ENTRANCE EXAMINATION - XITH

DEFENCE CAREER ACADEMY, AURANGABAD.

As an ISO 9001 : 2008 - Certified

ENT : 2013	Sr. NO.
TIME : 2.00 Hrs.	MAXIMUM MARKS : 100

QUESTION - BOOKLET

GENERAL INSTRUCTIONS

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

2. Carry only writing material with you in the Examination Hall.

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 121 items (Questions). Each item comprises four responses (Answers). 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. 1 to 90 questions carry 1 marks, Q. No. 91 carries 10 marks.

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 A NEW ONE.

9. Ask for a separate paper for rough work.

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 90 counts, each subdivided in four { (a) (b) (c) (d)} 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 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

Q. 1 to 5 : Read the following passage carefully and answer the questions given at the end of it by choosing correct alternative answer.

It is fundamental characteristic of culture that, despite its essentially conservative nature, it does change over time and from place to place. Herein it differs striking from the social behaviour of animals other than man. Among ants, for example, colonies of the same species differ little in behaviour from one another and even, so far as we can judge from specimens embedded in amber, from other ancestors of fifty million years ago. In less than one million years man, by contrast, has advanced from the rawest savagery to civilization and has proliferated at least three thousands distinctive cultures.

1. The phrase "essentially conservative nature" implies that culture :

    a) has an inbuilt resistance to change   b) is violently opposed to change

    c) is essentially static   d) is essentially self-contained

2. According to the author, man cannot live:

    a) without creating a thousand distinctive cultures

    b) like ants and other insects

    c) without asserting his dignity

    d) without constantly striving for a better mode of life.

3   The author's chief concern is :

    a) the social behaviour of animals   b) evolution of human society

    c) man's abilities of survival   d) adaptive techniques perfected by man

4. The word 'proliferated' here means :

    a) spread   b) propagated   c) popularized   d) multiplied

Directions : Pick out the correct synonyms for each of the following words.

5. Eradicate

    a) Dedicate   b) Eliminate   c) Complicate   d) Indicate

6. Timid

    a) Veteran   b) Fearful   c) Cowardly   d) Plucky

7. Cautiously

    a) Secretly   b) Somewhat   c) Genuinely   d) Carefully

Directions : In each of the following sentences, choose the word opposite in meaning to the word in bold to fill in the blanks.

8. Absolute Control of the firm is what he wander, but he ended up with ……powers.

    a) Complex   b)Limited   c) little   d) Few

9. Generally she is cautious, but you can't predict when she is …..

    a) Rash   b) Hurtful   c) Kind   d) Fast

10. She has an attractive figure, but her temper is most …..

    a) Distracting   b) Repulsive   c) Complex   d) Unpredictable

(Directions Questions 11 to 15) : In questions 11 to 15, you will find a sentences with four parts underlined. In some sentences there is an error in one of these parts in the light of the rules of standard written English grammar, correct usage and choice of words. No sentence has more than one error. If you find an error, choose the letter of that underlined part in which you find the error. If you find no error, mark the answer (d).

11. The society does not (A)/holds itself responsible (B)/for the loss of damage to any item (C)/ No error(D).

12. In spite of being (A)/very busy at project work (B)/he saves time for them (C)/ No error (D)

13. Some persons (A)/get promotions (B)/even if they are not worthy for them (C)/ No error(D)

14. While he was returning (A)/from the office, a man attacked on (B)/ him with a dagger (C)/ No error(D)

15. The decline of her moral (A)/ was caused by a lot of (B)/ factors that were once fascinating to her (C)/ No error(D)

Instruction : Find the word with correct spellings.

16. a) multimedia   b) multeemedia   d) multimeedia   d) multymedia

17. a) Knowladge   b) nowledge   c) knoledge   d) knowledge

18. a) Champoin   b) Chompain   c) Champion   d) Champaion

19. a) Cournal   b) Colonal   c) Coloneal   d) Conol

20. a) Sillabus   b) Sellabus   c) Sallabus   d) Syllabus

21. Genral term of an A.P. is

 a) tn = a + (2n -1) $\times$ d   b) tn = 2a + (n -1) $\times$ 2d

 c) tn = a + (n -1) $\times$ 2d   d) tn = a + (n -1) $\times$ d

22. Genral term of an G.P. is

 a) tn = $ar^{(n-1)}$ b) tn = $2a\left(r^{(n-1)}\right)$ c) tn = $2a\,r^{(n-1)}$ d) tn = $a\,r^{(n-1)}$

23. Standard form of quadratic equation is.

 a) $ax^3 + bx + c = 0$ b) $ax^2 + bx^3 + c = 0$

 c) $ax^2 + bx + c = 0$ d) $ax + bx + c = 0$

24. The roots of quadratic equation $x^2 - 5x + 6 = 0$

 a) (2,3)   b) (4,2)   c) (5,9)   d) (-2,-3)

25. $4x^2 - k + 2 = 0$ then put x = 1 the value of k is

 a) - 6   b) 3   c) + 6   d) -3

26. $4x^2 + 4x + k = 0$ then put x = 1 the value of k is

 a) k = 2   b) k = 4   c) k = -5   d) k = 3

27. If the roots of the quadratic equation are 5 and -7 then the quadratic equation is.

 a) $x^2 + 2x - 35 = 0$ b) $x^2 + 7x - 5 = 0$

 c) $7x^2 + 5x - 7 = 0$ d) $x^2 + 7x - 35 = 0$

28. The value of determinant $\begin{vmatrix} 5 & 2 \\ 7 & 4 \end{vmatrix}$ is,

   a) 8   b)12   c) 6   d)4

29. If dy = - 15 and d = -5 then the value of y is.

   a) -3   b) 6   c) -6   d) +3

30. If two dice are thrown then sample space is

   a) n (s) = 36   b) n (s) = 12   c) n (s) = 24   d) n (s) = 32

31. $\square$ ABC $\square$ DEF if (A $\square$ ABC) = 9cm² A ($\square$ DEF) = 64cm², DE = 5.6 cm then AB is.

   a) 2.5   b) 3.1   c) 2.1   d) 2.3

32. The line in the plane of circle which intersects circle in one and only one point is called.

   a) chord   b) secant   c) diameter   d) tangent

33. If the point p is in exterior of the circle then how many tangent can be drawn to the circle from pt. p.

   a) one and only one   b) three   c) In finite   d) two

34. The measure of semicircular arc is.

   a) 180^0 b) 270^0 c) 360^0 d) 90^0

35. If the arm rotates 220^0 in clockwise direction then the terminal arm lies in.

   a) IIIrd quadrant   b) IInd quadrant   c) IVth quadrant   d) Ist quadrant

36. For the angle in standard position if the initial arm rotates 305^0 in anticlock wise direction then the terminal arm lies in.

   a) Ist quadrant   b) IInd quadrant   c) IIIrd quadrant   d) IVth quadrant

37. Find the ratio sin θ of the angle in standard possition whose terminal arm passes through the point (4,3)

   a) $\dfrac{4}{5}$ b) $\dfrac{3}{4}$ c) $\dfrac{5}{3}$ d) $\dfrac{5}{4}$

38. The terminal arm passes asthrough the point (5,-7) then the angle lies in.

   a) Ist quadrant   b) IVth quadrant   c) IIIrd quadrant   d) IInd quadrant

39. Find the slope of line whose inclination is 45^0

   a) $\sqrt{3}$ b) $\dfrac{1}{\sqrt{3}}$ c) 1   d) Not defined

40. What is the slope of line. y = 3x - 5

   a) 3   b) -3   c) $\dfrac{1}{3}$ d) $-\dfrac{1}{3}$

41. The formula of chloride of metal Mg is Cl₂ the metal Mg belongs to ……………… group.

    a) I group   b) II group   c) IIIrd group   d) Vth group

42. Ist group elements are called as

    a) 's' block element   b) 'p' block element

    d) 'd' block element   d) none of these

43. Symbol of chlorine is

    a) Li   b) Na   c) Ca   d) Cl

44. Atomic size ………….. down the group

    a) Increases   b) decreases

    c) both (a) and (b)   d) none of these

45. The chemical formula of Pop is …………………….

    a) Al_2O_3 b) $MgCl_2$

    c) Fe_2O_3 x H_2O d) None of these

46. Nuclear force between proton – proton is

    a) repussive   b) attractive   c) zero   d) infinits

47. The SI unit of force is

    a) dyne   b) newton   c) joule   d) volt

48. Ascillator transfers

    a) energy   b) particle

    c) electric effect   d) magnetic effect

49. Matter is made up of

    a) molecules   b) atoms   c) electron   d) Protons

50. Which of the following called physical basis of life

    a) Golgi body   b) vacuole   c) cell wall   d) protoplasm

51. which symmetry of body organization present in frog

    a) Bilateral   b) Radial   c) Spherical   d) Irregualr

52. Tube feet for locomotion present in

    a) Earthworm   b) Jelly fish   c) Balanogolssus   c) star fish

53. In life science five kingdom system of classification was p roposed by

    a) Linnaeus   b) Whittaker

    c) Treviranus   d) Johnson

54. Opening and closing of stomata is due to the

a) harmonal change

b) tu rgor prressure of guard cell

c) gaseous exchange

d) Respiration

55. Which of the following is long day plant.

a) Radish   b) cosmos   c) Dahlia   d) Spinach

56. In 1615 A.D., the British obtained permission to start a factory at …………

a) Mumbai   b) Surat   c) Madras   d) Hyderabad

57. In 1871, Germany annexed the provinces of alsace and Lorraine that belonged to ………………

a) England   b) France   c) Italy   d) Germany

58. Western democracies kept away ……… as an outcast from international politics till 1934.

a) Italy   b) Soviet Russia   c) Germany   d) England

59. The Indian Constitution was drafted by the committee headed by ………………..

a) Pt. Jawaharlal Nehru b) Dr. Rajendra Prasad c) Dr. B.R. Ambedkar d) Dr. Zakir Hussain

60. The ……… congress of 1778 aimed at maintaining world peace.

a) Paris   b) London   c) Berlin   d) Peking

61. There ………… permanant members on the security council of the UN.

a) 4   b) 5   c) 6   d) 8

62. A system having dual set of government is known as the ……………..system.

a) Federval   b) Unitary   c) Constitutional   d) dual

63. The …………. is the first citizen of India.

a) Prime Minister   b) Governor   c) President   d) Chief Justice

64. At the apex of the Judicial system in India is the ………….. court.

a) High   b) Supreme   c) Subordinate   d) District

65. The Natural port of ……………… is situated on the coast of Andhra Pradesh.

a) Chennai   b) Kochi

c) Paradwip   d) Vishakhapatnam

66. A railway locomotive manufacturing factory is located at ………………. In West Bengal

a) Kolkata   b) Chittaranjan   c) Perambudur   d) Bangalore

67. Coal is formed due to the process of ………….. of vegetation.

a) oxidation   b) carbonation   c) liquefaction   d) evaporation

68. The largest of manganese are located in ………. State.

    a) Jharkhand

    b) Chhattisgarh

    c) Karnataka

    d) Kerala

69. Ration cards were issued to the households on the basis of their ……….

    a) districts

    b) states

    c) residential

    d) addresses

70. Transformation of the public sector into the private sector is known as ………….

    a) Liberalisation

    b) Privatisation

    c) Globalisation

    d) Industrialization

71. 5th BRICS summit held in …………….

    a) Durban, S. Africa

    b) Delhi, India

    c) Brazillia, Brazil

    d) Beijing, China

72. The call for 'Quit India movement' against Britishers was given in

    a) 1940

    b) 1941

    c) 1942

    d) 1947

73. We can know about early vedic period from

    a) The samveda

    b) The Rig veda

    c) The yajurveda

    d) The Atherv veda

74. Ankaleshwar in India is known for the production of

    a) Petroleum

    b) Electricals

    c) Jems & Jwelary

    d) Coal

75. Which country has become first to pass climate Act ?

    a) India

    b) Brazil

    c) China

    d) Canada

76. Who Honourad by prestigious Dadasaheb Phalke Award for the years 2012

    a) Amitabh Bacchan

    b) Lata Mangeshkar

    c) Pran

    d) Amrish Puri

77. What is the sex ratio of India as per the Provisional data of census of India 2011 from the following

    a) 935

    b) 940

    c) 945

    d) 950

78. Who is the present Chief minister of Maharashtra

    a) Ashok Chavan

    b) Prithviraj Chavan

    c) R.R. Patil

    d) Patangrao Kadam

79. Who is the captain of Mumbai Indians in IPL – 2013

    a) Sachin Tendulkar

    b) Harbhajan Singh

    c) Ricky Ponting

    d) Kevin Pollard

80. World AIDS day is celebrated on which date

    a) January 12

    b) April 1

    c) May 1

    d) December 1

SERIES COMPLETION

NUMBER SERIES

81. Find out the number which will occur at the place of question mark, in each series given below ?

8, 24, 40, 56, ?

a) 48   b) 16   c) 72   d) 80

ALPHABET SERIES

82. Which letter occurs in the same place from the left end as well as the right end of the given alphabet?

a) K   b) L   c) N   d) M

LETTER SERIES

83. Find out the letter or group of letters in the place of question mark in each series below:

K, N, Q, T, ?

a) W   b) V   c) U   d) X

BLOOD RELATIONS= ?

84. Rakesh out to a lady, Yash said, "She is the daughter of the woman who is the mother of the husband of my mother." Who is the lady to a Yash?

a) Aunt   b) Grand daughter   c) Daughter   d) Sister

RELATION PUZZLE

85. Dani has a brother Anil. Dani is the son of Kiran . Vimal is Kiran's father. In terms of relationship, what is Anil of Vimal?

a) Sister   b) Mother-in-law   c) Mother   d) Step - mother

DIRECTION SENSE TEST

86. Kiran walks 20 meters North. He then truns left and walks 40 m. He again turns left and walks 40 metres. Further he moves 20 metres after truning to the right. How far is he from his original position?

a) 20m   b) 30m   c) 50m   d) 60m

87. A boy rund 10 metres towards East and truns to right, runs 20 metres and turns to right, runs 7 metres and agin turns to left, runs 3 metres and then turns to left, runs 8 metres and finally turns to left and runs 3 metres. Now, which direction is the boy facing?

a) North   b) West   c) North   d) South

INSERTING THE MISSING CHARACTER

88.

a) 16 b) 12 c) 8 d) 4

89. You are alone at home and the guests arrive

a) I shall not allow them to enter the home.

b) I shall lock the home and go away.

c) I shall tell them to come some other time.

d) I shall offer a warm welcome to them.

90. You are told by y our neighbour to carry a tiffin box for their relative. who is admitted in a hospital. What will you tell them?

a) I don't have time to go.

b) I am afraid to go to the hospital.

c) The hospital has its own arrangement of food for the patients.

d) I would like to go as it is the neighbourly duty.

PART - III

Maxmium Marks - 10

1) If I were the Prime Minister of India
2) Use of Mobile in Jr. College level : Merits and demerits
3) Global warming
4) Save Water

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