Birla Industrial & Technological Museum
(National Council of Science Museums)
19A, Gurusaday Road, Kolkata: 700019

**Aptitude Test for the post of Office Assistant Grade III**

Date: 21.03.2022                                    Full Marks:-100

Time allowed:-3 hours

Name of the candidate:_____ _____

Signature of the candidate: _____

General Instructions:-

1. All the questions are compulsory.
2. To answer objective type questions put a (√) mark on the correct answer in the question paper itself from the 4 alternatives given below each question.
3. For answering Descriptive type questions, use a sheet to be given separately.
4. Mobile phones and calculating devices will not be allowed in the examination hall.

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**A.      REASONING**                                    **(1 X 20=20 marks)**

01.

In a certain code, DEAF is written as 3587 and FILE is written as 7465. How is IDEAL written in that code?

a) 63648                          b) 63854
c) 43586                          d) 43568

02.     Paw: CAT, Hoof: (?)

a) Lamb                          b) Horse
c) Elephant                      d) Tiger

03.     Cup: Lip, Bird: (?)

a) Grass                          b) Forest
c) Beak                           d) Bush

04.     Which word does NOT belong with the others?

a) Index                          b) Glossary
c) Book                           d) Chapter

05. Which word is the odd man out?

a) Trivial

b) Unimportant

c) Insignificant

d) Important

06. 10 coaches of a passenger train have got derailed and have blocked the railway track from both ends. Courses of action:
   I. The railway authorities should immediately send men and equipment and clear the spot;
   II. All the trains running in both directions should be diverted immediately via other routes

a) If only I follows
c) If either I or II follows

b) If both I and II follow
d) If neither I nor II follows

07. Find out the missing number from the following alternatives to complete the series;

7, 10, 8, 11, 9, 12, (?)

a) 7
c) 12

b) 10
d) 13

08. I am facing East. Turning to the right I go 20m, then turning to the left I go 20m and turning to the right I go 20m, then again turning to the right I go 40m and then again I go 40m to the right. In which direction am I from my original position?

a) North
c) South

b) West
d) East

09. A, B, C, D, E & F are sitting in a row. E and F are in the Centre. A and B are at the ends. C is sitting to the left of the A. Who is to the right of B?

a) D
c) A

b) C
d) F

10. In a row of forty students R is fifth from the right end and there are 10 students between R and D. What is the D's position from left end of the row?

a) 26th
c) 24th

b) 23rd
d) 25th

11. A room is called bed, bed is called window, window is called flower and flower is called cooler. On what would a man sleep?

    a) Cooler                       b) Flower
    c) Window                  d) Bed

12. Gravity is related to Pull in the same way as Magnetism is related to (?)

    a) Repulsion                b) Separation
    c) Attraction              d) Push

13. A and B are sisters. A is the mother of D. B has a daughter C who is married to F. G is the husband of A. How is B related to F?

    a) Mother                  b) Mother in Law
    c) Sister in Law         d) None of the above

14. The average age of father and his son is 60.5 years. The ratio of their ages is 10:1 respectively. What is the age of the son after 11 years?

    a) 11                        b) 33
    c) 22                      d) 44

15. If 11x11=231, 111x111=12210, then 1111x1111 = (?)

    a) 1211210             b) 1233210
    c) 1111111             d) 1233321

16. How many such pairs of letters are there in the word PERFORATE each of which has as many letters between them in the word as in the English alphabet ?

    a) One                     b) Two
    c) Three                d) More than three

17. (9 ,7) (11,9) (21,19)
     32    40    (?)

    a) 60                     b) 90
    c) 70                   d) 80

18. 3, 8, 15, 24, ?

    a) 35                     b) 37
    c) 53                   d) 33

19.    4, 18, ?, 100, 180, 294, 448
       a) 44                          b) 48
       c) 60                          d) 50


20.    Find the odd one out

       a) Geometry                    b) Calculus
       c) Algebra                     d) Thermodynamics


B.     **QUANTITATIVE APTITUDE**                    **(2 X 15=30 marks)**

21.    In a business P invests Rs. 12,000/-. After some days Q joins the
       business and invests Rs. 16,000/- in it, 9 months after Q joins, P and Q
       get same profit. Find how many duration P's money was invested in the
       business.

       a) 20 months                   b) 11 months
       c) 12 months                   d) 14 months


22.    At the same rate of simple interest per annum, if a principal becomes the
       amount of Rs. 7,100/- in 7 years and of Rs. 6,200/- in 4 years, let us
       determine the principal amount.

       a) Rs. 4,000/-                 b) Rs. 6,000/-
       c) Rs. 7,000/-                 d) Rs. 5,000/-


23.    A horse is tied to a post by a rope. If the horse moves along circular path,
       always keeping the rope tight and describes 88 m when it traces 72
       degree at the centre, then the length of the rope is

       a) 70 m                        b) 72 m
       c) 22 m                        d) 70.8 m


24.    A single person takes 6 minutes to fill a bottle. If from 11am to 12:30 am
       1845 bottles are to be filled, how many persons should be employed on
       this job?

       a) 121                         b) 127
       c) 123                         d) 139

25. A man received 15 % increase in his salary. If his new salary is Rs. 1,932.00, his original salary (in rupees) was

a) Rs.1,642.20      b) Rs.1,820.00
c) Rs.1,680.00      d) Rs.1,720.60

26. A constable is 114m behind a thief. The constable runs 21 m and thief 15 m in a minute. In what time will the constable catch the thief?

a) 38 minutes      b) 19 minutes
c) 16 minutes      d) 9.5 minutes

27. What annual instalment will discharge a debt of Rs. 10,866.00 in 5 years at 10% simple interest?

a) ₹1822.00      b) ₹1833.00
c) ₹1811.00      d) ₹1800.00

28. 
$$\sqrt{x + 2\sqrt{x + 2\sqrt{x + 2\sqrt{3x}}}} = x$$

Find the value of x ?
a) 3      b) 12
c) 9      d) 1

29. 
3. Given that 16 cot $\theta$ =12, then $\dfrac{\sin\theta + \cos\theta}{\sin\theta - \cos\theta}$ is equal to

a) 7      b) -7
c) -1      d) 0

30. The LCM of two numbers is 28 times their HCF. The sum of the HCF and LCM is 3451. If one of the number is 2023 then the other is

a) 392      b) 196
c) 98      d) 588

31. $\sqrt{?} + 416 = (60\% \text{ of } 920) - 110$
a) 576      b) 666
c) 941      d) 676

32    If the length of sides of a triangle are 5.7, 7.6 and 9.5 , then the triangle is a

        a)  Isosceles
        c)  equilateral
        b)  Right angle
        d)  None of these

33    Average age of seven persons in a group is 35.45 years; the average age of five persons of this group is 28.75 years. What is the average age of other two persons in the group?

        a)  104.4 years
        c)  52.2 years
        b)  208.8 years
        d)  52 years

34    Convert 0.12343434343434.... into fraction form

        a)  1222/9900
        c)  1234/9990
        b)  1234/9000
        d)  1222/9999

35    Which of the following is/are irrational number?

        a)  1.41421356....
        c)  0.212112111....
        b)  $\pi$
        d)  All of the these

## C.  GENERAL ENGLISH

(1 X 30=30 marks)

In the following questions, some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error. The number of that part is the answer. If a sentence is free from error, then answer is (d) i.e. no error

36    Eighty-five thousand rupees(a)/is a large sum of money(b) to earn in a month(c)/No error(d)

        a)  Eighty-five thousand rupees
        c)  to earn in a month
        b)  is a large sum of money
        d)  No error

37    It being a rainy day(a)/I will decide to skip work(b)/and stayed at home(c)/No error(d)

        a) It being a rainy day
        c) and stayed at home
        b) I will decide to skip work
        d) No error

38    His voice shook with emotion(a)/and it was so funny to hear him(b)/that all we longed to laugh and to cry(c)/No error(d)

        a) His voice shook with emotion
        c) that all we longed to laugh and to cry
        b) and it was so funny to hear him
        d) No error

39    I had asked him (a)/ how he could go out(b)/if it started raining(c)/No error(d)

   a) I had asked him                  b) how he could go out
   c) if it started raining            d) No error

40    Another baffling change(a)/ that I noticed in him now days(b)/is that he avoids speaking to me(c)/No error(d)

   a) Another baffling change          b) that I noticed in him now days
   c) is that he avoids speaking to me  d) No error

**In the following questions, sentences are given in blanks to be filled with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four as your answer.**

   41    The fruit was juice and ..................

      a) Succulent                     b) Succinct
      c) Sufficient                    d) None of these

   42    A person suffering from an uncontrollable desire to steal is known as ..................

      a) Necrophobic                   b) Necromaniac
      c) Kleptomaniac                  d) Claustrophobic

   43    I need a .........................note.

      a) Five-hundred rupees           b) Five-hundred rupee
      c) Five-hundreds rupees          d) Five-hundreds rupee

   44    The .................door awakened the dog.

      a) creaking                      b) old
      c) waving                        d) none of these

   45    He talked to his horse.............the horse could understand his grief.

      a) as though                     b) with a feeling that
      c) feeling that                  d) assuming

**In the following questions, out of four alternatives choose the one which best expresses the meaning of the given word.**

   46    Happy

      a) Cheery                        b) Jovial
      c) Merry                         d) All of the above

47    Enthusiastic

a) Ecstatic                          b) Melancholy
c) Apathetic                         d) Lethargic

48    Confuse

a) Bemuse                            b) Baffle
c) Perplex                           d) All of the above

**In the following questions, choose the word opposite in meaning to the given word.**

49    Lavish

a) Sumptuous                         b) Luxurious
c) Meagre                            d) Lush

50    Fickle

a) Capricious                        b)Reasonable
c) Stable                            d) Stoic

51    Request

a) Appeal                            b) Invocation
c) Refusal                           d)None of these

**In the following questions, choose the word which is correctly spelt.**

52   · a) Vitaimin                    b) Vetamin

c) Vitamin                           d) Vitamean

53    a) Conceive                     b) Perceive

c) Misconceive                       d) All are correct

54    a) Accommodation                b)Acomoddation

c)Accomodation                       d)Acommodation

In the following questions, four alternatives are given for the Idiom/Phrases. Choose the alternative, which best expresses the meaning of the idiom /Phrase

55    *A closed fisted person*

a) Very poor                    b) Miser person
c) Person inside a closed room.    d) a wealthy person

56    *Beat about the bush*

a) Not clear what is being said    b)To hide behind the bush
c)Very clear and lucid            d)To praise someone

57    *Making a fresh start.*

a) Improvising the old thought    b) Giving a jumpstart
c) Starting something in a new and    d) Grabbing the eyeballs
different way

**Re-arrange the parts of the sentence in correct order**

58    P. As for the tasks
Q. three important ones
R. ahead, there appear
S.  to be at least

a) PRQS                    b) RQPS
c) PSRQ                    d) PRSQ

59    P. they not only
Q. tech activists on to the streets
R. ran an innovative and creative
    campaign, but
S.  were also able to bring

a) PRQS                    b) RQPS
c) PSRQ                    d) PRSQ

60    P. Is our national identity
Q. needs to be shrouded in a
R. of such a loose character that it
S. cloak of anodyne conformity?

a) PRQS                    b) RQPS
c) PSRQ                    d) PRSQ

**Fill in the blanks with correct prepositions given below:-**

61  I prevailed ................... him to join our group.

   a) upon                         b) along with
   c) on                           d) beside

62  The crew were .............. the ship for a month.

   a) on board                     b) off
   c) abroad                       d) on

63.  He has a preference...........tea ..........coffee.

   a) over, to                     b) for, to
   c) over, for                    d) for, over

64  I refrained .............hurting his feelings

   a) to                           b) from
   c) in                           d) on

65  Our ancestors had immense difficulty...........procuring books.

   a) to                           b) in
   c) by                           d) from

**D.   Descriptive type**                                   **(10 marks)**

a) Write a paragraph in about 150 words **on any one** of the following topics of your choice: -

   1. Impact of CoVID-19 pandemic on India's economy
   2. Russia and Ukraine relations
   3. Global warming and the future of mankind

                                                            **(10 marks)**

b) Write a letter to the Chief Engineer, State Electricity Board requesting for immediate restoration of power supply in your locality which has been affected due to a severe cyclonic storm;

                              *or*

Write a letter to a friend sharing your experience of visiting a Science Museum or Science Centre in your area;

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