

**INDIAN INSTITUTE OF TECHNOLOGY OF TIRUPATI
STAFF RECRUITMENT 2021**

OBJECTIVE TEST

DATE : 25TH JULY 2021	DURATION : 120 MINUTES	TOTAL MARKS : 90TT
POST APPLIED FOR	ADMIT CARD NUMBER (LAST FOUR DIGITS ONLY)	DEPARTMENT
JA (JUNIOR ASSISTANT)		ADMINISTRATION

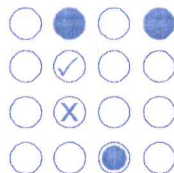
INSTRUCTIONS

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:

CORRECT METHOD

WRONG METHOD



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. A is able to do a piece of work in 25 days and Q is able to do the same work in 35 days. If they can work together for 7 days, what is the fraction of work left?

A. $14/25$	B. $11/25$
C. $12/25$	D. $13/25$

2. A wire can be bent in the form of a circle of radius 56cm. If it is bent in the form of a square, then its area will be

A. 7744	B. 8844
C. 5544	D. 4444

3. A rectangle becomes a square when its length and breadth are reduced by 10m and 5m, respectively. During this process, the rectangle loses 650m^2 of area. What is the area of the original rectangle in square meters?

A. 1125	B. 4500
C. 2924	D. 2250

4. For integers a, b and c, what would be the minimum and maximum values respectively of $a+b+c$ if $\log|a| + \log|b| + \log|c| = 0$?

A. 1 and 3	B. -1 and 3
C. -1 and 1	D. -3 and 3

5. If $Z = 53$ and $ACT = 51$, then RAT will be equal to _____

A. 77	B. 79
C. 83	D. 81

6. If $TAXI=16$, $WAVE =26$, then the value of $ALIF$ is _____

A. 18	B. 9
C. 16	D. 26

7. U3VS, OQ2Y, ILE1, _____, AB2Q

A. EG3L	B. E3GK
C. E3HM	D. EH3M

8. Suppose there is a circular road connecting 12 stops. There is a black car at 8th stop and a white car at 3rd stop. For every minute, the black car moves three stops anti-clockwise and the white car moves one stop clockwise. After how many minutes will they reach the same stop?

A. 16	B. 22
C. Never Meet	D. None of the above

9. 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 statue 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
10. Two pipes P and Q can fill a tank in 6 hours and 9 hours respectively, while a third pipe R can empty the tank in 12 hours. Initially, P and R are open for 4 hours. Then P is closed and Q is opened. After 6 more hours R is closed. The total time taken to fill the tank (in hours) is _____
- A. 13.5 B. 15.5
C. 14.5 D. 16.5
11. An accurate clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?
- A. 154° B. 160°
C. 180° D. 170°
12. Find the missing number. 5, 6, 13.5, ?, 33.5, 36.5
- A. 14.5 B. 15.5
C. 14 D. 16.5
13. In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, what is the dividend?
- A. 4236 B. 4306
C. 5336 D. 4336
14. What is the unit digit in $\{(6374)^{1793} \times (625)^{317} \times (341)^{491}\}$?
- A. 0 B. 2
C. 3 D. 5
15. What will be remainder when 17^{200} is divided by 18?
- A. 16 B. 17
C. 1 D. 2
16. Three numbers which are co-prime to each other are such that the product of the first two is 551 and that of the last two is 1073. The sum of the three numbers is:
- A. 75 B. 81
C. 89 D. 85

17. 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. 140
B. 90
C. 80
D. 120
18. There are 6 working days in a regular week and for each day, the working hours are 10. A man earns Rs. 2.10 per hour for regular work and Rs. 4.20 per hour for overtime. If he earns Rs. 525 in 4 weeks, how many hours did he work?
- A. 245
B. 255
C. 275
D. 285
19. A rectangular courtyard 3.78 meters long 5.25 meters wide is to be paved exactly with square tiles, all of the same size. what is the largest size of the tile which could be used for the purpose?
- A. 42cm
B. 14cm
C. 21cm
D. None of these
20. What day of the week was it on May 28, 1987?
- A. Wednesday
B. Thursday
C. Friday
D. Saturday
21. The present ages of three persons in proportions 4 : 7 : 9. Eight years ago, the sum of their ages was 56. Find their present ages (in years).
- A. 8, 20, 28
B. 20, 35, 45
C. 32, 56, 72
D. 16, 28, 36
22. A printer numbers the pages of a book starting with and uses 3273 digits in all. How pages does the book have?
- A. 1095
B. 1097
C. 1099
D. 1101
23. A boat takes 6 hours to move downstream from point P to Q and to return to point P moving upstream. If the speed of the stream is 4 km/hr and speed of the boat in still water is 6 km/hr, what is the distance between point P and Q?
- A. 10 Km
B. 9 Km
C. 8 Km
D. 11 Km

37. Which of the followings is not an idea of Prarthana Samaj (Prayer Society)?
- Monogamy
 - Monotheism
 - Upliftment of women
 - Abolition of caste discrimination
38. Which river valley project has one of its power houses at UNESCO World Heritage Site-Hampi?
- Bhakhra-Nangal
 - Tungabhadra
 - Hirakud
 - Nathpa Jhakri
39. When was Quit India Movement started?
- 1946
 - 1944
 - 1943
 - 1942
40. Above the Stratosphere lies the _____.
- Troposphere
 - Mesosphere
 - Thermosphere
 - Exosphere
41. Who is known as the father of Indian unrest?
- Bal Gangadhar Tilak
 - Mahatma Gandhi
 - Abdul Ghaffar Khan
 - Lala Lajpat Rai
42. The Tropic of Cancer does not pass through this state.
- Gujarat
 - Madhya Pradesh
 - Odisha
 - Mizoram
43. Which of the following is known as 'Red Planet'?
- Mercury
 - Venus
 - Jupiter
 - Mars
44. How does weather seem to affect the novel coronavirus?
- The virus can't survive in hot, humid climates
 - Cold temperatures can kill the virus
 - Temperature variance due to weather conditions stops the spread of the virus
 - It is not yet known

45. Fundamental Duties of the Indian Constitution is adopted from the constitution of _____
- A. UK
B. USA
C. USSR
D. Australia
46. Which Article of the Indian Constitution promotes equality of opportunity in matters of public employment?
- A. Article 16
B. Article 17
C. Article 19
D. Article 21
47. Property Tax is a type of _____
- A. Direct Tax
B. Indirect Tax
C. State Govt. Imposed Tax
D. None of the above
48. A judge of Supreme Court of India can be removed by?
- A. Member of Lok Sabha
B. Member of Rajya Sabha
C. Members of the both houses supported by majority of votes
D. President of India
49. SAIL is a Public Sector Enterprise that falls under the category of _____
- A. Maharatna
B. Navratna
C. Miniratna
D. Not included in any of the above
50. Which of the following banks has been selected as a digital payments partner by the National Agriculture Market (eNAM)?
- A. ICICI
B. HDFC
C. Axis
D. Kotak Mahindra
51. The Central Board of Direct Taxes (CBDT) has extended the due date for filing income tax returns for assessment year (AY) 2021-22, for individuals _____
- A. by two months, till September 30, 2021
B. by three months, till October 31, 2021
C. by four months, till November 30, 2021
D. by one month, till August 31, 2021

52. Who among the following won Sahitya Akademi Award - 2020 in English literature?
- A. Gian Singh
 - B. Arundhathi Subramaniam
 - C. Imaiyam
 - D. Irungbam Deven
53. According to the UGC guidelines, Institutions of Eminence (IOEs) are permitted to open a maximum of how many off-campus centres in foreign countries?
- A. Two
 - B. Three
 - C. Four
 - D. Five
54. Money raised by issuing of shares is called
- A. Share
 - B. Short covering
 - C. Share Capital
 - D. Sinking fund
55. The 15th edition of Toshali National Craft Mela was organised in _____
- A. Karnataka
 - B. Andhra Pradesh
 - C. Kerala
 - D. Odisha
56. Force of attraction between the molecules of different substances is called
- A. Cohesive Force
 - B. Adhesive Force
 - C. Surface Tension
 - D. Buoyancy
57. What is the position of India in Global Climate Risk Index 2021?
- A. Sixth
 - B. Fifth
 - C. Third
 - D. Seventh
58. Who launched the National Digital repository 'Poshan Gyan' on health and nutrition?
- A. FCI
 - B. NITI Ayoga
 - C. MCI
 - D. MoHFW
59. Which country is the second largest source of FDI in India for 2020-21?
- A. Japan
 - B. Mauritius
 - C. Singapore
 - D. USA

60. In collaboration with which organisation, the Ministry of AYUSH launched mYoga Mobile App?
A. UNO
B. WHO
C. WTO
D. FAO

61. Choose the most suitable alternative in accordance with the correct use of tense.

- A. Rohan just had his dinner.
- B. Rohan has just had his dinner.
- C. Rohan just had eaten his dinner.
- D. Rohan just has had eaten his dinner.

62. Choose the most suitable alternative in accordance with the correct use of tense.

- A. Before the doctor comes the patient will die.
- B. Before the doctor comes the patient will have died.
- C. Before the doctor comes the patient will be dying.
- D. Before the doctor came the patient will die.

Direction : Choose the most suitable alternative to fill in the blanks:

63. He told me that he _____ Sanskrit fluently and was immensely pleased.

- A. could speak
- B. can speak
- C. could have spoken
- D. could be speaking

64. Venkatesh told me that he _____ go to Tirumala next day.

- A. will
- B. would
- C. shall
- D. may

65. Which is _____ more beautiful of the two places?

- A. a
- B. the
- C. no article
- D. of

66. I met _____ Aggarwals today on my way to the campus.

- A. a
- B. the
- C. no article
- D. an

67. People have felt no respite _____ heat wave.
 A. to
 B. from
 C. of
 D. with
68. At the sight of his former secretary he flew _____ a rage.
 A. in
 B. into
 C. to
 D. on
69. He died _____ over work because hard work had affected his health adversely.
 A. by
 B. from
 C. of
 D. with
70. The fear that COVID 19 has broken _____ in India is not unfounded.
 A. down
 B. into
 C. out
 D. over
71. We usually give our servants the old clothes we cast _____.
 A. off
 B. aside
 C. away
 D. on
72. She always reminds me of her mother since she _____ her.
 A. takes on
 B. takes after
 C. takes before
 D. takes up

Direction : Below are sentences with varied clauses. Analyse each sentence to point out the clause used in the sentence by choosing the correct alternative.

73. I shall not tell you where she lives.
 A. Noun clause
 B. Adverb clause
 C. Adjective clause
 D. Co-ordinate clause
74. I shall go to the place where my mother lives.
 A. Noun clause
 B. Adverb clause
 C. Adjective clause
 D. Co-ordinate clause
75. I shall go where my mother lives.
 A. Noun clause
 B. Adverb clause
 C. Adjective clause
 D. Co-ordinate clause

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

76. He is **not worth his salt** if he fails at this juncture.
- A. quite strange
 - B. quite weird
 - C. quite worthy
 - D. quite worthless

77. Seema is a little **hard of hearing**.
- A. inaudible
 - B. disinterested
 - C. deaf
 - D. insensitive

Direction : Choose the word nearest in meaning to the bold part.

78. A wise man puts past **rancour** behind and moves ahead.
- A. hatred
 - B. dislike
 - C. division
 - D. criticism
79. She is a woman of **sterling** qualities.
- A. irritating
 - B. exciting
 - C. interesting
 - D. genuine

Direction : Select the word nearest to the opposite in meaning of the bold word.

80. The issue was raised **tangentially** in the negotiations.
- A. forcefully
 - B. partly
 - C. candidly
 - D. fitfully
81. He finally **conceded** that he was involved in smuggling.
- A. accepted
 - B. concealed
 - C. admitted
 - D. denied
82. It needs an expert to **decipher** the secret message sent to the Army Officers during war time.
- A. swindle
 - B. decode
 - C. encode
 - D. make up

Direction : In the following questions the first and the last parts of the sentence are numbered as S_1 and S_6 . The rest of the sentence is split into four parts end are named as P, Q, R and S. These four parts are not given in their proper order. Read the jumbled parts of the sentence and find out which of the four combinations is correct. Then find the correct answer.

83. S_1 : In spite of an unprecedented boom in the market
 P: and had to remain content
 Q: the paper-dealer could not
 R: push up his sales
 S: with a volume of sale lower than
 S_6 : what he had sold the previous year.

- A. PQSR
 B. RQPS
 C. QRPS
 D. RPSQ

84. S_1 : A connection had long been suspected
 P: since both wear at their worst in the
 Q: same reasons and seasons, but the nature
 R: between the abundance of mosquitoes
 S: and the occurrence of malaria
 S_6 : of this connection had not been understood.

- A. PQSR
 B. RQPS
 C. QRPS
 D. RSPQ

85. S_1 : Yes, a mirage can be photographed.

P: That is hallucination.

Q: Anything reflected by the lens of the human eye will naturally be picked up by the photographic lens.

R: Sometimes, however, a person imagines he is seeing something but actually he is not.

S: The image, of course, will be hazy and shimmering because of refraction of light.

S_6 : That kind of mirage obviously cannot be photographed.

- A. PQSR
 B. RQPS
 C. QRPS
 D. QSRP

Direction : Read the passage carefully and answer the questions based on it.

If I had been asked in my early youth whether I prefer to have dealings only with men or only with books, my answer would certainly have been in favour of books. In later years this has become less and less. Not that I have had so much better experiences with men than with books, on the contrary delightful books even now come my way more often than purely delightful men. But the many bad experiences with men have nourished the meadow of my life as the noblest book could not do.

86. The author says that in later years his love of books diminished because
- A. he did not get many delightful books to read
 - B. he had better experiences with men than with books
 - C. he had given up the habit of reading books
 - D. even the bad experiences he had with men were more valuable than what the noblest books could give
87. Which one of the following statements best reflects the main arguments of the passage?
- A. Books are always better than men
 - B. There are more purely delightful men than purely delightful books
 - C. It is the experience with other human beings that nourishes one's life and not necessarily books
 - D. Neither men nor books give any worthwhile experience
88. Which one of the pairs of phrases best helps to bring out the metaphorical meaning of the meadow of my life?
- A. Pure and healthy life
 - B. Vast and rich life
 - C. Well-nourished but dull life
 - D. Poor but simple life

Direction : Direct / indirect speech is given in the following questions. Out of the four alternatives suggested select the one which best expresses the same sentence in indirect/direct speech.

89. Moni asked Nani whether the latter was in his sense.
- A. "Hey Nani, are you in your senses now?" asked Moni.
 - B. "Nani, have you lost your senses?" asked Moni.
 - C. "Nani, are you in your senses"? asked Moni.
 - D. "Are you senseless, Nani?" asked Moni.
90. He said to her, "What a cold day!"
- A. He told her that it was a cold day.
 - B. He exclaimed that it was a cold day.
 - C. He exclaimed sorrowfully that it was a cold day.
 - D. He exclaimed that it was a very cold day.
