INDIAN INSTITUTE OF TECHNOLOGY OF TIRUPATI
STAFF RECRUITMENT 2020 2019

OBJECTIVE TEST

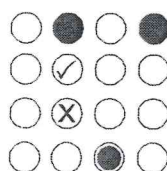| DATE : 5TH JANUARY 2020	DURATION : 120 MINUTES				TOTAL MARKS : 90
POST APPLIED FOR	ADMIT CARD NUMBER (LAST FOUR DIGITS ONLY)				DEPARTMENT
JS (JUNIOR SUPERINTENDENT)					ADMINISTRATION

INSTRUCTIONS

Please read the following instructions carefully :

1. Write and mark carefully THE LAST FOUR DIGITS OF YOUR Admit Card number, Post applied for, and Department Codes on the OMR Answer Sheet and sign at the appropriate place. In the absence of Admit Card Number and Signature on the OMR Answer Sheet, it may NOT be evaluated and it may be cancelled.

2. Strictly follow the instructions given by the Room Invigilator and instructions given on the Question Booklet.

3. Candidates are NOT allowed to carry any Papers, Notes, Books, Cellular phones, Scanning devices, Pagers etc. to the Examination Hall. Any candidate found using or in possession of such unauthorized material or involved in copying or impersonation or adopting unfair-means or behaviors will be disqualified and may be subjected to penal action.

4. The examination is of objective type. All questions are compulsory. **There is no negative mark for wrong answer.**

5. The candidate must check that the Question Booklet has 90 objective questions with multiple choice answers. If any discrepancy is found, report to the Invigilator immediately, so that the Question Booklet may be replaced.

6. Each objective question is followed by four answers in which one is correct. Your task is to choose the correct answer and mark your Answer on the OMR Answer Sheet, NOT on the Question Booklet.

7. Completely darken the CIRCLE so that the alphabet inside the CIRCLE is NOT visible. Darken only one circle for each answer. The CORRECT and the WRONG method of darkening the CIRCLE on the OMR answer sheet are given in the example below:

<u>CORRECT METHOD</u>   <u>WRONG METHOD</u>

8. Use blue/black ink ball point pen for darkening the circles on the OMR Answer Sheet. Do NOT use pencil.

9. Folding / wrinkling or putting any unwanted mark or damaging the OMR Answer sheet is prohibited. The candidate will be responsible for invalidation of the OMR Answer sheet for doing such deeds.

10. Use the space provided for Rough Work in the Question Booklet.

11. The OMR Answer sheet and Question Booklet will have to be submitted to the Invigilator after the examination.

1. The least number which should be added to 28523 so that the sum is exactly divisible by 3, 5, 7 and 8 is

A.   41
B.   42
C.   32
D.   37

2. The product of two numbers is 2028 and their HCF is 13. What are the number of such pairs?

A.   4
B.   3
C.   2
D.   1

3. Six bells start ringing together and ring at intervals of 4, 8, 10, 12, 15 and 20 seconds respectively. How many times will they ring together in 60 minutes ?

A.   31
B.   15
C.   16
D.   30

4. Present ages of Kiran and Syam are in the ratio of 5:4 respectively. Three years hence, the ratio of their ages will become 11:9 respectively. What is Syam's present age in years?

A.   28
B.   27
C.   26
D.   24

5. My brother is 3 years elder to me. My father was 28 years of age when my sister was born while my mother was 26 years of age when I was born. If my sister was 4 years of age when my brother was born, then what was the age of my father when my brother was born?

A.   35 years
B.   34 years
C.   33 years
D.   32 years

6. A is younger than B but older than C. If the difference of the ages of B and C is 10 years, what is definitely the sum of the ages of A and B?

A.   Data inadequate
B.   50 years
C.   45 years
D.   None of the above

7. A towel, when bleached, lost 20% of its length and 10% of its breadth. What is the percentage decrease in area?

A.   30%
B.   28%
C.   32%
D.   26%

8. The breadth of a rectangular field is 60% of its length. If the perimeter of the field is 800 m, find out the area of the field.

A.   37500m^2
B.   30500m^2
C.   32500 m^2
D.   40000 m^2

9. A person walked diagonally across a square plot. Approximately, what was the percent saved by not walking along the edges?

A.   40%
B.   30%
C.   20%
D.   25%

10. A room 5 m 44 cm long and 3 m74 cm broad needs to be paved with square tiles. What will be the least number of square tiles required to cover the floor?

    A. 176
    B. 124
    C. 224
    D. 186

11. $\{(481 + 426)^2 - 4 \times 481 \times 426\} = ?$

    A. 3025
    B. 4200
    C. 3060
    D. 3210

12. What is the unit digit in $(525)^{316} \times (6324)^{1797} \times (341)^{476}$?

    A. 1
    B. 2
    C. 4
    D. 0

13. $(619 \times 619 + 447 \times 447 + 619 \times 447) / (619 \times 619 \times 619 - 447 \times 447 \times 447) = ?$

    A. 1/172
    B. 25/133
    C. 1/1066
    D. 5/6

14. $[1-0.01]+[1-0.02]+[1-0.03]+\cdots+[1-0.99] = ?$

    A. 99
    B. 44.5
    C. 49.5
    D. 50

15. The sum between a positive fraction and its reciprocal is 41/20. Find the absolute difference of that fraction and its reciprocal.

    A. 41/20
    B. 17/20
    C. 11/20
    D. 9/20

16. A, B, C, D and E play a game of cards. A says to B, "If you give me three cards, you will have as many as E has and if I give you three cards, you will have as many as D has." A and B together have 10 cards more than what D and E together have. If B has two cards more than what C has and the total number of cards be 133, how many cards does B have?

    A. 22
    B. 23
    C. 25
    D. 35

17. Mr. Thomas invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% per annum respectively. If the total amount of simple interest earned in 2 years be Rs. 3508, what was the amount invested in Scheme B?

    A. Rs. 6400
    B. Rs. 7200
    C. Rs. 6500
    D. Rs. 7500

18. The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is Rs. 1. The sum is:

    A. Rs. 600
    B. Rs. 645
    C. Rs. 525
    D. Rs. 625

19. There are two buildings P and Q. If 15 persons are sent from P to Q, then the number of persons in each building is the same. If 20 persons are sent from Q to P, then the number of persons in P is double the number of persons in Q. How many persons are there in building P?

    A. 80
    B. 140
    C. 120
    D. 90

20. A man rows to a place 48 km distant and come back in 14 hours. He finds that he can row 4 km with the stream in the same time as 3 km against the stream. The rate of the stream is:

    A. 1 km/hr.
    B. 2 km/hr.
    C. 1.5 km/hr.
    D. 2.5 km/hr.

21. A train having a length of 240 metre passes a post in 24 seconds. How long will it take to pass a platform having a length of 650 metre?

    A. 120 seconds
    B. 99 seconds
    C. 89 seconds
    D. 80 seconds

22. If A is the brother of B and K, D is the mother of B and E is the father of A. Which one of the following statement is not definitely true?

    A. B is the brother of K
    B. A is the father of K
    C. A is the son of D
    D. D is the wife of E

23. A statue is being carved by a sculptor. From the original piece of marble, in the first week 35% is cut away, in the second week 20% of the remainder is cut away and in the third week 25% is chiselled away and polished to produce the finished statute weighs 97.5kg. What is the weight of the original piece of the marble.?

    A. 265 kg
    B. 250 kg
    C. 255 kg
    D. 260 kg

24. If TAXI=8, HALT=10, WAVE=13, LINK=9 then the value of ALIF is ....

    A. 12
    B. 9
    C. 10
    D. 13

25. EL_2FA, G_3LHA, $ILJA_4$, _____, ML_2NA

    A. K_1LLA
    B. KL_1MA
    C. KLL_1A
    D. $KLMA_1$

26. 7, 25, 121, ...

    A. 721
    B. 289
    C. 349
    D. 625

27. 9, 26, ..., 124

    A. 65
    B. 64
    C. 63
    D. 66

28. Four out of the five numbers 1024, 1226, 1456, 1676, 1896 have a common property. Then the odd number is ——————

    A. 1024   B. 1226

    C. 1456   D. 1676

29. In this question, a statement is given followed by some conclusions. Without resolving anything yourself choose the conclusion which logically follows from the given statement.

    Statement: Many business offices are located in buildings having two to eight floors. If a building has more than three floors, it has a lift.

    A. Seventh floors have lifts.   B. Only floors above the third floor have lifts.

    C. All floors may be reached by lifts. D. Second floors do not have lifts.

30. In this question, a statement is followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

    Statement: Water supply in wards A and B of the city will be affected by about 50% on Friday because repairing work of the main lines is to be carried out.

    Conclusions:

    I.   The residents in these wards should economise on water on Friday.

    II. The residents in these wards should store some water on the previous day.

    A. Only conclusion I follows   B. Only conclusion II follows

    C. Either I or II follows   D. Both I and II follow

Direction : Below are given sentences in active/passive voice. Out of the four alternatives suggested, select one which best expresses the same sentence in passive/active voice.

31. They will laugh at you.

    A. You can be laughed at by them   B. You may be laughed at by them

    C. You will be laughed at by them   D. You will have been laughed at by them

32. The most useful training of my career was given to me by my boss.

    A. My boss has been giving me the most useful training of my career

    B. My boss gives me the most useful training of my career

    C. My boss has given me the most useful training of my career

    D. My boss gave me the most useful training of my career

Direction : Choose the correct alternative to fill in the blanks:

33. Classical music is worth _____.

    A. to listen   B. to listen to

    C. listening to   D. none

34. Bhagat Singh _____ his life for his motherland.
   A. lay down
   B. laid down
   C. lie down
   D. none

35. Nobody could have _____ future correctly.
   A. forecast
   B. forecast
   C. forecasted
   D. none

36. She is _____ weaker of the two sisters.
   A. a
   B. the
   C. an
   D. no article

37. Neither of his arms _____ defective.
   A. is
   B. are
   C. have
   D. has

38. It is not safe place to _____.
   A. live
   B. live in
   C. live at
   D. living at

39. After the death of his father the responsibility has devolved _____ him.
   A. on
   B. at
   C. from
   D. none

40. In accordance with the advice of a doctor she is _____ diet.
   A. on
   B. at
   C. off
   D. none

41. Consequent upon heavy loss he is worse _____ these days.
   A. upon
   B. off
   C. over
   D. none

42. You cannot expect respect from him because he is lost _____ sense of shame.
   A. in
   B. to
   C. into
   D. none

43. Disintegration of the country is inimical _____ the progress of the people.
   A. to
   B. for
   C. from
   D. none

44. The robbers not only injured the landlord but also decamped _____ booty.
   A. with
   B. off
   C. about
   D. none

45. The scheme of Rozgar Yojna originated _____ the Prime Minister.

    A. in   B. with

    C. by   D. none

46. For the unity of the country discipline among the people is called _____.

    A. forth   B. for

    C. out   D. none

47. The two friends appear to have fallen _____ over a minor issue.

    A. down   B. out

    C. into   D. none

Direction : Please choose the correct meaning of the idioms given in **bold** in the sentences.

48. We should guard against our **green-eyed** friends.

    A. rich   B. jealous

    C. handsome   D. enthusiastic

49. A movement for the world unity is **in the offing.**

    A. at the end   B. about to start

    C. on decline   D. in the air

50. He was a king who ruled his subjects **with a high hand.**

    A. oppressively   B. kindly

    C. conveniently   D. sympathetically

51. She exhibited remarkable **sangfroid** during the crisis.

    A. temper   B. irritation

    C. composure   D. anger

Direction : Choose the alternative that best expresses the meaning of the given idiomatic phrase.

52. If you **read between the lines**, you will appreciate what he writes.

    A. can read leaving lines in between   B. know what the writer thinks

    C. can read a lot quicker   D. can read and write in the language

53. He left the town **under a cloud.**

    A. of his own accord   B. with a heavy heart

    C. in disgrace   D. when it was raining

54. What **egged you on** to become a social worker?

    A. urged   B. dampened

    C. hindered   D. discouraged

55. Not likely to be easily pleased.

   A. Fastidious   B. Infallible

   C. Fatalist   D. Communist

56. A written declaration made on oath in the presence of a magistrate.

   A. Document   B. Affidavit

   C. Dossier   D. Voucher

57. She is very **discreet**.

   A. mannered   B. mild

   C. proud   D. prudent

58. He tried to **alleviate** the sufferings of his neighbours.

   A. abate   B. dissipate

   C. remove   D. relieve

59. You are advised to show **clemency** to the defeated enemy.

   A. callousness   B. mercy

   C. leniency   D. kindness

60. Inordinate

   A. distant   B. facile

   C. moderate   D. attractive

61. The first Satyagraha campaign of Gandhi was started at

   A. Bardoli   B. Baroda

   C. Dandi   D. Champaran

62. What is fog?

   A. A cumulonimbus cloud   B. A cirro stratus cloud

   C. An altocumulus cloud   D. A low stratus cloud

63. To which group do most of the Indian belong?

   A. Caucasoid   B. Mongoloid

   C. Australoid   D. Negroid

64. Rajasthan receives very little rain because
    A. It is too hot
    B. The winds do not come across any barrier to cause the necessary uplift to cool the air
    C. The monsoons fail to reach this area
    D. There is no water available and thus the winds remain dry

65. National Securities Depository Limited (NSDL) deals with
    A. Debentures   B. Bearer bonds
    C. GDRs   D. Electronic shares

66. Which of the following is <u>not</u> one of the four important capabilities focused by the Human Development Reports of UNDP?
    A. To contribute to a safe environment
    B. To lead a long and healthy life
    C. To be knowledgeable
    D. To have access to the resources needed for a decent standard of living

67. Which of the following operates at the district level?.
    A. Primary Agricultural Credit Society
    B. The Reserve Bank of India
    C. Central Cooperative Bank
    D. State Cooperative Bank

68. Project GAGAN has been designed to
    A. Track the migratory birds and study their pattern of migration
    B. Provide a dependable aerial defence system
    C. Meet the precision approach requirements of the Civil Aviation sector
    D. Ensure a more reliable meteorological forecast system

69. Which of the following states is the largest producer of coffee in India?
    A. Tamil Nadu   B. Kerala
    C. West Bengal   D. Karnataka

70. Rubella is also known as
    A. German measles   B. Red measles
    C. Black measles   D. All the above

71. Why is the sky blue?
    A. All colours interfere to produce blue
    B. Atmosphere scatters blue colours more than the others the
    C. It is actually blue
    D. In the white light in the space blue colour dominates

72. A person of blood group O is sometimes called a universal donor because of
   A. Lack of antibodies
   B. Lack of antigens
   C. Lack of both antigens and antibodies
   D. The presence of antigens

73. River water is harder than rain water because it
   A. Is exposed to the atmosphere
   B. Contains salt and magnesium
   C. Is always flowing
   D. Contains sodium chloride

74. Who among the following is the first recipient of Bharat Ratna Award
   A. M. Visvesvaraya
   B. Jawaharlal Nehru
   C. C. V. Raman
   D. G. B. Pant

75. Who was the first female Prime Minister in the world?
   A. Sirimavo Bandaranaike
   B. Golda Meir
   C. Indira Gandhi
   D. Margaret Thatcher

76. Dada Saheb Phalke Award (2019) is presented to
   A. Vinod Khanna
   B. Amitabh Bachchan
   C. K. Viswanath
   D. Shashi Kapoor

77. Tallinn is the capital of which country?
   A. Estonia
   B. Belgium
   C. Lithuania
   D. Romania

78. Central Government's prestigious Mission Indradhanush is related to?
   A. Children Safety
   B. Cyber Warfare
   C. Vaccination
   D. None of the above

79. National Optical Fiber Network will be providing broadband connectivity to which among the following?
   A. Nagarpalikas
   B. Municipalities
   C. Gram Panchayats
   D. Metro Cities

80. Indian Culinary Institute is located at
   A. Tirupati
   B. Nellore
   C. Vijayawada
   D. Visakhapatnam

81. Who among the following became the first Indian bowler to take a hat-trick in Men's T20 match?
   A. Jasprit Boomrah
   B. Deepak Chahar
   C. Ravindra Jadeja
   D. Yazvendra Chahal

82. What is the name of India's regional navigation satellite system?

 A. NavIB   B. NavIC

 C. NaviHI   D. GPS

83. When is 'Good Governance Day' observed?

 A. December 25th   B. December 24th

 C. December 23rd   D. December 22nd

84. Who among the following won Nobel Prize in Economics for the work on poverty alleviation?

 A. Olga Tokarczuk   B. Michael Kremer

 C. Gerty Cori   D. Elizabeth Blackburn

85. Who won Men's singles title in 2019 Wimbledon Championship?

 A. Roger Federer   B. Ande Murray

 C. Novak Djokovic   D. Juan Sebastian

86. How many States and Union Territories are there in India?

 A. 28 States and 9 Union Territories B. 29 States and 9 Union Territories

 C. 28 states and 10 Union Territories D. 27 States and 9 Union Territories

87. Article 370 was drafted in the part _____ of the Indian Constitution

 A. XXI   B. XXX

 C. XIX   D. XII

88. Who is the Chief Minister of Nagaland?

 A. Neiphiu Rio   B. T. R. Zeliang

 C. Shurhozelie Liezietsu   D. S. C. Jamir

89. Which state/Union Territory court of India has recently recognised that 'Internet Access' is a basic human right

 A. Delhi   B. Allahabad

 C. Bombay   D. Kerala

90. 11th BRICS summit was held in

 A. Brazil   B. Russia

 C. India   D. China

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