NCHMCT JEE Sample Paper

The sample questions/guidelines are only informative and indicative for the candidates. The actual questions may vary in difficulty level and content dispersion.

NUMERICAL ABILITY AND SCIENTIFIC APTITUDE

1. What is the number of numbers between 400 and 500 if both the numbers are counted?
(1) 101 (2) 100 (3) 99 (4) 102

2. After the division of a number successively by 3, 4, and 7, the remainders obtained are 2, 1 and 4 respectively. What will be the remainder if 84 divide the same number?
(1) 80 (2) 76 (3) 41 (4) 53

3. The sum of all even two digit numbers is divided by one of them leaving no remainder. It is known that the sum of the digits of the divisor is 9, and that the digits in the quotient and divisor are the reverse of each other. The divisor is
(1) 18 (2) 36 (3) 54 (4) 72

4. In a class of 51 students, the difference between the highest marks and the least marks is 70. If the average score is calculated without considering the student who got the highest marks then the average score decreases by 1%. If the average score is calculated without considering the student who got the least marks then the average score increases by 1 1/3%. What is the original average score of the class?
(1) 60 (2) 70 (3) 80 (4) 40

5. Shashi counts all the numbers from 252 to 594 and checks for the number of occurrences of 8. How many times does he come across the number 8?
(1) 74 (2) 76 (3) 79 (4) 80

6. How many metres of cloth 5 m wide will be required to make a conical tent, the radius of whose base is 7 m and
(1) 108 m (2) 110 m (3) 112 m (4) 115 m

7. Aluminium is not used
(1) in silvery paints (2) for making utensils (3) for making wires (4) as oxidizer in metallurgy

8. Viruses are composed of
(1) proteins only (2) nucleic acids only
(3) proteins and nucleic acids (4) lipoprotein

9. Soap helps in cleaning clothes, because
(1) it lowers the surface tension of the solution
(2) it absorbs the dirt
(3) it increases the surface tension of the solution
(4) chemicals of soap change

10. The stored food material found in muscles is
(1) Phosphogen (2) Lipid (3) Glycogen (4) Protein

REASONING AND LOGICAL DEDUCTION

Direction (Question 11) : In this question, there is set of four figures labelled A, B, C and D called the Problem Set followed by a set of four other figures labelled 1, 2, 3 and 4 called the Answer Set. One figure contains a question mark. Select a suitable figure from the Answer Set which will substitute this question mark so that a series is formed by the figures A, B, C and D taken in order. The number of the selected figure is the answer.


Direction (Question 12): In this question below are three statements followed by three conclusions numbered I, II and III. You have to take the three given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the three given statements disregarding commonly known facts. Then decide which of the answers (1), (2), (3) and (4) is the correct answer and indicate it on the answer sheet.

12. Statements: Some chairs are tables. Some tables are drawers. All drawers are shelves
Conclusions: I. Some shelves are tables.
II. Some drawers are chairs.
III. Some shelves are drawers.
(1) Only I and III follow
(2) Only I and either II or III follow
(3) Only II and either I or III follow
(4) All I, II and III follow

Direction (Question 13): The below question consists of a question and two statements numbered I and II. Decide whether the data provided in the statements are sufficient to answer the question. Mark answer as
(1) if the data in statement I alone are sufficient to answer the question, while the data in, statement II alone are not sufficient to answer the question.
(2) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
(3) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(4) if the data in both statements I and II together are necessary to answer the question.

13. In a class, the ratio of boys and girls is 13:10. How many boys are there in the class?
I. The number of boys is 30% more than that of girls.
II. The number of girls is 15 less than that of boys.

Directions (Questions 14-15): Complete the series.

14. 9, 15, 23, 33, ?
(1) 44 (2) 38 (3) 36 (4) 45

15. In a certain code, PEAK is written as ‘3512’ and DINE is written as ‘6895’. How is KIND written in that code?
(1) 2396 (2) 2896 (3) 2986 (4) 2596

Directions (Questions 16-18): Read the following information to answer these questions.
In a school, there were five teachers, A and B were teaching Hindi and English. C and B were teaching English and Geography. D and A were teaching Mathematics and Hindi. E and B were teaching History and French.

16. Who among the teachers was teaching maximum number of subjects?
(1) A (2) C (3) B (4) D

17. Which of the following pairs was teaching both Geography and Hindi?
(1) A and B (2) C and A (3) B and C (4) None of these

18. More than two teachers were teaching which subject?
(1) History (2) French (3) Hindi (4) Geography

Directions (Questions 19-20) : Each of the following questions is based on a set of propositions I-IV. Select the best answer to each question.
I. All P are Q.
II. Some P are not Q.
III. Some, but not all, P are Q.
IV. No P are Q.

19. Considered only by themselves, which of the following pairs of statements might either both be true or both be false?
(1) I and II (2) II and III (3) I and III (4) I and IV

20. Considered only by themselves, all of the following pairs of statements might both be false but could not both be true except?
(1) I and II (2) I and III (3) I and IV (4) II and IV

GENERAL KNOWLEDGE AND CURRENT AFFAIRS

21. World’s tallest building is
(1) Effiel Tower (2) Burj Khalifa (3) Statue of Liberty (4) Qutub Minar

22. Nicole Faria is
(1) Miss Earth 2010 (2) Miss World 2010
(3) Miss Universe 2010 (4) None of these

23. The host of 2018 World Cup of Football is
(1) Qatar (2) Russia (3) Japan (4) India

24. The largest freshwater lake in the world is
(1) Lake Victoria (2) Lake Michigan (3) Lake Balkhash (4) Lake Superior

25. Which book, written by Rashmi Bansal, profiles the story of 25 IIM-Ahmedabad graduates?
(1) Stay Hungry Stay Foolish (2) The Elephant, the Tiger and the Cell Phone
(3) The Five Dollar Smile (4) None of these

26. Big Cinemas is a subsidiary of
(1) A.V. Birla group (2) Reliance ADAG (3) Essar Group (4) None of these

27. Which state of India projects itself as “God’s own Country”?
(1) Kerala (2) Himachal Pradesh (3) Uttarakhand (4) Chattisgarh

28. SPICMACAY is concerned with \_\_\_\_\_\_\_\_\_\_\_\_\_.
(1) arts and culture (2) music and culture
(3) photography and culture (4) sports and culture

29. Mukta Arts is associated with which among the following film personalities?
(1) Dev Anand (2) Subhash Ghai (3) Yash Chopra (4) Suraj Barjatya

30. India’s position in terms of medals tally at 16th Asian Games 2010 at Guangzhou was
(1) Fifth (2) Sixth (3) Seventh (4) Third

APTITUDE FOR SERVICE SECTOR

31. If you want to be successful, you should be
(1) grossly over confident (2) confident
(3) under confident (4) over confident

32. If you have just been denied promotion and your junior has been selected, what should you do?
(1) Leave the organisation
(2) Abuse the junior for manipulation and protest against the management
(3) Move the court
(4) Talk to your boss, bring out your contribution and ask for reconsideration

33. If you happen to on the spot of a road accident, where a person is injured, what should you do?
(1) Call the police (2) Inform the injured person’s relative
(3) Provide him first-aid, if you can (4) Avoid the scene of accident

34. In case you get angry on some issue, you should
(1) display your anger by shouting and give vent to your anger
(2) avoid the situation
(3) try to reason and delay your reactions
(4) distract your attention from the issue

35. You would like to be friendly with a person who is
(1) clever and smart (2) simple and honest
(3) extrovert and dominating (4) quiet and withdrawn

36. While selecting a candidate for a service industry job, you will go for a candidate who is
(1) highly academic (2) social and helpful
(3) quiet and an introvert (4) responsible

37. If you happen to come across a girl child, who has unfortunately got separated from the parents in the crowd, you would
(1) enquire about her parents and help her as the need be
(2) hand over the child to people around
(3) inform the police
(4) ignore to avoid any hassle

38. In case you happen to witness a family quarrel in your immediate neighbourhood, you would
(1) ignore and forget
(2) inform other neighbours and try to intervene
(3) shout and tell them not to make noise
(4) inform police

39. When you see a clustre of slums in your neighbourhood, what comes to your mind?
(1) Slums should be immediately removed to a far off place
(2) Slums are a scar on our cities
(3) Persons living in slums should also have a place to live
(4) Try and ignore the issue

40. On receipt of bad performance review, you would
(1) become extremely angry
(2) be disappointed and frustrated
(3) try and take criticism in stride and learn some lessons
(4) go and fight with your boss

ENGLISH LANGUAGE

Directions (Questions 41-42): In each of the following questions a related pair of words or phrases given. Each pair is followed by four other pairs of words. Choose the pair that best expresses the relationship as by the original pair.

41. Harm : Damage
(1) sweet : sour (2) stout : weak (3) injure : incapacitate (4) hook : crook

42. Contradict : Contravene
(1) deny : refute (2) confuse : satisfy
(3) compensate : damage (4) profane : vulgarity

Directions (Questions 43-44) : In each of the following questions, out of the given alternatives choose the one which is closest in meaning to the underlined word and can replace it without changing the meaning of the sentence.

43. He gave me a detailed account of the meeting.
(1) report (2) summary (3) explanation (4) precis

44. It is so gratifying to know that there are not many small-pox cases these days.
(1) pleasing (2) surprising (3) satisfying (4) happy

Direction (Question 45) : In the question, choose the world which is most opposite in meaning of the underlined world in the sentence.

45. This is only the most tenuous evidence for it.
(1) abundant (2) enough (3) reasonable (4) less

Directions (Questions 46-47) : In these questions, fill in the blank with most appropriate word from the given alternatives to complete the sentences meaningfully.

46. A new shop \_\_\_\_\_\_\_\_ opened in the building, since last week.
(1) will be (2) has been (3) is (4) would be

47. My first lesson \_\_\_\_\_\_\_\_\_\_ forgiveness came from my father.
(1) on (2) in (3) about (4) upon

Direction (Question 48) : In the question four sentences are given. Choose the sentence which is grammatically wrong.

48. (1) She had finished her work when I met her.
(2) Do you believe in God?
(3) He cut his hand with a knife.
(4) He challenged me for a duel.
Direction (Question 49) : In the question, choose the option which best expresses the meaning of the idiom given.

49. To carry off the bell
(1) To call others for help (2) To bag the first position
(3) To steal all wealth and flee (4) To trouble others
Direction (Question 50) : In the question, out of the given group of words, choose the mis-spelt word.

50. (1) Boast (2) Cataloge (3) Terrible (4) Heritage

Directions (Question 51): Read the passage carefully and answer the following question:
Shopping malls, supermarkets and large format retail stores may be sprouting all over the country, but there are still a large number of entrepreneurs who would rather not sell their wares through the usual retail channels. They prefer selling directly through trade exhibitions, which are attracting an increasing number of footfalls. Scores of exhibitions are held each year in all parts of the country, big cities and small. Some of the largest exhibitions held in the country are trade events held by the Cll, IT and software expositions held by Nasscom, MAIT – manufacturers association show, and expositions which cater to interior designs and automobiles, etc. “Publications are also starting to get into the exhibitions business in a big way,” says Hemanshu Chitnis, Director of Exhibitions and Expositions International (Business India and Times of India exhibitions are among the largest). Those who exhibit their goods are happy too; says fashion and textile designer Bhamini Subramaniam, who took part recently in the Femina Trunk Show of designer wear along with designers like Krishna Mehta, Narendra Kumar Ahmed, Naheed Merchant and Pranavi Kapoor from Delhi: “Large retail outlets have a fixed 40 per cent mark up on designer apparel which they take on a consignment basis. At exhibitions the only cost incurred is the one-time fee for the stall and there’s no price loads for consumers.” Also we don’t have to deal with credit in any form which enables us complete monitoring over stocks, she adds. Explains Piyush Gupta, Director of GNH systems, an importer of Chinese electronic gadgets, “The whole retailing system is very complex in India and there are middlemen at every stage. They add their profit margin and the extra cost is borne by the customer.”

51. Exhibitions are better options than the Retail Outlets because
(1) the only cost involved in exhibitions is one time fee for the stall.
(2) no price loads for the consumers.
(3) no middleman at any stage.
(4) All the above.