 - Certified

ENT : 2020-2021	**Maths & GAT**	**Sr. No.**
TIME : 2.30 Hrs.		**MAXIMUM MARKS : 150**

QUESTION - BOOKLET

GENERAL INSTRUCTIONS

1. Do not carry any book, paper or any other material with you inside the Examination Hall.

2. Use only Black / Blue ball pen.

3. Keep the Hall Ticket with you ready for scrutiny.

4. Result of this Examination will be displayed on the Notice Board. The Result Sheet will include the successful/ qualified candidates ONLY.

5. All successful candidates indicated on the list shall present themselves for the invetview on the same day.

6. This Test Booklet contains 150 items (Questions). Question No. 1 to 150 (MCQ) carry 1 mark each You have to select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, Choose Only One response for each item.

7. All the answers must be marked on the Answer Sheet only. Do not write anything on this Test Booklet.

8. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR QUESTION ETC. IF SO, GET IT REPLACED BY THE SUPERVISOR.

9. Ask for a separate paper for rough work.

10. Read the questions carefully, Remember, answers are to be indicated in the Answer

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

Sheet Only. Return the Test Booklet, Rough work papers and the Answer Sheet immediately when asked to do so. You are NOT permitted to take away with you any paper concerning the Examination.

ANSWER SHEET

11. The Answer Sheet contains 150 counts, each subdivided in four { (1) (2) (3) (4)} subdivisions for indicating the correct choice of answers. After having selected the correct choice from the test Booklet, you should indicate that choice by completely blackening the respective circle, DO NOT merely cross the circle. You should indicate correct answer by blackening ONLY ONE circle in each answer. Any answer having more than ONE blackened circle will be treated as a WRONG answer.

12. Before starting the answering ensure that you have filled the complete information at the top of this Answer Sheet. Incomplete Answer Sheet will be regarded as invalid.

THANK YOU AND BEST OF LUCK

Part - I Math

01. What is the common difference of the A.P. 10, 11.5, 13, 14.5, ...?
1) 1.5 2) -1.5 3) 2.5 4) -2.5

02. Which of the following are the next two terms of the sequence 2, 5, 8, 11, ... ?
1) 13, 16 2) 13, 17 3) 14, 17 4) 14, 16

03. Which of the following sequences are in A.P. ?
i) 1, 3, 6, 10 ..... ii) 3, 8, 13, 18, ... iii) 7, 4, 1, -2, ... iv) -10, 13, -16, 11, ...
1) (i) and (ii) 2) (ii) and (iii) 3) (iii) and (iv) 4) (iv) and (i)

04. for an A.P., a = 1 and d = 4. What is the value of n. if $t_n = 81$?
1) 22 2) 21 3) 20 4) 19

05. Which one of the following formula is true to find the sum of first n terms of an A.P.?
1) $S_n = \frac{n}{4}(a - l)$ 2) $S_n = \frac{n}{4}(l - a)$ 3) $S_n = \frac{n}{2}(a + l)$ 4) $S_n = \frac{n}{2}(l - a)$

06. What are the roots of the quadratic equation $2x^2 + 6 = -7x$?
1) $-2, \frac{3}{2}$ 2) $-2, \frac{2}{3}$ 3) $-2, -\frac{2}{3}$ 4) $-2, -\frac{3}{2}$

07. If one of the roots of the quadratic equation $kx^2 + 2x - 8 = 0$ is -2, then what is the value of k?
1) 2 2) 3 3) 1 4) 4

08. If the point (3, -(1)) lies on the graph of the equation ax + 7y = 2, then what is the value of a ?
1) 6 2) 3 3) -3 4) 1

09. A die is thrown. E is the event that the uppermost face shows a prime number. What is E equal to?
1) {1, 3, 5} 2) {2, 3, 5} 3) {1, 2, 3} 4) {2, 3, 4}

10. If S = {1, 2, 3, 5, 7, 8, 9} and A = {1, 5, 8}, what is A^1 (complement) ?
1) {1, 5, 8} 2) {1, 2, 3} 3) {7, 8, 9} 4) {2, 3, 7, 9}

11. What is the class mark of the class 10-19?
1) 14.5 2) 29 3) 4.5 4) 9

12. Which of the following is not a measure of the central tendency?
1) Mean 2) Median 3) Mode 4) Standard deviation

13. In Δ PQR, line *l* is drawn parallel to QR intersecting PQ in A and PR in 2) PA = 3 cm, AQ = 4.5 cm and PB = 2 cm. What is the length of PR ?
1) 5 cm 2) 4 cm 3) 3 cm 4) 6.5 cm

14. In Δ PQR, $\angle Q = 120^0$. seg PS $\perp$ line QR. S-Q-R. If PQ = 8cm and QR = 6cm, what is the length of SR ?
1) 8 cm 2) 10 cm 3) 12cm 4) 16 cm

15. In Δ DEF, DG is the median. If EF = 18 cm, $DE^2 + DF^2 = 260\ cm^2$, then what is the length of median DG ?
1) 9 cm 2) 14 cm 3) 4.5 cm 4) 7 cm

16. In Δ ABC, AB = 24cm, BC = 32cm and AC = 40cm. What type of Δ ABC is ?
1) An acute angled triangle 2) An obtuse angled triangle
3) A right angled triangle 4) Triangle is not possible

17. What type of quadrilateral is a parallelogram inscribed in a circle ?

1) Rectangle 2) Square 3) Rhombus 4) Trapezium

18. Where does the orthocentre of a right angle triangle lie ?

1) In the interior of the triangle 2) In the exterior of the triangle

3) On the hypotenuse 4) At the vertex of the right angle

19. If the ratio of the circumference to the area of a circle is numerically 2 : 7, then what is the diameter of the circle ?

1) 7 2) 14 3) $\frac{7}{\pi}$ 4) $\frac{14}{\pi}$

20. The radius of a circle is 5.5 cm. What is the measure of the arc of this circle whose length is 6.05 cm ?

1) 31.5^0 2) 60^0 3) 63^0 4) 120^0

21. What is the length of a tangent segment drawn from a point 26 cm away from the centre of a circle of radius 24 cm ?

1) 25cm 2) 13cm 3)12cm 4) 10 cm

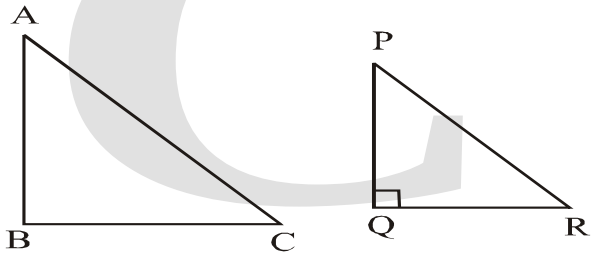
22. If the slope of the line joining the points (k, - 4) and (-1, -6) is -2, then what is the value of k ?

1) 2 2) -2 3) 1 4) -1

23. The equation of line is 3x + 6y - 9 = 0, then the slope is

1) -1/2 2) -1 3) 1/2 4) -2

24. Two similar right triangles ABC and PQR are as shown in the figure. If AB $= \sqrt{3}$, PQ $= \frac{\sqrt{3}}{2}$, BC=1.Find PR=?



1) 2 2) 1 3) $2\sqrt{3}$ 4) 4

25. For the angle in standard position, if the initial arm rotates 220^0 in clockwise direction, then in which quadrant will the terminal arm be ?

1) Quadrant I 2) Quadrant II 3) Quadrant III 4) Quadrant IV

26. The value of which of the following is 1 ?

(1)) $\cot^2\theta - \operatorname{cosec}^2\theta$ 2) $\operatorname{cosec}^2\theta - \cot^2\theta$ 3) $\operatorname{cosec}^2\theta + \cot^2\theta$ 4) $\tan^2\theta - \sec^2\theta$

27. What is the distance between the point A(7, 5) and B (2, 5) ?

1) 0 2) 2 3) 5 4) 7

28. What is the equation of a line passing through (2,–(1)) and parallel to the line 3x + 4y = 10 ?

1) 3x + 4y + 2 = 0 2) 3x + 4y – 2 = 0 3) 3x – 4y – 2 = 0 4) –3x + 4y – 2 = 0

29. An arc of a circle of radius 10 cm subtends an angle of 72^0 at the centre. What is the length of the arc ?

1) 12.56 cm 2) 6.28 cm 3) 125.6 cm 4) 62.8 cm

30. The circumference of a circle is 110 cm. What is the length of the arc of this circle whose measure is 72^0 ?
1) 22 cm 2) 33 cm 3) 44 cm 4) 55 cm

31. The diameter of a solid metallic sphere is 18 cm. It is melted and drawn into a wire of radius 3 mm. What will be the length of the wire ?
1) 36 m 2) 54 m 3) 108 m 4) 144 m

32. If $\alpha + \beta = -2$ and $\alpha^2 + \beta^2 = 74$, what is the quadratic equation whose roots are α and β ?
1) $x^2 - 2x + 35 = 0$ 2) $x^2 + 2x - 35 = 0$ 3) $x^2 - 2x - 35 = 0$ 4) $x^2 + 2x + 35 = 0$

33. What is the number of common tangents that can be drawn to two circles touching internally ?
1) 3 2) 2 3) 1 4) no common tangent

34. What is the value of m for which the simultaneous equations $mx + 5y - 11 = 0$ and $14x + 7y - 15 = 0$ do not have unique solution ?
1) 10 2) 14 3) 11 4) 15

35. What is the value of $\frac{1}{x}+\frac{1}{y}$, if $\frac{5}{x}+\frac{9}{y}=6$ and $\frac{1}{x}+\frac{5}{y}=30$?
1) 6 2) –6 3) 4 4) – 4

36. If the slope of the line joining the points (2, k) and (–4, 2) is $\frac{1}{2}$, then what is the value of k ?
1) 2 2) 3 3) –4 4) 5

37. For the angle θ in standard position, if the terminal arm passes through the point (6, –8), then what is the value of cot θ ?
1) $-\frac{4}{3}$ 2) $\frac{4}{3}$ 3) $-\frac{3}{4}$ 4) $\frac{3}{4}$

38. What is the value of mean $(\bar{x})$, if $\sum f_i x_i = 30$ and $\sum f_i = 6$?
1) $\frac{1}{5}$ 2) 5 3) 24 4) 36

39. What is the roots of the quadratic equation $6x^2 - 13x + 6 = 0$?
1) $\frac{2}{3},\frac{3}{2}$ 2) $\frac{2}{3},-\frac{3}{2}$ 3) $-\frac{2}{3},\frac{3}{2}$ 4) $-\frac{2}{3},-\frac{3}{2}$

40. Three conis are tossed simultaneously. P is the event of getting at least two heads. What is P equal to ?
1) { HHH, HHT, HTH, THH} 2) {HHT, HTH, THH}
3) {HHT} 4) {HTH, THH}

41. In Δ ABC, AB = AC and in Δ DEF, DE = DF. $\angle$ BAC $\cong \angle$ EDF. A(Δ ABC) = 32 cm^2 and A (Δ DEF) = 98cm^2 What is the ratio of their corresponding heights ?
1) 16 : 49 2) 49 : 16 3) 4 : 7 4) 7 : 4

42. In Δ DEF, E-P-F. EF = 15cm, PF = 10cm. What is the ratio of A(Δ DEP) to A(Δ DEF) ?
1) 1 : 3 2) 3 : 1 3) 2 : 3 4) 3 : 2

43. In Δ ABC, AB = 12 cm. BC = 10 cm, AC = 8 cm. What type of Δ ABC is ?
1) An acute angled triangle 2) An obtuse angled triangle
3) A right angled triangle 4) An isosceles triangle

44. O is the centre of a circle with radius 8cm. T is a point in the exterior of the circle. A and B are the point on the circle such that $\angle ATB = 70^0$. What is the measure of $\angle AOT$?

1) 110^0 2) 70^0 3) 55^0 4) 35^0

45. Where does the circumcentre of a right angled triangle lie ?

1) In the interior of the triangle 2) In the exterior of the triangle

3) At the vertex of the right angle 4) At the midpoint of the hypotenuse

46. For the angle in standard position, if the initial arm rotates 230^0 in anticlockwise direction, then in which quadrant will the terminal arm be ?

1) Quadrant I 2) Quadrant II 3) Quadrant III 4) Quadrant IV

47. For the angle θ in standard position, if the terminal arm passes through the point (–5, 12), then what is the value of cosec θ ?

1) $\frac{12}{13}$ 2) $\frac{13}{12}$ 3) $-\frac{12}{13}$ 4) $-\frac{13}{12}$

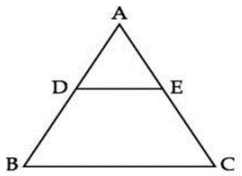
48. A (–2, 3), B(4, –3), C(4, 2), D(3, k). If line AB is parallel to line CD, then what is the value of k ?

1) 3 2) –3 3) 1 4) –1

49. What is the common difference of the A. P. 239, 236, 233, ... ?

1) 3 2) –3 3) 4 4) –4

50. In given figure, DE||BC, if AB = 7.6 cm, AD = 1.9 cm, then AE : EC is :



1) 1 : 4 2) 1 : 3 3) 4 : 1 4) 3 : 1

51. If sec $\theta = \sqrt{\frac{13}{12}}$, then the value of sin θ - cos θ is

1) $\frac{1}{\sqrt{12}}$ 2) $\frac{1-\sqrt{12}}{\sqrt{13}}$ 3) $\frac{1+\sqrt{12}}{\sqrt{13}}$ 4) $\frac{1}{\sqrt{13}}$

52. What is the value of D, for the simultaneous equations 3x + 2y + 11 = 0 and 7x – 4y = 9 ?

(1)) 26 2) –26 3) 62 4) –62

53. Two coins are tossed simultaneously. What is the probability of getting at least one tail ?

1) $\frac{1}{2}$ 2) $\frac{4}{3}$ 3) $\frac{3}{4}$ 4) $\frac{1}{4}$

54. The values of mean and mode for a certain frequency distribution are 96 and 93 respectively. What is the value of the median ?

1) 92 2) 95 3) 94 4) 97

55. Which of the following are the terms of an A.P.?

1) 1,3,4,10, ... 2) 3, 6, 12, 24, ... 3) 28, 26, 24, 22, .. 4) 4, 2, 3, 1, ..

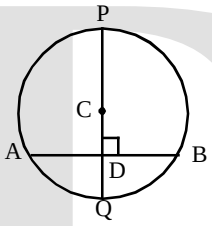
56. If $\sin\theta = \frac{12}{37}$, then the value of $\cot\theta$ is :

1) $\frac{37}{35}$ 2) $\frac{35}{37}$ 3) $\frac{12}{35}$ 4) $\frac{35}{12}$

57. The length of the chord of a circle of radius 41 cm at a distance of 9 cm from its centre is .....cm

(1)) 40 2) 80 3) 20 4) 41

58. In the figure, seg PQ is the diameter of the circle with centre 3)Chord AB $\perp$ Diameter PQ at 4) DQ = 9 AB = 30, Then PQ = ...



1) 17 2) 26

3) 34 4) 52

59. AB and AC are tangent segments to a circle with centre O at B and C respectively from point A in the exterior of the circle. If the length of each tangent segment is equal to the radius 7 cm of the circle. Then AO = ...cm

1) $7\sqrt{2}$ 2) $7\sqrt{3}$ 3) $14\sqrt{2}$ 4) $14\sqrt{3}$

60. The co - ordinates radius of circumcircle of ΔPQR if P = (5, -(1)), Q c(-3,3) and R = (-2, 6) is =

1) $2\frac{1}{2}$ 2) 10 3) $1\frac{1}{2}$ 4) 5

61. The point on y-axis which is equidistance from the point (-5,-2) and (3,2) is

1) (0,-2) 2) (-2,0) 3) (2,-2) 4) (2,2)

62. If the distance between the points (k,-2) and (-2, -5) is 5 then the value of K is

(1)) k = 6 or k = 2 2) k = 6 or k = 2 3) k = -6 or k = 2 4) k = -6 or k = -2

63. If $\frac{4\sin A}{3\cos A} = 1$, then the value of sec A is :

1) $\frac{3}{5}$ 2) $\frac{5}{3}$ 3) $\frac{5}{4}$ 4) $\frac{4}{5}$

64. $\frac{1}{2}\sin^2 90^0 + \frac{1}{4}\cos^2 60^0 + \cot^2 90^0 - \frac{3}{4}\sec^2 30^0$

1) $\frac{5}{16}$ 2) $-\frac{7}{16}$ 3) $-\frac{5}{16}$ 4) $\frac{7}{16}$

65. The value of $\sin 75^0 + \cos 75^0$ is :

1) $\sqrt{3}$ 2) $\frac{\sqrt{6}}{2}$ 3) $-\sqrt{3}$ 4) $\sqrt{3}+1$

66. If the diagonal of a rectangle is 17 cm long and the perimeter of the rectangle is 46 cm, then the area of the rectangle is :

(1)) 120 cm^2 2) 112 cm^2 3) 132 cm^2 4) 289 cm^2

67. If (-2, -3) is a point on the line 2y = mx + 5, then what is the value of m ?

1) $\frac{11}{2}$ 2) $-\frac{11}{2}$ 3) $\frac{2}{11}$ 4) $-\frac{2}{11}$

68. Arc of a circle subtends and angle of 189^0 at the centre of the circle if the length of the arc is 33 cm, then the radius of circle is :
1) 3 cm 2) 7 cm 3) 10 cm 4) 14 cm

69. The measure of the complementary angle of measure 55^0 is .....
1) 145^0 2) 55^0 3) 35^0 4) None of these

70. The measure of an angle is four times the measure of its supplementary angle. Then the measure of the angle is .....
1) 35^0 2) 72^0 3) 108^0 4) 144^0

71. Which of the following pairs the pairs of co-terminal angles ?
1) 425^0, 65^0 2) 430^0, 70^0 3) 450^0, 90^0 4) 720^0, 40^0

72. The perimeters of two similar triangles is 36 cm and 24 cm respectively. One sicle of the smaller triangle is 10 cm. Then the corresponding side of the bigger triangle is .....
1) 15 2) 20 3) 30 4) 7.5

73. Which of the following statements is false ?
i. The sum of any two sides of the triangle together is greater than the third side.
ii. If any two angle of a triangle are not congruent, then the side opposite to the smaller angle is smaller.
iii. Each of the perpendicular sides of a right triangle is smaller than the hypotenuse.
iv. The perpendicular line segment to a line drawn from a point outside the line tis the greatest.
1) i. 2) ii 3) iii 4) iv

74. Find the ratio in which the line segment joining the points (6,4) and (1)),-7) is divided by the x-axis.
1) 4:7 2) 7:4 3) 5:7 4) 7:5

75. If a square is divided into two congruent parts then which of the following figures are obtained ?

1) Two equilateral triangles 2) A square whose area is $\frac{1}{3}$ the area of the other part.

3) Two rectangles 4) All of these

Part - II GAT

COMPREHENSION

Direction. Q. 76-78 In this section you have a short passage. After the passage you will find several questions based on the passage. First, read the passage and answer the questions based on it.

The last twenty years have witnessed an explosion of growth opportunities for women in industry, especially at the decision making level. Today more young women have a change to walk the competitive edge and proved that their abilities are at par with if not better than those of their male colleagues.

However, as they are beginning to storm the traditionally male bastions of management they are finding out that the roads to success are paved with difficulties. They discover very early in their career that the battle for supremacy in corporate organizations calls into play not only the forces, of power, control and dominance, but issues of gender, attitude and acceptance of women.

76. The first sentence of the passage implies that job opportunities
1) for women have increased.
(2) in industry have increased.
(3) for women at the managerial level have increased.
(4) in the corporate sector have increased.

77. Which one of the following phrases best reflects the meaning of "male bastions" ?
1) Management styles of males. (2) Management areas dominated by males
(3) Careers for males (4) Management abilities of males.

78. According to the passage, women in high positions have

1) no problems at all.

(2) some problems.

(3) Problems related to power and control.

(4) Problems related to roles of women in society.

SPOTTING ERRORS

Directions: Q.79-84: In this section, six sentences are given. Each sentence has three parts indicated by a, b and c. Read each sentence to find out whether there is an error in one of the parts. If you find an error in any one of the parts [a, b, c,] indicate your response by blackening the letter related to that part in the Answer Sheet provided. If a sentence has no error, indicate this by blackening 4) which stands for "No error".

79. When the teachers are on strike 1) /and a notice to this effect is pasted on the college gate(2)/there is no sense to go there.(3)/No error(4)

80. Neither India nor Pakistan 1) /have yet acquired (2) /the capability to produce nuclear weapons.(3)/ No error(4)

81. The manager of the bank was busy;1) / so he asked them to come and(3) / see him between two to three in the afternoon(3) /No error(4)

82. The conductor asked the passenger 1) /why had he not purchased his (2)/ ticket for the journey(3)/ No error(4)

83. I shall write1)/to you (2)/when I shall reach Bangalore (3)/No error(4)

84. What sort of a drug this is1) /that no one seems to be able to predict its long-term effects (2)/ with any certainty?(3) / No error(4)

SENTENCE IMPROVEMENT

Directions : Q. 85 - 90: In this section, you will find a few sentences, parts of which are printed in bold. You may also find a group of words which is printed in bold. For each bold part, four words/ phrase are listed below. Choose the word nearest in meaning to the bold part and blacken the corresponding space in the Answer Sheet.

85. The old man shows no sign of **infirmity** even though he is eighty years old

1) lack of firmness (2) Feebleness (3) fickleness (4) indolence

86. Most of the politicians these days have a large number of **toadies** around them.

1) servants (2) followers (3) sycophants (4) professional assistants

87. The weavers have to do **monotonous** work.

1) autonomous (2) irksome (3) exhausting (4) repetitive

88. There is not a **single** word that is **redundant** in the report.

1) unimportant (2) not needed (3) bombastic (4) flowery

89. The country economy is beginning to **look up** now.

1) look clear (2) go down (3) remain static (4) improve

90. We agreed to have the Town Hall as the **rendezvous** for all the scout troops.

1) assembly (2) camping ground (3) picnic spot (4) meeting place

SENTENCE COMPLETION

Direction (Q.91 to 96) : Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete.

91. The two sisters look so .....that it is difficult to tell one from the other.

1) same 2) similar 3) identical 4) alike

92. Since one cannot read every book, one should be content with making a ..... selection.
1) normal 2) standard 3) sample 4) judicious

93. Success comes to those who are vigilant not to permit .....from the chosen path.
1) diversion 2) deviation 3) affected 4) inflicted

94. His actions had..... pain and suffering on thou sands of people.
1) deplored 2) eliminated 3) obstruction 4) inflicted

95. He has good ..... over the famous world languages.
1) authority 2) expertise 3) hold 4) command

96. The lions in the Gir forest are protected as they come under ..... species.
1) dangerous 2) engendered 3) enamoured 4) endangered

SYNONYMS

Direction. Q 97 & 98 In this section you will find a a few sentences, parts of which are italicised. You may also find only a group of words which is italicised. For each italicized part, four words / phrases are listed below. Choose the word/ phrase nearest in meaning to the italicised word or phrase.

97. A civilised Roman ***banquet was*** a thing of great richness, style and decorum.
1) table (2) ornament (3) feast (4) palace

98. Last evening I was ***held up*** at the meeting.
1) delayed (2) stopped (3) detained (4) kept

ANTONYMS

Directions (Qs. 99 & 100): In this section each item consists of a word or a phrase which is underlined in the given sentence. It is followed by four words or phrases. Select the word or phrase which is closest to the opposite in meaning of the underlined and bold word or phrase.

99. He was **immaculately** dressed for the party.
(1) Imperfectly (2) Irresponsibly (3) Incompletely (4) Moderately

100. The teachers have been observing his **impertinent** behavior.
(1) Indifferent (2) Polite (3) Rude (4) Unpleasant

101. A boy walks at a speed of 5 m/s towards a plane mirror. The boy and his image in the mirror are moving
(1) towards each other at a speed of 5 m/s (2) away from each other at a speed of 5 m/s
(3) towards each other at a speed of 10 m/s (4) away from each other at a speed of 10 m/s

102. The size of an image formed in a pinhole camera may be increased by
(1) placing the object nearer to the camera
(2) reducing the size of the object
(3) decreasing the distance between the pinhole and the screen
(4) making the pinhole bigger

103. The Centre of the sphere of which the spherical mirror forms a part is called
(1) Centre of curvature (2) focus
(3) pole (4) vertex

104. A 110 volt toaster oven draws a current of 6 ampere on its highest setting as it converts electrical energy into thermal energy. The toasters maximum power rating is
(1) 660 W (2) 760W (3) 110 W (4) 55 W

105. Which resistor will be physically larger in size ?
(1) 10 ohm, 50 W (2) 100 ohm, 10 W (3) 1k ohm, 1 W (4) 10M ohm, 1/2 w.

106. The electronic configuration (2, 8, 5) belongs to .....
(1) Mg (2) Al (3) Si (4) P

107. The chemical formula for carbonic acid is .....
(1) H_2SO_4 (2) H_2CO_3 (3) HNO_3 (4) HCl

108. Mixture of several indicators is known as .....indicator.
(1) natural (2) synthetic (3) universal (4) olfactory

109. .....metal is generally found in free state.
(1) Copper (2) Gold (3) Iron (4) Zinc

110. Ethane with the molecular formula C_2H_6 has ..... covalent bonds.
(1) 6 (2) 7 (3) 8 (4) 9

111. The largest gland in Human body is _____
(1) Pancreas (2) Thyroid gland (3) Liver (4) Salivary gland

112. _____ is brain of cell.
(1) Lysosome (2) mitochondria (3) Golgi bodies (4) Nucleus

113. _____ are called amphibians of plant kingdom
(1) Algae (2) Bryophytes (3) Fungi (4) Pteridophyte

114. Find the CORRECT match
(1) Meristematic tissue - dead tissue (2) Sclerenchyma - power of cell division
(3) Xylem - Conduction of water (4) Phloem - Responsible for secondary growth

115. Breaking up of complex substances into simple substances is called
(1) digestion (2) ingestion (3) egestion (4) assimilation

116. Vasco da Gama sought business concessions from king _____ of calicut.
(1) Shah (2) Alam (3) Zamorin (4) Jahangir

117. Upto 18th Century _____was regarded as a dark continent
(1) Asia (2) Africa (3) America (4) Eurape

118. Communist Republic founded in Oct 1949 under the leadership of _____
(1) Mao - Tse - Tung (2) Sun - yet - sen (3) Chiang - kai shek (4) Dr. B.R.Ambedkar

119. Hitlers autobiography entitled "_____" is a manfesto of the Nazism.
(1) Das Kapital (2) Mein Kampf (3) Young Turks (4) Nazism

120. The Judges of the International court of the league of Nations were being appointed by the _____
(1) council (2) Assembly (3) Secretary (4) Security Head.

121. Area wise India is the _____largest counfry in the world.
(1) fifth (2) Sixth (3) Seventh (4) fourth

122. The forest soils are _____in colour
(1) dark yellow (2) dark brown (3) dark red (4) pink

123. Rajasthan plain is known as _____desert.
(1) sahara (2) Kalahari (3) Gobi (4) Great Indian

124. Punjab and Haryana plain is the leading producer of _____
(1) bajara (2) Wheat (3) Oilseeds (4) sugarcane

125. Varanasi is famous for _____
(1) Silk sarees (2) Cotton sarees (3) Woollen Clothes (4) leather production

126. In democracy all citizens have _____right to vote
(1) Unequal (2) equal (3) limited (4) indirect

127. The party (or parties) winning the majority of seats in the election is known as _____party.
(1) Ruling (2) opposition (3) Independent (4) Free

128. India has adopted ____system of government
(1) Unitary (2) federal (3) presidential (4) limited monarchy

129. _____ is a primary political activity.
(1) critizing the government (2) deciding policies
(3) voting (4) attending meetings

130. To maintain and capture _____is the main aim of the political parties.
(1) Publicity (2) Minority (3) Power (4) Information

131. The principal copper deposits of India lie in which of the following places?
1) Hazaribag and Singbhum of Bihar 2) Khetri and Daribo areas of Rajasthan
3) Anantapur in Andhra Pradesh 4) Siwaliks in Uttar Pradesh and in Karnataka

132. Which of the following are true regarding Jhum cultivation in India?
I) It is largely practiced in Assam
II) It is referred to as 'slash and burn' technique
III) In it, the fertility is exhausted in a few years
1) I, II and III 2) II and III 3) I and II 4) I and III

133. The Yarlung Zangbo river, in India, is known as
1) Ganga 2) Indus 3) Brahmaputra 4) Mahanadi

134. The Salal Project is on the river
1) Chenab 2) Jhelum 3) Ravi 4) Sutlej

135. The only zone in the country that produces gold is also rich in iron is
1) North-eastern zone 2) North-western zone 3) Southern zone 4) None of the above

136. The present Lok Sabha is the
1) 13th Lok Sabha 2) 14th Lok Sabha 3) 15th Lok Sabha 4) 16th Lok Sabha

137. The Parliament of India can make use of the residuary powers
1) at all times
2) only during national emergency
3) during national emergency as well as constitutional emergency as well in a state
4) None of the above

138. The members of Lok Sabha hold office for a term of
1) 4 years 2) 5 years 3) 6 years 4) 3 years

139. The Parliament exercises control over council of ministers, the real executive, in several ways. Which one of the following has been wrongly listed as a method of control over executive?
1) Questions
2) Supplementary questions
3) Adjournment motions
4) None of the above

140. The number of writs that can be prayed for and issued by the Supreme Court and/or a High Court is
1) 3 2) 4 3) 5 4) 6

141. Which state is going to observe 2020 as Susashan Sankalp Varsh?

1) Uttar Pradesh 2) Gujarat 3) Haryana 4) Madhya Pradesh

142. The followers of which religion are called the "Hynniew Trep"?

1) Shinto 2) Taoism 3) Seng Khasi 4) Confucianism

143. Which government is going to conduct 'Night Walk' to promote women empowerment?

1) Tamil Nadu 2) Andhra Pradesh 3) Karnataka 4) Kerala

144. In which state, India's first university for transgender community will be opened?

1) Uttar Pradesh 2) Kerala 3) Gujarat 4) Andhra Pradesh

145. Pakistan, one among the three countries in the world with Polio endemic, is planning to import Polio markers from India. Which are the other two countries:

1) Afghanistan and Mongolia 2) Nigeria and South Africa

3) Afghanistan and Nigeria 4) Nigeria and Kenya

146. Which organisation gives forecast on general locust situation to the global community?

1) FAO 2) WWF 3) IFAD 4) WFP

147. Which of the following is called the Falcon Capital of the World?

1) Siberia 2) Nagaland 3) Meghalaya 4) China

148. Which of the following is the only ape found in India?

1) Gorilla 2) Chimpanzee 3) Hoolock Gibbon 4) Mandrill

149. Which American firm is developing the Project Kuiper, which is to launch thousands of satellites into space?

1) SpaceX 2) NASA 3) Amazon 4) Blue Origin

150. The Tamil Nadu government recently observed the 15th anniversary of the 2004 tsunami. Where did this tsunami originate?

1) Java Island 2) Sumatra Island 3) Bali Island 4) Sulawesi Island

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