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



DCA ENTRANCE EXAMINATION - IX

DEFENCE CAREER ACADEMY, **AURANGABAD.**

As an ISO 9001: 2008 - Certified

ENT: 2018-2019

MATH & GAT

Sr. No.

TIME: 2.00 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.
- Keep the Hall Ticket with you ready for scrutiny. 3.
- Result of this Examination will be displayed on the Notice Board. The Result Sheet will 4. include the successful/qualified candidates ONLY.
- All successful candidates indicated on the list shall present themselves for the invetview on 5. the same day.
- This Test Booklet contains 150 items (Questions). Question No. 1 to 150 (MCQ) carry 1 mark 6. 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.
- All the answers must be marked on the Answer Sheet only. Do not write anything on this 7. 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.

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

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

| 1. | If a and b are two whole numbers, then a - $b = c$ wil be a whole number if | | | | | |
|-----|--|-------------------------------|-------------------------|---------------------|--|--|
| | 1) a < b | 2) a > b | 3) $a = b$ | 4) both (2) and (3) | | |
| 2. | Multiplicative identity of a whole number 'a' is | | | | | |
| | 1) 1 | 2) 1/a | 3) a + 1 | 4) a - 1 | | |
| 3. | If number 'b' is a fact | tor of a number 'a', then 'a' | divided by 'b' gives th | e remainder | | |
| | 1) any number greate | er than zero | 2) any number less | than zero | | |
| | 3) zero | | 4) one | | | |
| 4. | Value of (-1) ⁻¹³ is | | | | | |
| | 1) 1 | 2) -1 | 3) $\frac{1}{13}$ | 4) -13 | | |
| 5. | If 'a' and 'b' are two | rational numbers then numb | er of rational number | between them are | | |
| | 1) one | 2) two | 3) zero | 4) infinite | | |
| 6. | Predecessor of lower | st positive integer is | | | | |
| | 1) zero | 2) -1 | 3) +1 | 4) none of these | | |
| 7. | $\frac{\frac{7}{9} - \frac{1}{6}}{\frac{1}{3} - \frac{1}{2}} = ?$ | | | | | |
| | 1) $\frac{11}{54}$ | 2) $\frac{11}{-3}$ | 3) $\frac{31}{-54}$ | 4) $\frac{31}{54}$ | | |
| 8. | $\frac{\frac{7}{8} \times 6 \times \frac{2}{3} \times \frac{5}{7} \times 16}{\frac{4}{3} \times 2 \times \frac{38}{7} \times \frac{35}{19}} = ?$ | | | | | |
| | 1) $\frac{2}{3}$ | 2) $\frac{3}{5}$ | 3) $\frac{7}{19}$ | $4)\frac{3}{2}$ | | |
| 9. | $4(1.24 - (0.8)^2) + 6 \times \frac{1}{3}$ | - =? | | | | |
| | 1) 0 | 2) 2.13 | 3) 4 | 4) 4.4 | | |
| 10. | $\frac{5}{6}$ as compared to $\frac{6}{7}$ | s | | | | |
| | 1) greater | 2) smaller | 3) equal | 4) not equal | | |
| 11. | $\frac{5}{7}$ of 35 equals $\frac{5}{2}$ of | which number ? | | | | |
| | 1) 5 | 2) 7 | 3) 10 | 4) 14 | | |

| 12. | The set of negative numbers and whole numbers is called as | | | | |
|-----|--|---|---------------------------|----------------------------|--|
| | 1) natural numbers | | 2) integers | | |
| | 3) positive numbers | | 4) 0 | | |
| 1.2 | $ax^{\frac{1}{2}} + ax + 9x^2 + 4$ is a | | | | |
| 13. | | | | | |
| | 1) algerbric expressi | | 2) polynomial | | |
| | 3) equation in one va | riable | 4) none of these | | |
| 14. | Factorization of a ² - ⁴ | 4 is. | | | |
| | 1) $(a + 2) (a - 2)$ | 2) $(a^2 + 2) (a - 2)$ | 3) $(a^2 + 2) (a^2 + 2)$ | 4) None of these | |
| 15. | If $x + \frac{1}{x} = 6$, then $x^2 + \frac{1}{x} = 6$ | $-\frac{1}{x^2}$ is | | | |
| | 1) 32 | 2) 34 | 3) 36 | 4) 38 | |
| 16. | Algebric expession a | ³ - b ³ has the factors | | | |
| | 1) (1 + a+2) (1 +a - 2 | 2) | | 2) (1 + a - 2) (1 - a + 2) | |
| | 3) $(a - 2) (a^2 + ab + b^2)$ | ²) | | 4) (1 - a + 2) (1 - a - 2) | |
| 17. | The number which is neither positive nor negative is | | | | |
| | 1) 1 | 2) 5 | 3) 0 | 4) 10 | |
| 18. | If $a + b = x$ and $ab = x$ | y, then $\frac{1}{a^3} + \frac{1}{b^3}$ is | | | |
| | $1) \frac{x^3 - xy}{y^3}$ | $2) \frac{x^3 - 3xy}{y^3}$ | 3) $\frac{x^3 - 3y}{y^3}$ | $4) \frac{x^3 - y^3}{xy}$ | |
| 19. | Which of the followi | ng has a definite length? | | | |
| | 1) Ray | 2) Straight line | 3) Line segment | 4) All of these | |
| 20. | If two lines are perpe | endicular to the third line, th | en the two lines are | | |
| | 1) perpendicular to e | each other | 2) paraller to each | other | |
| | 3) intersect each other | er at some point | 4) none of these | | |
| 21. | (-43) - (-12) = | | | | |
| | 1) + 55 | 2) -21 | 3) -31 | D) +31 | |
| 22. | If one angle is the average of other two angles and the difference of the least and greatest angle is 60°, then the triangle-formed is | | | | |
| | 1) right angled triang | rle | 2) equilateral triang | rle | |
| | 3) isoceles triangle | | 4) scalene triangle | | |

1) a + b = c

23. If a,b and c are three sides of a triangle, then

2) a - b > c

4) c > a + b

3) a + b > c

| 24. | Two sides of an isoceles triangle are 7 cm and 8cm, then measure of third side is | | | | | |
|-----|--|---|------------------------------|------------------------------|--|--|
| | 1) 7 cm | 2) 8 cm | 3) 7 cm or 8 cm | 4) neither 7 cm nor 8 cm | | |
| 25. | Multiplying a negative integer for odd times gives a result. | | | | | |
| | 1) positive | 2) negative | 3) 0 | 4) none | | |
| 26. | $(-12) \times (-3) \times (+4)$ | × (-6) = | | | | |
| | 1) - 144 | 2) -908 | 3) + 864 | 4) -864 | | |
| 27. | $(-32) \times (-4) \times (+3) \times (-32) \times (-32) \times (-32) \times (-4) \times (-32) \times$ | ⟨ 0 × (-6) = | | | | |
| | 1) +27, 648 | 2) +276, 480 | 3) zero | 4) -27, 648 | | |
| 28. | If the dividend and di | visor have unlike signs then t | the quotient will be | | | |
| | 1) positive | 2) negative | 3) zero | 4) None of these | | |
| 29. | Value of 124 \times 4 - 3 | + 118 ÷ 2 | | | | |
| | 1) 552 | 2) 496 | 3) 553 | 4) -553 | | |
| • | 1 . | | | | | |
| 30. | 15 of $\frac{1}{5}$ is | | | | | |
| | 1 | 151 | | | | |
| | 1) $\frac{1}{75}$ | 2) $\frac{151}{5}$ | 3) 3 | 4) -3 | | |
| 31. | The surface area of a | cube whose volume is 64, is | S | | | |
| | 1) 8 | 2) 16 | 3) 32 | 4) 96 | | |
| 32. | The length of a rectarespectively is | angular soild whose volume | e is 42 m³ and width | and height are 2m and 3m | | |
| | 1) 1 | 2) 2 | 3) 3 | 4) 7 | | |
| 33. | The ratio of the volumeradius H and height R | me of a cylinder with radus | R and height H to the | ne volume of a cylinder with | | |
| | 1) $\frac{H}{R}$ | 2) $\frac{H}{\pi R}$ | 3) $\frac{R}{H}$ | 4) $\frac{\pi R}{H}$ | | |
| | \overline{R} | $\frac{2}{\pi R}$ | \overline{H} | 4) \overline{H} | | |
| 34. | Number of bricks, eachigh and 24cm thik, i | ch measuring 25cm × 12 cm s | $n \times 6$ cm needed to co | onstruct a wall 8 m long, 6n | | |
| | 1) 600 | 2) 800 | 3) 1600 | 4) 6400 | | |
| 35. | If surface area of the | cube is 216 m ² , then diagon | al of the cube is | | | |
| | 1) 6 | 2) $6\sqrt{3}$ | 3) 24 | 4) 36 | | |
| 36. | The height h of a cyli volume, then radius of | nder is equal to the edge of a of the cylinder is | a cube. If the cylinder | and the cube have the same | | |
| | h | | 3) $\frac{\sqrt{\pi}}{1}$ | 4) $\frac{h^2}{}$ | | |
| | 1) $\frac{h}{\sqrt{\pi}}$ | 2) $h\sqrt{\pi}$ | 3) $\frac{}{h}$ | 4) $\frac{-}{\pi}$ | | |

| 37. | 7. P is the population of a city at the beginning of a certain year. If population decreases at the rat R% per annum, then population after n-year is | | | |
|-----|---|--|---|--------------------------------------|
| | 1) $P \times R \times n$ | 2) $P \times R \times (n-1)$ | $3) P \left(1 + \frac{R}{100}\right)^n$ | $4) P\left(1-\frac{R}{100}\right)^n$ |
| 38. | In order to clear th (M.P.) Then the buy | ne stock, a shopkeeper offer ver pays | s a certain percent of | rebate on the marked price |
| | 1) S.P. discount | 2) C.P discount | 3) M.P discount | 4) M.P - S.P. |
| 39. | To convert a given p | percentage to a fraction | | |
| | 1) add 100 | 2) subtract 100 | 3) multiply by 100 | 4) divide by 100 |
| 40. | Rajesh's salary is re raised by | duced by 20%. In order to ha | we his salary back to t | he orginal amount, it must be |
| | 1) 10% | 2) 20% | 3) 25% | 4) 30% |
| 41. | If C.P of 25 mangoo | es is equal to S.P of 30 mang | goes, then % loss is | |
| | 1) 10% | 2) 12.5% | 3) $13\frac{4}{5}\%$ | 4) $16\frac{2}{3}\%$ |
| 42. | Product of two integ | gers with unlike signs is | | |
| | 1) negative | 2) 0 | 3) positive | 4) none |
| 43. | The exponential for | m of $3 \times 3 \times 3 \times 3$ | | |
| | 1) 4 ³ | 2) 3 ³ | 3) 3 ⁴ | 4) 35 |
| 44. | Subtract - 28 from | - 12 | | |
| | 1) -16 | 2) + 16 | 3) + 40 | 4) -40 |
| 45. | 156 × = 0 | | | |
| | 1) 1 | 2) 0 | 3) 156 | 4) -1 |
| 46. | The median of 30, 1 | 17, 43, 39, 40, 18 is | | |
| | 1) 30.5 | 2) 32.5 | 3) 33.5 | 4) 34.5 |
| 47. | Sum of two integers | s is $+$ 62. If one of the integer | er is -48 then the other | r is. |
| | 1) 112 | 2) 200 | 3) 110 | 4) 116 |
| 48. | If $x < y < z$, $z < ky$, $z < ky$, $z < ky$ | x = 0 and average of the num | ibers x, y land z is 3 tii | mes the median, then value of |
| | 1) -2 | 2) 3 | 3) 5.5 | 4) 8 |
| 49. | Smallest negative n | umber. | | |
| | 1) -1 | 2) -10 | 3) 0 | 4) -20 |
| 50. | Cube of (-3) is | | | |
| | 1) +27 | 2) -9 | 3) -27 | 4) -6 |
| | | | | |

| 51. | A 30 m log ladder is lea base of the pole on the | | • | ladder is 24 m away from the |
|-----|---|----------------------------|---------------------------|--------------------------------|
| | 1) 12 | 2) 18 | 3) 16 | 4) 20 |
| 52. | How many edges does a | cube have? | | |
| | 1) 12 | 2) 8 | 3) 4 | 4) 2 |
| 53. | What is the degree of p | olynomial $28 - 9m^2 + 1$ | $3m^3$ | |
| | 1) 2 | 2) 1 | 3) 3 | 4) 0 |
| 54. | Rajendra purchased a P | endrive for Rs. 300 and | sold for Rs. 350 what | his profit percent ? |
| | 1) 20 % | 2) 25 % | 3) 45 % | 4) 80 % |
| 55. | The measure of a semic | ircular arc is | | |
| | 1) 900 | 2) 260° | 3) 3600 | 4) 180° |
| 56. | The square root of 2025 | 5 is | | |
| | 1) 45 | 2) 54 | 3) 55 | 4) 65 |
| 57. | If m α n, when m = 7.5, | n = 10 | | |
| | 1) 75 | 2) 7.05 | 3) 75.01 | 4) 0.75 |
| 58. | A cuboid has | edges. | | |
| | 1) 3 | 2) 6 | 3) 9 | 4) 12 |
| 59. | The opposite angles of | a cyclic quadrilateral ar | e | |
| | 1) complementery | 2) supplementory | 3) both (1) & (2) | 4) None of these |
| 60. | When we divide - 30n ² | by 3n then quotient will | get | |
| | 1) $-10n^2$ | 2) -10n | 3) 10n | 4) $10n^3$ |
| 61. | A sack contains 20 kg of | of rice. How many such | sacks are required to f | ill in 460 kg. of rice. |
| | 1) 230 | 2) 23 | 3) 46 | 4) 64 |
| 62. | The sum of two number | is 39 and their ratio is | 5: 8 then find the number | bers. |
| | 1) 15,24 | 2) 35,40 | 3) 20,32 | 4) None of these |
| 63. | The product of two - dig factors. | git numbers is 768 and the | neir G.C.D. is 8. Find th | e product of their u ncommon |
| | 1) 96 | 2) 20 | 3) 56 | 4) 12 |
| 64. | $(a+2)^3 = [a^3 + b^3 + 3ab]$ | (a+2)] | | |
| | 1) True | 2) False | 3) Can't say | 4) None of these |
| 65. | Numbers whose decima | l form is non-terminaet | ing but is not recurring | g are called |
| | 1) rational number | 2) irrational number | 3) perfect square | 4) None of these |
| 66. | The perimeter of an iso length of the congruent | - | _ | ion-congruent side is half the |
| | 1) 4.5 cm | 2) 9 m | 3) 12 cm | 4) 18 m |
| 67. | Compound Interest = | | | |
| | 1) A mount - Interest | | 2) Amount + Prince | ipal |
| | 3) Amount - Principal | | 4) Amount - Princi | pal |
| * | DEFENCE CAREE | RACADEMY | Entrance Exa | mination - 2018 P.T.O. |

| | 1) angle bisector | 2) perpendicualr bis | ector 3) altitude | 4) median |
|-----|--|--------------------------|----------------------------|----------------------------------|
| 69. | Total surface area of a | a cone = | | |
| | 1) $\pi r(l+r)$ | 2) $2\pi rl$ | 3) πrl | 4) $\pi r + l$ |
| 70. | P is a point on the cilength can be the cho | | (P) = 3.5. Which of the | ne following segments of given |
| | 1) 8 cm | 2) 5 cm | 3) 8.5 cm | 4) 9 cm |
| 71. | Solve: $x-3 = 5$, find $x = 5$ | value of x | | |
| | 1) 7 | 2) 2 | 3) -8 | 4) 8 |
| 72. | The market price of a discount that she got | | hopkeepar game it to A | Asmita for 153 Rs. What is |
| | 1) 30 Rs. | 2) 333 Rs. | 3) 27 Rs. | 4) 30 Rs. |
| 73. | The ratio of the meas quadrilateral is it? | sures of the consecutive | angles of a quadrilater | al is 2:4:6:8, What type of |
| | 1) Parallelogram | 2) Kite | 3) Trapezium | 4) Rectangle |
| 74. | What will be the shap given point P in the p | _ | a plane, if all the points | s which are equidistant from the |
| | 1) Equilateral | 2) Square | 3) Circle | 4) Regular polygon |
| 75. | Which is trinomial in | the following. | | |
| | 1) $8x + 9$ | 2) $m^2 - 2m + 6$ | 3) 13-17n ² | 4) 13xyz |
| | | PART | - II GAT | |
| * | Q.76. to 78 : Read correct options. | the following passage | carefully and answe | r the questions choosing the |

Wind-power has obvious advantage as it is non-polluting, causes no ecological imbalance, requires no throughput fuel and has extremely low gestation period. After almost a decade of sporadic groth, wind energy finally seems to be stepping out from shadows of alternative technology into the commercial mainstream, worldwide. Even though, India now has an installed base of just over 1600 MW, this is nothing compared to countries such as Germany which meets around 20% of its energy requirements from wind energy.

Wind-power offers long-term price stability too. Not only are generation costs of such projects low, the capital expenditure is comparable to fossil fuel based stations. Wind-power plants have low operating and maintenance costs. Long-term economics work out to be quite favourable for the wind energy. Infact, it is being seen as a solution to sustainable development. By the end of 2001, the installed wind-power was almost 25000 MW.

- 76. Which one of the following statements is correct?
 - 1) Wind-power plants take a long time to get commissioned.
 - 2) Maintenance cost of wind-power plants is high.
 - 3) Wind-power plants lead to violent vibrations
 - 4) Wind-power plants require no fuel
- 77. Which one of the following statements is correct?
 - 1) Installation of wind-power is resisted by environmentalists
 - 2) Generation cost of wind-power plants is high
 - 3) Installation cost of wind-power plants is much higher than of fossil fuel based plants
 - 4) Wind-power is now being commercially harnessed
- 78. Which one of the following stagements is correct?
 - 1) In Germany, 25000 MW of electricity is generated by using wind-power
 - 2) Wind-power plants offer no price stability
 - 3) Wind-power is economically viable on long-term basis
 - 4) In America, 20% of the power requirements are met through wind-power.
- * Q.79. to 81: Read the following passage carefully and answer the questions choosing the correct options.

The energy crisis has been with us for a long time, and will be with us even longer. Whether Arab oil flows freely or not, it is clear that the world industry cannot be allowed to depend on so fragile a base. The supply of oil can be shut off at whim any time. In any case, the oil wells will run dry in about thirty years. New sources of energy must be found, and this will take time. But it is not likely to restore that sense of copious energy availability we had in the past.

- 79. In the writer's opinion, the energy crisis:
 - 1) Is an outcome of unregulated supply of oil to industries
 - 2) Will subside as soon as the Arab oil begin to flow again
 - 3) Is very likely to lead to the world war
 - 4) Will remain with us for an almost indefinite period of time
- 80. The phrase 'so fragile a base' refers to the:
 - 1) Current energy crisis in the world
 - 2) Uncertainty about the flow of Arab oil
 - 3) Delay in finding the new energy sources
 - 4) Drying up of the oil well in future
- 81. The type of writing in the given passage could be called:
 - 1) Official 2) scientific 3) popular 4) political

FILL IN THE BLANKS

| Dire | ctions: Choose the work | d or phrase (a, b, c, or 4 |) which best complete | es each sentence. |
|------|-----------------------------|----------------------------|-------------------------|------------------------|
| 82. | He was on the g | round, quite still. | | |
| | 1) lain | 2) lied | 3) laying | 4) lying |
| 83. | She couldn't see herself | f in the mirror because o | of the rising from | m the hot bath. |
| | 1) fog | 2) heat | 3) smoke | 4) steam |
| 84. | You'll see it straight in | front of you when you tu | ırn the corner, you can | 't it! |
| | 1) fail | 2) loose | 3) miss | 4) lose |
| 85. | She took an umbrella w | ith her, to getting v | wet. | |
| | 1) deny | 2) avoid | 3) prevent | 4) resist |
| 86. | Luckily, she was not | injured in the sco | oter accident. | |
| | 1) seriously | 2) slightly | 3) strictly | 4) strongly |
| 87. | If you want children to | be polite, you must | them up properly. | |
| | 1) grow | 2) bring | 3) rise | 4) take |
| 88. | He's always tense when | he has to make a | | |
| | 1) discussion | 2) pronunciation | 3) speech | 4)talk |
| * | Directions: Give the | Synonyms of: | | |
| 89. | Applaud | | | |
| | 1) request | 2) praise | 3) pray | 4) flatter |
| 90. | Abundant | | | |
| | 1) long | 2) heavy | 3) plentiful | 4) excessive |
| 91. | Thrive | | | |
| | 1) survive | 2) revive | 3) entertain | 4) prosper |
| 92. | Economise | | | |
| | 1) reduce | 2) save | 3) minimize | 4) accumulate |
| 93. | Gruesome | | | |
| | 1) dark | 2) rude | 3) painful | 4) horrible |
| 94. | Pleasure | | | |
| | 1) disappointment | 2) happiness | 3) grief | 4) anxiety |
| * | Directions: Give the | Antonyms of: | | |
| 95. | Venerate | | | |
| | 1) defame | 2) abuse | 3) criticize | 4) accuse |
| 96. | Jubilant | | | |
| | 1) disturbed | 2) scared | 3) gloomy | 4) quiet |
| 97. | Innocent | | | |
| | 1) guilty | 2) corrupt | 3) deadly | 4) sinful |
| 98. | Reward | | | |
| | 1) retribution | 2) penalty | 3) forfeiture | 4) demotion |
| 99. | Concealed | | | |
| | 1) released | 2) disclosed | 3) opened | 4) publicized |
| 100. | Foreigner | | | |
| | 1) alien | 2) native | 3) stranger | 4) national |
| * | DEFENCE CAREE | RACADEMY 8 | Entrance Exa | mination - 2018 P.T.O. |

| 101. | 1. In a certain code, COMPUTER is written as RFUVQNPC. How is MEDICINE written in the same code? | | | | |
|---------|--|------------------------|--|--|--|
| | 1) EOJDJEFM | 2) EOJDEJFM | 3) MFEJDJOE | 4) MFEDJJOE | |
| * | | ~ . | , | ave been given, out of which four cose out the odd one. | |
| 102. | 1) Listen | 2) Swim | 3) Walk | 4) Climb | |
| * | | | | es is given with one term missing. | |
| | | | ontinue the same pa | ttern and fill in the blank spaces. | |
| 103. | 5, 16, 49, 104, () | | 0) 450 | 0.404 | |
| | 1) 115 | 2) 148 | 3) 170 | 4) 181 | |
| 104. | A, B, C and D are pl West, then who faces | - | are partners. D faces | towards North. If A faces towards | |
| | 1) B | 2) C | 3) D | 4) Data inadequate | |
| * | given words on one | side of : :and one wo | ord is given on anoth wes, having the sam | certain relationship between two her side of:: while another word he relation with this word as the re. | |
| 105. | Nurture: Neglect:: | Denigrate ? | | | |
| | 1) Reveal | 2) Extol | 3) Recognise | 4) Calumniate | |
| 106. | Electric charge is me | easured in | | | |
| | 1) coulombs | 2) amperes | 3) volts | 4) watts | |
| 107. | The phenomenon of l | ight passing through t | the object is called. | | |
| | | 2) refraction | 3) dispersion | 4) total internal reflection | |
| 108. | Combustion is an | | | | |
| | 1) exothermic reaction | | 2) endothermic rea | | |
| | 3) displacement reaction | tion | 4) reduction reaction | on | |
| 109. | Ozone consists of: | | | | |
| | 1) 3- carbon atoms | | 2) 3- oxygen atoms | | |
| 110 | 3) 1- carbon & 2- ogy | | 4) 1 - oxygen & 2 - | hydrogen atoms | |
| 110. | Energy currency of the | | 2) AFFD | A) II C.1 | |
| 111 | 1) ADP | 2) FTP | 3) ATP | 4) all of these | |
| 111. | Which of the following | | | 4) T | |
| 110 | 1) Cow | 2) Grass | 3) Bacteria | 4) Temperature | |
| 112. | In monocot plants roo | | type | | |
| | 1) fibrous | 2) tap | 3) both A & B | D) none of these | |
| 113. | Animas in class reptil | | | | |
| | 1) cold | 2) some what warr | | 4) none of these | |
| 114. | Animal which gives r | ise to produce babies | are known as ——— | | |
| . – | 1) oviporan | 2) viviparous | 3) both A & B | 4) none of these | |
| \star | DEFENCE CARE | ERACADEMY | 9 Entranc | e Examination - 2018 P.T.O. | |

| 115. | Formula to find out pre | ssure is | | |
|------|--|-----------------------------|---------------------------|-----------------------------|
| | 1) $\frac{\text{thrust}}{\text{area}}$ | 2) area thrust | 3) thrust-area | 4) none of these |
| 116. | A body can have energy energy | become of its shape or p | position or configuration | n this is known as ——— |
| | 1) chemical | 2) nuclear | 3) potential | 4) solar |
| 117. | Commercial unit of pov | wer is — | | |
| | 1) Ampere | 2) kilowatt | 3) watt | 4) joules |
| 118. | Example of phylum mo | llusc is | | |
| | 1) butterfly | 2) pila | 3) earthworm | 4) nereis |
| 119. | Scientific name of lion | is ——— | | |
| | 1) panther tigris | 2) panther pardus | 3) panther leo | 4) rosa gallica |
| 120. | Which of the following | is not used for locomot | ion by organisms. | |
| | 1) flagella | 2) vili | 3) pseudopodia | 4) cilia |
| 121. | The printing press was in | nvented around | | |
| | 1) 1450 | 2) 1550 | 3) 1650 | 4) 1498 |
| 122. | Vasco-da-Gama, The po | ortuguese sailor visited In | dia in | |
| | 1) 1450 | 2) 1498 | 3) 1453 | 4) 1733 |
| 123. | The followers of Martin | Luther are called as | | |
| | 1) Catholics | 2) Roman | 3) Raoman Catholics | 4) Protestants |
| 124. | How many colonies were | e established by the Britis | sh in North America bet | ween 1607 A.D. to 1733 A.D. |
| | 1) 23 | 2) 14 | 3) 13 | 4) 17 |
| 125. | is regarded as | the Father of French Rev | volution. | |
| | 1) Voltaire | 2) Montesquieu | 3) Musolini | 4) Rousseanu |
| 126. | Who introduced the pol | icy of the subsidiary All | iance in India? | |
| | 1) Lord Dalhousie | 2) Lord Mountbatton | 3) Lord Bentinck | 4) Lord Wellesly |
| 127. | The Peshwa | entered into a subsidiary | alliance in 1802. | |
| | 1) Madhavrao | 2) Raghunathrao | 3) Bajirao II | 4) Nanasaheb |
| 128. | At the time of the battle | of plassey in 1757. Who | o was the Nawab of Be | engal? |
| | 1) Siraj-ud-Daulah | 2) Mir Kasim | 3) Shah Alam | 4) Mir Jafar |
| 129. | Which one of the follow | wing does not make subs | stance a resource? | |
| | 1) Utility | 2) Value | 3) Quantity | 4) Measurement |
| 130. | Which one of the follow | ving is a human made re | esource? | |
| | 1) Medicines to treat ca | ancer | 2) Spring water | |
| | 3) tropical forest | | 4) Soil | |

| 131. | 1. Complete the statement | | | | | |
|------|--|---|-------------------------|-----------------------|--|--|
| | Biotic resources are | | | | | |
| | 1) derived from living | g things | 2) made by human bei | ing | | |
| | 3) derived from non-l | iving things | 4) non-living things. | 4) non-living things. | | |
| 132. | Which one of the foll | ch one of the following is not a factor of soil formation ? | | | | |
| | 1) time | 2) soil texture | 3) organic mater | 4) flowing water | | |
| 133. | 3. Which method is most appropriate to check soil exosin on steep slope? | | | | | |
| | 1) shelter belts | 2) mulching | 3) terrace cultivation | 4) agriculture | | |
| 134. | Which one is not force | ourable for the conservation | n of nature? | | | |
| | 1) Switch off the bulb | when not in use | 2) always close the ta | • | | |
| | 3) Not to waste agrice | | 4) dispose carrybags | after shopping. | | |
| 135. | What does humus me | an? | | | | |
| | 1) Soil erosion | | 2) sediment brought b | by river | | |
| | 3) organic matter in t | - | 4) leaves on grounds | | | |
| 136. | | compour | | | | |
| | 1) organic | 2) inorganic | 3) biotic | 4) none of these | | |
| 137. | | incharge of maintainting la | | - | | |
| | 1) traffic police | • | 3) doctor | 4) lawyer | | |
| 138. | Indian Nevy day is ce | libreted on which of the fo | llowing. | | | |
| | 1) 12 Nov. | 2) 5 Dec. | 3) 12 Sept. | 4) 4 Dec. | | |
| 139. | Who was appointed a | s chanceller or Nalanda U | niversity on 30 May 20 | 15. | | |
| | 1) APJ Abdul Kalam | 2) George Yeo | 3) Amartya Sen | 4) Jagdish Sen | | |
| 140. | Which country decide (OPEC) in January 20 | ed to withdraw from organ 019. | iation of the petroleum | Exporting countries | | |
| | 1) Qatar | 2) Indonesia | 3) Iran | 4) Israel | | |
| * | Questions On "Mak | ing of National Moveme | ent (1870- 1947)" | | | |
| 141. | Indian National congr | ess was founded in | | | | |
| | 1) 1825 | 2) 1885 | 3) 1895 | 4) 1925 | | |
| 142. | was the chair | rman of drafting committee | ·. | | | |
| | 1) Dr. Rajendra Prasa | d | 2) Jawaharlal Nehru | | | |
| | 3) Sardar Vallabbhai I | Patel | 4) Dr. B.R. Ambedka | ar. | | |
| 143. | was the | first Deputy Prime Ministe | er of India. | | | |
| | 1) Pandit Jawaharlal I | Nehru | 2) Dr. Rajendra Pras | ad | | |
| | | | | | | |

| | 3) Sardar Vallabbhai Patel | | 4) Dr. B.R. Ambedkar | |
|-------|----------------------------|------------------------------|-------------------------|---------------------|
| 144. | Minerals of a rock de | termine it's | | |
| | 1) colour | 2) shape | 3) composition | 4) size |
| 145. | A-4 Size of partical in | fine granite texture is | | |
| | 1) Less than 6 mm | 2) more than one mm | 3) Less than 1 mm | 4) 1 mm |
| 146. | The previous constitut | ion of Nepal had been adopt | ted in | |
| | 1) 1990 | 2) 1950 | 3) 1947 | 4) 1991 |
| 147.I | Federalism means | | | |
| | 1) centralisation of po | ower | 2) classification of p | oower |
| | 3) Power under dictat | tor | 4) More than on lave | el of power |
| 148. | World Population was | s one Billion in: | | |
| | 1) 1800 | 2) 1803 | 3) 1850 | 4) None of these |
| 149. | Sultan Azlam Shah Cu | up is releted to which among | g the following sports: | ? |
| | 1) Badmintion | 2) Hockey | 3) Table Tennis | 4) Golf |
| 150. | "The World Beneath' | nis feet" is a Biography of? | | |
| | 1) Pulela Gopichand | 2) Nawab Pataudi | 3) Ajit Wadekar | 4) Sachin Tendulkar |
| | | | | |