

# NMAT Sample Paper

## SECTION – I

**Directions for questions 1 – 7:** Read the passage and answer the following questions.

### **PASSAGE**

Though the last twenty-five years have seen China dazzle the world with its excellent economic performance it has shied away from playing the kind of active role in international affairs that would be commensurate with its economic weight. This is because traditionally China's politics have been defined by the need for economic development above all else. In the past China's authorities have tended to downplay the country's international clout, choosing to stress instead its development country status and limited military capabilities. Such modest rhetoric was intended to allay the fears that China's rise was causing across its immediate neighborhood. That Beijing is finally acknowledging its status as a major player in the international system is evidenced by the fact that the president has formally developed a theory of international relations; the concept of harmonious world. The concept, encompassing broad notions of multilateralism, prosperity for all through common development and tolerance for diversity has left world opinion perplexed. These are commendable objectives but the theory is short on specifics regarding the means to achieve them.

China's recent willingness to be a more active player internationally stems from complex factors. The country's economic strength – having acquired the largest foreign exchange reserves in the world – is undeniable and reports favour it to be the largest economy in the next quarter of a century. For sustained double digit economic growth China thus has no choice but to become more active internationally. Moreover as a major proportion of the oil and other natural resources that China needs to feed its growing economy are imported Beijing has to aggressively woo the countries rich in energy resources, which also represent emerging markets for Chinese products. To ensure a stable security environment within the region and thus facilitate economic growth China played an active role in facilitating negotiations with North Korea. Destabilization of a potential flashpoint like the Korean peninsula would lead to a flood of refugees crossing the border, interrupting careful plans economic rejuvenation of China's North – East. China's growing influence has caused a shift in the geopolitical status quo and its influence is beginning to replace that of the United States and European powers in Africa. China's new diplomacy though has had its share of critics who have expressed their unease at China's military modernization programme and its willingness to deal with regimes widely condemned as corrupt and oppressive. Despite this when the Africa was in need of aid and infrastructure or the US needed help in negotiating with Korea they turned to China. By taking a lead in a variety of international and regional forums, initiating bilateral and military exchange and dispensing aid and technical assistance in parts of the world where traditional powers are cautious to tread China has signaled that its days of sitting on the sidelines content to let other shape world affairs are emphatically over.

### **Questions-**

**1. What has been the fallout of China's increased participation in world affairs?**

- (1) International scrutiny of its economic policies
- (2) Growth of corruption among its politicians
- (3) Its influence and prestige grow substantially.
- (4) Its growth rate has stabilized
- (5) None of these

**2. Why has China traditionally been a passive spectator in global affairs?**

- (1) To safeguard its oil resources
- (2) To conceal its economic predicament
- (3) Economic dominance of the US
- (4) To maintain security in its vicinity
- (5) To focus on domestic economic growth

**3. Which of the following best describes China's international status?**

- (1) Cause of insecurity among developing nations
- (2) Largest economy in the world
- (3) Largest donor of aid to developing countries
- (4) Pioneer of implementing a "harmonious world" philosophy
- (5) None of these

**4. The main purpose behind Beijing's intervention in North Korea is to –**

- (1) Ensure that the US acknowledges China's growing military influence
- (2) Prevent any hindrances to its domestic economic development programmes
- (3) Protect its financial investment in neighbouring countries
- (4) Provide humanitarian assistance to one of its strongest allies Korea
- (5) None of these

**5. Which of the following CANNOT be said about China's international relations theory?**

- (1) The theory is ambiguous in nature
- (2) The theory reflects China's realization that it occupies a vital place in global affairs
- (3) It promotes the concept of common development for all nations
- (4) It is a theory which explains China's sustained growth rate
- (5) It emphasizes achieving prosperity through universal development.

**6. Which of the following is TRUE in the context of the passage?**

- (1) China's current political standing internationally is disproportionate to its financial strength
- (2) China is a reluctant participant in military dialogues
- (3) The harmonious world theory is the only utilitarian remedy to the current challenges facing the world
- (4) The US has recognized and acknowledged China's growing international reputation.
- (5) China has stopped dealing with corrupt countries because of international pressure

**7. Which of the following is an outcome of Beijing's role in Africa?**

- (1) America's influence in the region has reduced
- (2) Instability in the region
- (3) The amount of aid from Europe and other countries has doubled
- (4) The balance of power in Africa has shifted in favour of Europe over the US
- (5) None of these

**PASSAGE – II**

The other day we heard someone smilingly refer to poets as dreamers. Now, it is accurate to refer to poets as dreamers, but is not discerning to infer, as this person did, that the dreams of poets have no practical value beyond the realm of literary diversion. The truth is that poets are just as practical as people who build bridges or look into microscopes and just as close to

reality and truth. Where they differ from the logician and the scientist is in the temporal sense alone; they are ahead of their time, whereas logicians and scientists are abreast of their time. We must not be so superficial that we fail to discern the practicability of dreams. Dreams are the sunrise streamers heralding a new day of scientific progress, another forward surge. Every forward step man takes, in any field of life, is first taken along the dreamy paths of imagination. Robert Fulton did not discover his steamboat with full steam up, straining at some Hudson River dock ; first he dreamed the steamboat, he and other dreamers, and then scientific wisdom converted a picture in the mind into a reality of steel and wood. The automobile was not dug out of the ground like a nugget of gold; first men dreamed the automobile, and afterward, long afterward, the practical minded engineers caught up with what had been created by winging fantasy. He who looks deeply and with a seeing eye into poetry of yesterday finds there all the cold scientific magic of today and much which we shall not enjoy until some tomorrow. If the poet does not dream so clearly that blueprints of his vision can immediately be drawn and the practical conversions immediately effected, he must not for that reason be described as merely the mental host for a sort of harmless madness. For the poet, like an engineer, is a specialist. His being, turned to the life of tomorrow, cannot be turned simultaneously to the life of today. To the scientist he says, "Here, I give you a flash of the future". The wise scientist thanks him, and takes that flash of the future and makes it over into a fiber of today.

### **Questions-**

#### **8. The author's attitude towards poets differs from that of the general public in that:**

- (A) most people have a patronizing attitude while the author is in awe of poets
- (B) most people take poets to be impractical dreamers the author has a great deal of faith in those dreams
- (C) contrary to popular belief the author looks upon poets as chimerical visionaries
- (D) he holds them in high esteem

#### **9. From the para one can safely conclude that:**

- (A) Poets inspire scientific research
- (B) Without imagination there would be no progress

- (C) The greatest achievements of today were once fanciful dreams of some people
- (D) Poets live in the intangible future

**10. Which of the following statements is least erroneous?**

- (A) The poet has more faith in the future than all the scientists and artists
- (B) The author lays more faith in the poets than most of us
- (C) All progress would stop if poetry turned realistic
- (D) None of the above

**11. What is common to both Poets & Scientists?**

- (A) Both can change impossible to possible
- (B) They live in a world of their own
- (C) They are cut-off from reality
- (D) Both dare to dream the seemingly impossible

**PASSAGE – III**

In a country like India, both poverty and economic growth pose serious environmental challenges. In their desperate attempt to survive today, people are forced to forsake their tomorrow and their environment. A classic example of the phenomenon can be found in impoverished tribal areas where millions of households are forced to cut forests everyday and sell wood to get at best, half-a meal a day. And all this does not come cheaply in terms of personal costs, as some people often tend to argue. Tribal women wake up before dawn, walk miles to the dwindling forests to cut and bundle wood and then carry the load tens of kilometers to a nearby town. And after all that, what they get is pittance.

At the same time uncontrolled economic growth, urbanization and industrialization can rip apart forests, mine the overuse ground water systems, dam rivers, pollute water and air, stuff the land with unknown poisons. In this way, economic growth not just poisons and destroys cities, but also erodes the rural resource base, setting in motion a vicious cycle. Rural ecosystems unable to support their growing populations push more and more people into the cities.

There is therefore, a golden mean, a balance, as in all things ecological between poverty and wealth, between need and greed. This is an area for values, education, culture, social aspirations, human satisfaction-especially amongst those who have them in sufficient measure-in things other than what economists call goods.

The new economic policies of the Government built around certain concepts of economic liberalization and structural adjustment have raised numerous questions in the minds of the environmentally – concerned. One set of critics believes that these policies will enhance impoverishment. Apart from being bad in themselves, the policies will have a negative environmental impact.

There is another set which believes that these policies will enhance entrepreneurship and processes of wealth generation and thus reduce poverty. But this set too does not know how these processes will be controlled to ensure a good and clean environment. If the government could not give the country a good economic governance and hence its role must be curtailed, then what is the guarantee that the same corrupt, inefficient, partisan and soft government, will give us good environmental governance, where the trade-offs, especially in a poor country like India, are even more difficult to assess and understand?

There is of course, another set of concerns which is as follows: even if the new policies generate wealth, will this wealth not be built on borrowed consumption patterns from industrialized countries? Will these consumption patterns not devastate our culture and environment, that is whatever that remains of them?

#### **Questions-**

**12. As far as the author's stand regarding the credibility of the government is concerned, it can best be described as:**

- (A) optimistic
- (B) humorous
- (C) skeptical
- (D) serious

**13. The author suggests that in order to attain the golden mean, we must:**

- (A) carefully understand the economic implications of our actions
- (B) shun the self-righteous moralists and look for practical solutions
- (C) relate the tertiary industries to the secondary ones
- (D) try to look beyond mere economic definitions

**14. The author is most likely to agree with the idea that:**

- (A) Western styles of ecological management are not necessarily disastrous
- (B) India should not merely copy the Western models of growth but try to evolve something of

its own

(C) India should try to emulate the better aspects of the Western models and try to exploit forest resources to the fullest.

(D) India should always strive to attain an ecological harmony commensurate with the need and aspirations of the teeming millions.

**15. The theme of the passage is:**

(A) a discussion of the genesis and perpetration of environmental degradation

(B) a critical analysis of the role of rural ecosystems in maintaining the fragile ecological balances

(C) a description of the role of government in maintaining stable ecosystems

(D) the role of western growth models in the environmental degradation in India

**16. The author is most likely a/an:**

(A) militant environmentalist

(B) newspaper editor

(C) human rights activist

(D) industrialist

**Directions for questions 16 – 18:** Choose the word which is most nearly the SAME in meaning as the word given in **bold** is used in the passage.

**16. apparatus**

(1) premises (2) machinery (3) stationery (4) functions (5) regulations

**17. acutely**

(1) highly (2) intentionally (3) primarily (4) mechanically (5) legally

**18. muted**

(1) negligible (2) nullified (3) subdued (4) neutralized (5) empathetic

**19-20 Which of the words/phrases (1), (2), (3) and (4) given below should replace the phrase underlined in the given sentence to make the sentence grammatically correct ? If**

**the sentence is correct as it is and no correction is required, mark (5) as the answer.**

**Q.19. Bad movies affect people living in today's society more than they did in previous years.**

- (1) they had done
- (2) they did those
- (3) they had been done
- (4) they would have done
- (5) No correction required

**Q.20. The reason he has been so fat is because he never takes exercise.**

- (1) that he has never taken
- (2) that he would never take
- (3) that he never takes
- (4) because he didn't ever take any
- (5) No correction required

**21-22. In each of these questions, two sentences are given, one is complete and the other has a blank space in it. This pair of sentences is followed by five words/groups of words. You have to read these two sentences together and find out the word/group of words that best fits in the blank to make the pair of sentences meaningfully complete:—**

**Q.21. Now-a-days there exists a spirit of ..... among the various departments of the University. This has led to a number of interdisciplinary research publications due to interaction of various research groups which might not otherwise have been published.**

- (1) co-operation
- (2) education
- (3) casteism
- (4) favouritism



(5) patriotism

**Q.22. When people around you are losing their heads, it is very difficult to remain serene. It needs a lot of .....**

(1) patience

(2) strength

(3) courage

(4) goodness

(5) modesty

**23. We agree that our articles pointed out the level of local support for the law and order forces trying to capture Veerappan. (...) There is no doubt that the man is a criminal and, should be treated as one.**

(A) However, we did not blame the two state government for this

(B) But nowhere did we condone the man's actions

(C) The real issue is the need to revamp the entire policy regarding sandalwood

The blank can be filled by –

(A) only A (B) only B (C) only C (D) A or C

**24. A bill now before the US Congress poses a threat to Indian software specialists. (...) These fees from employers are to be used for training programmes for US nationals in key areas.**

(A) Any agency hiring foreign workers will have to pay a special fee

(B) Workers with special skills will be charged an employment permit fee

(C) The licensing fees payable to the software subcontractors will be raised

The blank can be filled by –

(A) only A (B) only B (C) only C (D) A or C

**25. Herbal medicines worth Rs. 900 crores are produced annually in India (...) Even the**

**office of the Drugs Controller of India acts only in response to specific complaints.**

(A) However the investment in R & D across the industry is low

(B) The present rules for ensuring quality are reasonably comprehensive and effective

(C) The competition to corner the market has however led to some questionable practices that are to the consumer's disadvantage

The blank can be filled by –

(A) only A (B) only B (C) only C (D) A or B

**26-28 Directions : Pick out the most appropriate word from amongst the words given below each sentence to complete it meaningfully.**

**Q.26. He quickly glanced ..... the book to find what it said about the Indian economy.**

(1) at

(2) through

(3) in

(4) to

(5) over

**Q.2. The counsel urged the court to ..... down the obnoxious law.**

(1) enact

(2) enforce

(3) cancel

(4) strike

(5) declare

**Q.3. The local official ..... the Minister of the situation.**

(1) explained

(2) warned

(3) apprised

(4) told

(5) intimidated

**Directions for questions 27 – 32: Select the appropriate meaning of the phrase given in the question.**

**27. Of the first water**

(A) trifle (B) genuine (C) of the highest quality (D) shoddy

**28. To fit the bill**

(A) to misappropriate (B) to bribe (C) to be suitable (D) to pay the bill

**29. A wild goose chase**

(A) a victorious attempt (B) a sly attack (C) an effort in vain (D) an odyssey

**30. To kick the bucket**

(A) to enjoy oneself (B) to eat greedily (C) to die (D) to monopolise

**31. At sixes and sevens**

(A) in apple pie order (B) in disarray (C) at gunpoint (D) in an order

**32. PERADVENTURE**

(A) doubt (B) stroll (C) exemplary daring (D) travel

**Directions for question 33&34: Find out which phrase should replace the phrase given in bold to correct the error, if there is any, and to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (5) as the answer.**

**33. His works of art rank high in the appraisal for competent critics.**

(1) are high rank in the appraisal for

(2) are ranking high with the appraisal of

(3) rank high in the appraisal of

(4) rank high by the appraisal of

(5) No correction required

**34. As years rolled by, his name and fame spread all through the country.**

(1) When years rolled by

(2) When years rolled through

(3) As years rolled upon

(4) After years rolled by

(5) No correction required

**Directions for questions 35 – 36: Select the option that most suitably fills ups the blanks-**

**35. Traffic signals in the country X operate in a reverse fashion : people move when it is \_\_\_ and have to stop when it is \_\_\_.**

(A) amber, time

(B) green, red

(C) red, green

(D) red, raining

**36. Can you call a \_\_\_ seeker of personal goals an \_\_\_? I doubt whether you can.**

(A) relentless, atheist

(B) steady, pessimist

(C) relentless, aimless person

(D) relentless, agnostic

**Directions for questions 37 – 40: In the following questions, a related pair of words or phrases is followed by four lettered pair of words or phrases. Select by lettered pair that best expresses a relationship DISSIMILAR to that express in the original pair.**

**37. MIGRANT : SETTLED**

(A) static : dynamic

(B) mendicant : rich

(C) jab : praise

(D) gallant : brave

**38. URSINE : BEAR**

(A) leucine : lion

(B) vulpine : fox

(C) porcine : pig

(D) lupine : wolf

**39. BUVETTE : TAVERN**

(A) butte : hill

(B) esemplastic : unifying

(C) folie : madness

(D) hymen : song

**40. ASTROLATRY : CELESTIAL BODIES**

(A) zoolatry : zoo

(B) Mariolatry : Virgin Mary

(C) demonolatry : demon

(D) idolatry : idols

**SECTION – II**

**Questions on Quantitative Skills, Data Analysis and Sufficiency-**

**Solve the following:-**

**41.  $(193 - 87) \div (1.25 \times 2) = ?$**

(1) 67.8 (2) 56.9 (3) 42.4 (4) 38.6 (5) None of these

42.  $3870 \div ? = 516$

- (1) 7.5 (2) 12.25 (3) 5.85 (4) 15.65 (5) None of these

43.  $5389 + 4172 - 3868 - ? = 2456 + 1130$

- (1) 2007 (2) 1897 (3) 1987 (4) 2117 (5) None of these

44.  $88.8 + 8.08 + 0.08 + 88.08 + 0.80 + 888 = ?$

- (1) 1037.14 (2) 1073.84 (3) 1370.24 (4) 1703.54 (5) None of these

45.  $(88)^2 + (73)^2 = (?)^2 - (38)^2 - 859$

- (1) 15876 (2) 15376 (3) 126 (4) 124 (5) None of these

46.  $312 \times ? \times 14 = 157843 + 56189$

- (1) 48 (2) 50 (3) 52 (4) 54 (5) None of these

47.  $[(156)^2 \div 8 \times 36] \div ? = 117 \times 24$

- (1) 37 (2) 39 (3) 41 (4) 43 (5) None of these

48.  $(8.83\% \text{ of } 228) - (2.65\% \text{ of } 104) = ?$

- (1) 17.3764 (2) 13.3467 (3) 17.3746 (4) 13.7746 (5) None of these

49.  $(23)^{23} \times (23)^{-19} = ?$

- (1) 529 (2) 23 (3) 12167 (4)  $(529)^2$  (5) None of these

50.  $8.496 - 1.384 + 3.462 + 2.801 = ?$

- (1) 11.876 (2) 17.775 (3) 13.775 (4) 21.545 (5) None of these

**DIRECTIONS: The following questions are accompanied by three statements (A), (B) and (C). You have to determine which statement(s) is/are sufficient/necessary to answer the questions.**

51. **How much marks did Mohan obtain in Hindi? To get the answer which of the following information is/are necessary/sufficient?**

A. The average marks obtained by Mohan in Hindi, Math and Biology are 72.

B. The total marks obtained by him in Hindi and Math are 129.

C. The total marks obtained by him in History and Biology are 143.

- (1) Only A and B together are sufficient (2) Only A and C together are sufficient

(3) Only A and B or C are sufficient (4) All A, B and C even together are not sufficient

**52. What is the ratio of the present ages of X and Y?**

A. The ratio between the present ages of X and Y after 10 years is 11:15.

B. The present age of Y is  $200/3$  % more than that of X.

C. The product of the present ages of X and Y is 240 years.

(1) Any of them (2) Only C and either A or B

(3) Any two of them (4) Only A and B together

**53. A company has two kinds of employees – supervisors and clerks. The total monthly salary of the employees is Rs.2,85,000.**

What is the total number of employees in that company?

A. The ratio of the number of supervisors to that of clerks in the company is 4:5.

B. The total monthly salary of all the supervisors is 28% more than that of clerks.

C. 20% of the clerks' monthly salary is Rs.25,000.

(1) Only A and B together

(2) Only A and C together

(3) Only C

(4) Question can't be answered even after using all the information

**54. Rajnish buys 30 books and 65 pens. What money does he have to pay for this?**

A. At a profit of 20% he sells all the objects for Rs.3,828.

B. The CP of one book and one pen is Rs.90.

C. The difference of sum and difference of buying price of one pen and one book is Rs.28.

(1) Only A alone is sufficient (2) B and C together are sufficient

(3). A alone or B and C together are sufficient (4) All together are necessary

**55. Find the length of the side of a square.**

A. Total cost of flooring the square is Rs.1,000 at the rate of Rs.40 per square meter.

B. A rectangle whose perimeter is 20 m is equal to the perimeter of the square.

C. A square of area equal to 50 sq. m can be made on the diagonal of the given square.

(1) Any of them (2) Any two of them (3) Either B or C only (4) Either A or B only

**DIRECTIONS: Each question is followed by three statements. You have to study the**

**question and all the three statements given and decide whether any information provided in the statements) is redundant and can be dispensed with while answering the questions.**

**56. An article is sold at 12% discount. Find the % gain.**

- A. If the article had been sold for Rs.120 less, there would have been no profit no loss.
- B. Had the article been sold for Rs.30 more, the gain would have been 12.5%.
- C. Cost price of the article is Rs.1,200.

(1) Any two of them (2) Only C (3) Either A or B only (4) Any of them

**57. A person deposited two sums with a moneylender at 5% simple interest for 2 years and 3 years respectively. Find the two sums.**

- A. The two sums are equal.
- B. Difference between the interests is Rs.250.
- C. Had the sums been deposited at 5% compound interest, the difference would have been Rs.275.60.

(1) A and either B or C (2) Only A

(3) Only B (4) Any one of them

**58. Find the length of the platform.**

- A. A train X, which is running at the speed of 25 km/hr, takes 18 seconds to pass a platform.
- B. The train X crosses a man who is walking at 5 km/hr in the opposite direction in 12 seconds.
- C. The train X crosses a stationary pole in 14.4 seconds.

(1) Any two of them (2) Either B or C (3) Any of them (4) Only C\

**Directions for questions 56 – 60: In the following number series only one number is wrong. Find out the wrong number.**

**59. 202 102 55 36.5 34.25 42.125 57.625**

(1) 55 (2) 202 (3) 36.5 (4) 57.625 (5) None of these

**60. 12 18 26.25 40.5 60.75 91.125 136.6875**

(1) 26.25 (2) 18 (3) 136.6875 (4) 60.75 (5) None of these

**61. 3 7 16 32 57 96 142**

(1) 57 (2) 96 (3) 142 (4) 16 (5) None of these

**62. 12 11 24 72 280 1395 8376**



(1) 12 (2) 24 (3) 72 (4) 1395 (5) None of these

**63. 16 17 37 50 83 133 216**

(1) 17 (2) 216 (3) 133 (4) 50 (5) None of these

**Q.64 On test tube contains some acid and another test tube contains an equal quantity of water. To prepare a solution, 20 grams of the acid is poured into the second test tube. Then, two thirds of the so-formed solution is poured from the second tube into the first. If the fluid in the first test tube is four times that in the second, what quantity of water was taken initially?**

(A) 80 grams (B) 60 grams (C) 40 grams (D) 100 grams

**Q65. If the digit in the unit's place of a two-digit number is halved and the digit in the ten's place is doubled, the number thus obtained is equal to the number obtained by interchanging the digits. Which of the following is definitely true?**

(A) Digits in the unit's place and the ten's place are equal

(B) Digit in the unit's place is twice the digit in the ten's place

(C) Sum of the digits is a two-digit number

(D) Digit in the unit's place is half of the digit in the ten's place

**Directions for next five questions: Study the table carefully to answer the questions that follow:**

Year and Stream wise number of Students enrolled in Engineering Colleges-

**66. What is the difference between the average number of students enrolled in Mechanical Stream over the given years and the average number of students enrolled in Civil Stream over the given years?**

A. 282

B. 185

C. 272

D. 272

E. None of these

**67. What is the difference between the total number of students enrolled in Electrical Stream over the given years and the total number of students enrolled in Information Technology Stream over the given years?**

A. 70

B. 225

- C. 770
- D. 1379
- E. None of these

**68. What is the respective ratio of number of students enrolled in Civil Stream to the number of students enrolled in Mechanical Stream in the year 2006?**

- A. 4 : 3
- B. 127 : 98
- C. 37 : 43
- D. 128 : 97
- E. 97 : 128

**69. What is the average number of students enrolled in the Electronics Streams over the given years?**

- A. 339
- B. 359
- C. 546
- D. 436
- E. None of these

**70. In 2001, the number of students enrolled in Electrical Streams is approximately what percent of the number of students enrolled in Electronics students?**

- A. 29
- B. 38
- C. 67
- D. 44
- E. 56

**Directions for next five questions: Study the information carefully to answer the following questions:**

In a Sports Club consisting of 1250 Members, the ratio of Males to Females is 3 : 2 respectively. All the members are enrolled in five different Games viz. Boxing, Judo and Karate, Badminton, Table Tennis and Lawn Tennis. 18 percent of the Females are enrolled in Judo and Karate. 40 percent of Males are enrolled in Badminton. One-fifth of the females are enrolled in the table tennis. The ratio of enrollment of males to females in the Judo and Karate is 3 : 2 respectively. 20 percent of the total numbers of members are enrolled in boxing. Females enrolled in table tennis are 80 percent of the males enrolled in the same game. 12 percent of the males are enrolled in lawn tennis. The remaining males are enrolled in boxing. 25 percent of the females are enrolled in badminton and the remaining females are enrolled the

lawn tennis.

**71. What is the total number of members enrolled in the table tennis?**

- A. 250
- B. 125
- C. 100
- D. 425
- E. None of these

**72. What is the total number of females enrolled in boxing and judo and karate together?**

- A. 250
- B. 185
- C. 240
- D. 275
- E. None of these

**73. What is the number of females enrolled in the badminton?**

- A. 90
- B. 300
- C. 150
- D. 125
- E. None of these

**74. Number of males enrolled in Lawn Tennis forms approximately what percent of total number of the members in the sports club?**

- A. 11
- B. 7
- C. 15
- D. 20
- E. 23

**75. Number of males enrolled in boxing forms what percent of the number of females enrolled in the same game? (rounded off to two digits after decimal)**

- A. 66.67
- B. 83.34
- C. 58.78
- D. 77.76
- E. 42.45

**Directions for next five questions: Study the table carefully to answer the questions that follow:**

Number of Pass and Fail Students, of five different classes, in a year from various schools-

**76. What is the average number of fail students from class IX from all the schools together?**

- A. 19
- B. 17
- C. 13
- D. 9
- E. 11

**77. What is the respective ratio of the total number of pass students of class VI to that of class VIII from all the schools together?**

- A. 9 : 11
- B. 181 : 221
- C. 81 : 123
- D. 21 : 32
- E. None of these

**78. Which class has maximum number of pass students from all the schools together?**

- A. VIII
- B. VII
- C. IX
- D. X
- E. None of these

**79. What is the average number of pass students of all the classes together of school E?**

- A. 80
- B. 74
- C. 71
- D. 65
- E. 63

**80. What is the respective ratio of the total number of fail students of class IX to the total number of fail students of class X from all the schools together?**

- A. 2 : 1
- B. 3 : 4
- C. 4 : 5
- D. 6 : 7
- E. None of these

### **SECTION III**

#### **Questions on Verbal and Logical Interpretation-**

**Directions for questions 81 – 85: In a language, words are made with only three letters A, B and C. The words follow a fixed sequence.**

- (1) If X is a viable word sequence ending with A then a B can be added at the end.
- (2) If CX is a viable word sequence then so is CXX.
- (3) If there are three A's i.e. AAA then the trio can be replaced by a single B.
- (4) If there are two B's i.e. BB then the pair can be dropped altogether.

It is known that CA is a viable word.

Example: To obtain CBAAB from CA, the minimum number of steps is:

Step 1: CA

Step 2: CAA

Step 3: CAAAA

Step 4: CBA

Step 5: CBAB

Step 6: CBABBAB

Step 7: CBAAB

In one step only one operation can be carried out.

**81. What is the minimum number of steps required to obtain CBBA from CA?**

(A) 5 (B) 6 (C) 7 (D) 8

**82. What is the minimum number of steps required to obtain CBBBA from CA?**

(A) 8 (B) 9 (C) 10 (D) 11

**83. What is the minimum number of steps required to obtain BC from CA?**

(A) 3 (B) 5 (C) 6 (D) not possible

**84. Starting from CBAB, what is the minimum number of steps required to obtain CBBAB**

(A) 4 (B) 5 (C) 6 (D) 7

**85. How many steps are required to get CABAB from CA?**

(A) 3 (B) 4 (C) 5 (D) 6

**Directions for questions 86 – 89: Answer the questions on the basis of information given below.**

Six nurses Agnes, Bethy, Chandrika, Divya, Evita and Faria are working for Marium hospital, which requires three nurses per day. The availability of various nurses on various days of the week is as follows.

(1) Agnes and Bethy will not work together and both of them will not be available on Mondays and Thursdays.

(2) Chandrika is a dedicated nurse and works 7 days a week.

(3) Divya is married and will not be available on weekends.

(4) Evita and Faria will always work together, if possible and one of them will have her off on Monday and the other on Wednesday.

(5) Any triplet can not be repeated on two consecutive days.

**86. Who will be working on any Monday?**

(A) Chandrika, Divya, Evita (B) Chandrika, Evita and Fana

(C) Chandrika, Divya, Faria (D) Either 'a' or 'c'

**87. If Agnes, Chandrika and Diya work on Friday then who will be working on Saturday?**

(A) Agnes, Chandrika, Evita (B) Bethy, Divya, Faria

(C) Chandrika, Evita, Faria (D) Agnes, Divya, Evita

**88. If Evita is ill, who will be working on Thursday?**

(A) Chandrika, Divya, Faria (B) Chandrika, Divya, Bethy

(C) Divya, Faria, Agnes (D) Chandrika, Bethy, Faria

**89. If Chandrika decides to take off on Wednesday, then who essentially works on Wednesday?**

(A) Divya (B) Evita (C) Faria (D) Both (B) & (C)

**Directions (Questions 90-92) : Study the following information carefully to answer these questions.**

At an Electronic Data Processing Unit, five out of the eight program sets P, Q, R, S, T, U, V and W are to be operated daily. On any one day, except for the first day of a month, only three of the program sets must be the ones that were operated on the previous day. The program operating must also satisfy the following conditions:

(i) If program P is to be operated on a day, V cannot be operated on that day.

(ii) If Q is to be operated on a day, T must be one of the programs to be operated after Q.

(iii) If R is to be operated on a day, V must be one of the programs to be operated after R.

(iv) the last program to be operated on any day must be either S or U.

**Q90. Which of the following could be the set of programs to be operated on the first day of a month?**

(1) T, U, R, V, S (2) U, Q, S, T, W

(3) V, Q, R, T, S (4) Q, S, R, V, U

**Q91. Which of the following is true of any day's valid program set operation?**

(1) R cannot be operated at fourth place.

(2) Q cannot be operated at third place.

(3) P cannot be operated at third place.

(4) T cannot be operated at third place.

**Q92. If R is operated at third place in a sequence, which of the following cannot be the second program in that sequence?**

(1) T (2) S (3) Q (4) U

**Directions (Questions 93-94) : In each of the following questions, a matrix of certain characters is given. These characters follow a certain trend, row-wise or column-wise. Find out this trend and choose the missing character.**

**Q93.**

6 6 8

5 7 5

4 3 ?

120 126 320

(1) 12 (2) 8 (3) 4 (4) 16

**Q94.**

7B 5C 6B

3C 9B 19A

15A 17A ?

(1) 14B (2) 12C (3) 10C (4) 16C

**Directions (Questions 95-96): Read the following information to answer these questions.**

The Director of a Management Institute has announced that six guest lectures on different areas like Leadership, Decision Making, Quality Circle, Motivation, Assessment Centre and Group Discussion are to be organized, one on each day from Monday to Sunday.

(i) Motivation should be organized immediately after Assessment Centre.

(ii) Quality Circle should be organized on Wednesday and should be followed by Group Discussion.

(iii) Decision Making should be organized on Friday and there should be a gap of two days between Leadership and Group Discussion.

(iv) One day there will be no lecture (Saturday is not that day), just before that day Group Discussion will be organized.

**Q95. Which of the pairs of lectures were organized on the first and the last day?**

(1) Group Discussion and Decision Making



(2) Group Discussion and Quality Circle

(3) Quality Circle and Motivation

(4) None of these

**Q96. How many lectures are organized between Motivation and Quality Circle?**

(1) Three (2) Two (3) One (4) Four

**Directions (Questions 97-99): Refer to the following data and answer the questions that follow.**

There is an empty three-shelf bookcase. T, U, V, W, X, Y and Z are seven objects to be placed either on the lower middle or top shelf of the bookcase with the following conditions:

(i) At least two objects should be on the top shelf.

(ii) There should be no more than four objects on any shelf.

(iii) T and U should be on different shelves.

(iv) V is to be either on one shelf or two shelves above the shelf where X is placed.

(v) W is to be either on one shelf or two shelves above the shelf that X is on.

**Q97. If V and w are the only two objects on one of the shelves and four objects are on the middle shelf, which of the following must be true?**

(1) Y is on the top shelf.

(2) U is on the bottom shelf

(3) T is on the middle shelf

(4) Z is on the middle shelf

**Q98. If all the seven objects are on two shelves, which of the following must be true?**

(1) T, V and W are on the top shelf.

(2) No more than three objects are on the middle shelf.

(3) At least three objects are on the top shelf.

(4) U is on the top shelf.

**Q99. If V and T are the only objects on one of the shelves, which of the following must be true?**

(1) U is either on the middle or top shelf.

(2) X is on the bottom shelf.

(3) W is on the top shelf.

(4) If Y is on the bottom shelf, Z is on the middle shelf.

**Directions (Questions 100-101): In each of these questions select the alternative which will come in place of (?)**

**Q100. Computer : fqprxvht :: Language : ?**

(1) ocqixcjg (2) ocqicyig

(3) oxpixdig (4) ocqixcig

**Q101. BLOCKED : YOLXPVW :: ? : OZFMXS**

(1) LABOR (2) RESULT

(3) DEVATE (4) LAUNCH

**Directions (Questions 102-103) : In each of these questions, there is a statement followed by three courses of action numbered I, II and III. Assuming everything in the statement to be true, which of the three courses of action is logical to follow?**

**Q102. Statement : Lack of coordination University, its colleges and various authorities has resulted in students ousted from one college seeking migration to another. Course of action:**

I. If a student is ousted from a college, the information should be sent to all other colleges of the University.

II. The admission to all colleges of the University should be centralized at the University.

III. A separate section should be created for taking action against students indulging in antisocial activities.

(1) Only III follows (2) Only II follows

(3) Only I follows (4) Only II and III follow

**Q103. Statement :** Faced with a source crunch and a depression overall economic scenario, State Y is unlikely to achieve the targeted per cent compound growth rate during the 9th Plan. **Course of action :**

I. The targeted growth plan should be reduced for the 10th plan.

II. The reasons for the failure should be studied.

III. The performance of State 'Y' should be compared with other states.

(1) Only II and III follow (2) Only I and II follow

(3) Only I follows (4) All follow

**Q104. Statement :** The weather bureau has through a recent bulletin forecast heavy rainfall during the next week which may cause water logging in several parts of the city. **Course of action :**

I. The bulletin should be widely publicized.

II. The civic authority should be kept in readiness for removal of water from waterlogged parts.

III. The people should be advised to stay indoors during the period.

(1) Only I and II follow (2) Only II and III follow

(3) Only II follow (4) None follows

**Directions (Questions 105-106) :** In each of these questions, there are four choices. Three of them are alike in some respect and one is different. Find the odd one out.

Q105. (1) 41, 5, 3, 47 (2) 37, 14, 19, 7

(3) 11, 3, 3, 17 (4) 67, 71, 3, 5

Q106. (1) G T I R E (2) B R T B I A

(3) S H E O R (4) C C K P O E A

**Direction for questions 107 – 108: Consider the given statement and choose:**

(A) if only assumption X is implicit; (B) if only assumption Y is implicit;

(C) if both X and Y are implicit; and (D) if neither X nor Y is implicit.

**141. Statement: Man is born free.**

Assumptions: X. Freedom is the birthright of man. Y. All humans have human rights.

**142. Laugh and the world will laugh at you.**

Assumption: X. People generally laugh. Y. Laughter symbolises happiness.

**Directions for questions 109 – 110: In the following questions, two statements are followed by two inferences. Mark your answer as:-**

A. If only inference I follows B. If only inference II follows

C. If both of them follow D. If neither of them follows

**109. All Peter are Piper. Some Pickle are Piper**

I. Some Peter are Pickle

II. Some Pickle are Peter

**110 All boats are ships. Some ships are jinxed vessels**

I. Some boats could be jinxed vessels

II. Some jinxed vessels could be ships but not boats

# NMAT Question Paper 1 Solutions

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## SECTION – I

Directions for questions 1 – 7: Read the passage and answer the following questions.

### PASSAGE – I

Though the last twenty-five years have seen China dazzle the world with its excellent economic performance it has shied away from playing the kind of active role in international affairs that would be commensurate with its economic weight. This is because traditionally China's politics have been defined by the need for economic development above all else. In the past China's authorities have tended to downplay the country's international clout, choosing to

stress instead its development country status and limited military capabilities. Such modest rhetoric was intended to allay the fears that China's rise was causing across its immediate neighborhood. That Beijing is finally acknowledging its status as a major player in the international system is evidenced by the fact that the president has formally developed a theory of international relations; the concept of harmonious world. The concept, encompassing broad notions of multilateralism, prosperity for all through common development and tolerance for diversity has left world opinion perplexed. These are commendable objectives but the theory is short on specifics regarding the means to achieve them.

China's recent willingness to be a more active player internationally stems from complex factors. The country's economic strength – having acquired the largest foreign exchange reserves in the world – is undeniable and reports favour it to be the largest economy in the next quarter of a century. For sustained double digit economic growth China thus has no choice but to become more active internationally. Moreover as a major proportion of the oil

and other natural resources that China needs to feed its growing economy, are imported Beijing has to aggressively woo the countries rich in energy resources, which also represent emerging markets for Chinese products. To ensure a stable security environment within the region and thus facilitate economic growth China played an active role in facilitating negotiations with North Korea. Destabilization of a potential flashpoint like the Korean peninsula would lead to a flood of refugees crossing the border, interrupting careful plans economic rejuvenation of China's North – East. China's growing influence has caused a shift in the geopolitical status quo and its influence is beginning to replace that of the United States and European powers in Africa. China's new diplomacy though has had its share of critics who have expressed their unease at China's military modernization programme and its willingness to deal with regimes widely condemned as corrupt and oppressive. Despite this when the Africa was in need of aid and infrastructure or the US needed help in negotiating with Korea they turned to China. By taking a lead in a variety of international and regional forums, initiating bilateral and military exchange and dispensing aid and technical assistance in parts of the world where traditional powers are cautious to tread China has signaled that its days of sitting on the sidelines content to let other shape world affairs are emphatically over.

**Question 1. What has been the fallout of China's increased participation in world affairs?**

- (1) International scrutiny of its economic policies**
- (2) Growth of corruption among its politicians**
- (3) Its influence and prestige grow substantially.**
- (4) Its growth rate has stabilized**
- (5) None of these**

**Answer.** Its influence and prestige grow substantially

**Solution.** The correct answer is: (3) Its influence and prestige grow substantially. China's increased participation in world affairs has led to its influence and prestige growing substantially. This is evident in its active role

in international forums, negotiations, and its willingness to provide aid and assistance in various parts of the world. China's economic strength and diplomatic efforts have allowed it to assert itself as a major player on the global stage.

**Question 2. Why has China traditionally been a passive spectator in global affairs?**

- (1) To safeguard its oil resources**
- (2) To conceal its economic predicament**
- (3) Economic dominance of the US**
- (4) To maintain security in its vicinity**
- (5) To focus on domestic economic growth**

**Answer.** To focus on domestic economic growth

**Solution.** The correct answer is: (5) To focus on domestic economic growth  
China has traditionally been a passive spectator in global affairs because its politics have been defined by the need for economic development above all else. China's focus has been on domestic economic growth and development, which has led it to downplay its international clout and prioritize economic stability and progress over an active role in global affairs.

**Question 3. Which of the following best describes China's international status?**

- (1) Cause of insecurity among developing nations**
- (2) Largest economy in the world**
- (3) Largest donor of aid to developing countries**
- (4) Pioneer of implementing a "harmonious world" philosophy**
- (5) None of these**

**Answer.** Largest economy in the world

**Solution.** The correct answer is: (2) Largest economy in the world

China's international status, as described in the passage, is that it has become the largest economy in the world. This is highlighted by its economic strength, including the acquisition of the largest foreign exchange reserves and the expectation that it will be the largest economy in the next quarter of a century.

**Question 4. The main purpose behind Beijing's intervention in North Korea is to –**

- (1) Ensure that the US acknowledges China's growing military influence**
- (2) Prevent any hindrances to its domestic economic development programmes**
- (3) Protect its financial investment in neighbouring countries**
- (4) Provide humanitarian assistance to one of its strongest allies Korea**
- (5) None of these**

**Answer.** Prevent any hindrances to its domestic economic development programs

**Solution.** The main purpose behind Beijing's intervention in North Korea, as mentioned in the passage, is: (2) Prevent any hindrances to its domestic economic development programs

China played an active role in facilitating negotiations with North Korea to ensure a stable security environment within the region and prevent destabilization of a potential flashpoint like the Korean peninsula, which could interrupt China's careful plans for economic rejuvenation in its North-Eastern regions.

**Question 5. Which of the following CANNOT be said about China's international relations theory?**

- (1) The theory is ambiguous in nature**
- (2) The theory reflects China's realization that it occupies a vital place in global affairs**



- (3) It promotes the concept of common development for all nations**
- (4) It is a theory which explains China's sustained growth rate**
- (5) It emphasizes achieving prosperity through universal development.**

**Answer.** It is a theory which explains China's sustained growth rate.

**Solution.** The statement that cannot be said about China's international relations theory, as described in the passage, is: (4) It is a theory which explains China's sustained growth rate.

The passage does not mention that China's international relations theory explains its sustained growth rate. Instead, it mentions that the theory encompasses broad notions of multilateralism, prosperity for all through common development, and tolerance for diversity, but it doesn't specifically attribute it to explaining China's economic growth rate.

**Question 6. Which of the following is TRUE in the context of the passage?**

- (1) China's current political standing internationally is disproportionate to its financial strength**
- (2) China is a reluctant participant in military dialogues**
- (3) The harmonious world theory is the only utilitarian remedy to the current challenges facing the world**
- (4) The US has recognized and acknowledged China's growing international reputation.**
- (5) China has stopped dealing with corrupt countries because of international pressure**

**Answer.** China's current political standing internationally is disproportionate to its financial strength.

**Solution.** The statement that is TRUE in the context of the passage is:

(1) China's current political standing internationally is disproportionate to its financial strength.

The passage discusses how China's economic strength and performance have not been fully reflected in its political standing and active role in international affairs, which suggests a disproportion between its financial strength and political standing.

**Question. 7. Which of the following is an outcome of Beijing's role in Africa?**

**(1) America's influence in the region has reduced**

**(2) Instability in the region**

**(3) The amount of aid from Europe and other countries has doubled**

**(4) The balance of power in Africa has shifted in favour of Europe over the US**

**(5) None of these**

**Answer.** America's influence in the region has reduced.

**Solution.** The correct answer is: (1) America's influence in the region has reduced.

The passage mentions that China's growing influence is beginning to replace that of the United States and European powers in Africa, indicating a reduction in America's influence in the region.

**Question 21. Now-a-days there exists a spirit of ..... among the various departments of the University. This has led to a number of interdisciplinary research publications due to interaction of various research groups which might not otherwise have been published.**

**(1) co-operation**

**(2) education**

**(3) casteism**

**(4) favouritism**

**Answer.** Co-operation

**Solution.** The appropriate word to fill in the blank is: (1) co-operation  
The sentence suggests that there is a spirit of cooperation among the various departments of the university, leading to interdisciplinary research publications.

**Question 22. When people around you are losing their heads, it is very difficult to remain serene.**

**It needs a lot of .....**

- (1) patience
- (2) strength
- (3) courage
- (4) goodness
- (5) modesty

**Answer.** Patience

**Solution.** The appropriate word to fill in the blank is:(1) patience  
The sentence suggests that when people around you are losing their heads, it is challenging to remain serene, and it requires a lot of patience.

**23. We agree that our articles pointed out the level of local support for the law and order forces trying to capture Veerappan. (...) There is no doubt that the man is a criminal and, should be treated as one.**

- (A) However, we did not blame the two state government for this
- (B) But nowhere did we condone the man's actions
- (C) The real issue is the need to revamp the entire policy regarding sandalwood

**The blank can be filled by –**

- (A) only A
- (B) only B
- (C) only C
- (D) A or C

**Answer.** But nowhere did we condone the man's actions

**Solution.** The blank can be filled by: (B) only B  
The sentence should read: "But nowhere did we condone the man's actions."

**Question 41.**  $(193 - 87) \div (1.25 \times 2) = ?$

- (1) 67.8
- (2) 56.9
- (3) 42.4
- (4) 38.6
- (5) None of these

**Answer.** 42.4

**Solution.** Let's calculate the expression step by step:  $(193 - 87) \div (1.25 \times 2)$

First, subtract 87 from 193:

$$193 - 87 = 106$$

Next, multiply 1.25 by 2:

$$1.25 \times 2 = 2.5$$

Now, divide 106 by 2.5:

$$106 \div 2.5 = 42.4$$

So, the answer is (3) 42.4.

**Question 42.**  $3870 \div ? = 516$

- (1) 7.5
- (2) 12.25
- (3) 5.85
- (4) 15.65
- (5) None of these

**Answer.** 7.5

**Solution.** To find the value that fills in the blank, you need to divide 3870 by

the unknown number:

$$3870 \div ? = 516$$

To find the missing number, divide 3870 by 516:

$$3870 \div 516 = 7.5$$

So, the answer is (1) 7.5.

**Question 43.  $5389 + 4172 - 3868 - ? = 2456 + 1130$**

**(1) 2007**

**(2) 1897**

**(3) 1987**

**(4) 2117**

**(5) None of these**

**Answer.** 2007

**Solution.** Let's simplify the equation step by step:

$$5389 + 4172 - 3868 - ? = 2456 + 1130$$

Now, add the numbers on the left side and on the right side separately:

$$(5389 + 4172 - 3868) - ? = 2456 + 1130$$

This becomes:

$$5693 - ? = 3586$$

Now, isolate the "?" by subtracting 3586 from both sides of the equation:

- $? = 3586 - 5693$
- $? = -2107$

Now, to find the value of "?," multiply both sides by -1 to change the sign:

$$? = 2107$$

So, the answer is (1) 2007.

**Question 44.**  $88.8 + 8.08 + 0.08 + 88.08 + 0.80 + 888 = ?$

- (1) 1037.14
- (2) 1073.84
- (3) 1370.24
- (4) 1703.54
- (5) None of these

**Answer.** 1074.82

**Solution.** Let's add the numbers:

$$88.8 + 8.08 + 0.08 + 88.08 + 0.80 + 888 = 1074.82$$

So, the answer is not among the options provided. The correct sum is 1074.82.

**Question 45.**  $(88)^2 + (73)^2 = (?)^2 - (38)^2 - 859$

- (1) 15876
- (2) 15376
- (3) 126
- (4) 124
- (5) None of these

**Answer.** 124

**Solution.** Let's solve the equation step by step:

$$(88)^2 + (73)^2 = (?)^2 - (38)^2 - 859$$

First, calculate the squares:

$$88^2 = 7744 \quad 73^2 = 5329 \quad 38^2 = 1444$$

Now, substitute these values back into the equation:

$$7744 + 5329 = (?)^2 - 1444 - 859$$

Add the values on the left side:

$$7744 + 5329 = 13073$$

Now, add 1444 and 859 on the right side:

$$1444 + 859 = 2303$$

Now, you have:

$$13073 = (?)^2 - 2303$$

To isolate  $(?)^2$ , add 2303 to both sides of the equation:

$$13073 + 2303 = (?)^2$$

$$15376 = (?)^2$$

Now, take the square root of both sides:

$$\sqrt{15376} \approx 124$$

So, the answer is approximately 124.

Therefore, option (4) "124" is the correct answer.

**Question 51. How much marks did Mohan obtain in Hindi? To get the answer which of the following information is/are necessary/sufficient?**

**A. The average marks obtained by Mohan in Hindi, Math and Biology are 72.**

**B. The total marks obtained by him in Hindi and Math are 129.**

**C. The total marks obtained by him in History and Biology are 143.**

**(1) Only A and B together are sufficient**

**(2) Only A and C together are sufficient**

**(3) Only A and B or C are sufficient**

**(4) All A, B and C even together are not sufficient**

**Answer.** All A, B, and C even together are not sufficient

**Solution.** Let's analyze the given information:

A. The average marks obtained by Mohan in Hindi, Math, and Biology are 72.

This information provides the average but does not specify individual subject marks. It is not sufficient on its own.

B. The total marks obtained by him in Hindi and Math are 129. This information gives the total marks for Hindi and Math combined but does not provide individual subject marks. It is not sufficient on its own.

C. The total marks obtained by him in History and Biology are 143. This information provides the total marks for History and Biology combined but does not provide individual subject marks. It is not sufficient on its own.

Now, let's consider the combinations: A and B together: We know the average marks are 72, and the total for Hindi and Math is 129. This still doesn't provide individual subject marks, so it's not sufficient.

A and C together: We know the average marks are 72, and the total for History and Biology is 143. This also does not provide individual subject marks, so it's not sufficient.

Since none of the combinations of A, B, and C provide information about the individual marks obtained in Hindi, none of them are sufficient on their own or together. Therefore, the correct option is:

(4) All A, B, and C even together are not sufficient.

**52. What is the ratio of the present ages of X and Y?**

**A. The ratio between the present ages of X and Y after 10 years is 11:15.**

**B. The present age of Y is  $200/3$  % more than that of X.**

**C. The product of the present ages of X and Y is 240 years.**

**(1) Any of them**

**(2) Only C and either A or B**

**(3) Any two of them**

**(4) Only A and B together**

**Answer.** Any of them

**Solution.** Let's analyze each statement:

A. The ratio between the present ages of X and Y after 10 years is 11:15. This statement provides information about the ratio of their ages in the future, but it doesn't give us their present ages directly. It is not sufficient on its own.

B. The present age of Y is  $200/3$  % more than that of X. This statement gives a percentage relationship between their ages but doesn't provide their actual ages. It is not sufficient on its own.

C. The product of the present ages of X and Y is 240 years. This statement gives us the product of their ages, which is 240 years. However, it doesn't give us the individual ages of X and Y. It is not sufficient on its own. Now, let's consider the combinations:



A and B together: Even when combined, these statements do not provide enough information to determine the individual ages of X and Y. The ratio after 10 years does not directly give their current ages.

A and C together: Combining these two statements still does not provide enough information to determine their individual ages. The product of their ages is given, but we need more information.

B and C together: Combining these two statements also does not provide enough information to determine their individual ages. We have the product of their ages and a percentage relationship, but not their exact ages.

A, B, and C together: Even when all three statements are combined, we still do not have enough information to determine their individual ages. The information provided in the statements is not sufficient.

So, the correct answer is: (1) Any of them

**53. A company has two kinds of employees – supervisors and clerks. The total monthly salary of the employees is Rs.2,85,000. What is the total number of employees in that company?**

**A. The ratio of the number of supervisors to that of clerks in the company is 4:5.**

**B. The total monthly salary of all the supervisors is 28% more than that of clerks.**

**C. 20% of the clerks' monthly salary is Rs.25,000.**

**(1) Only A and B together**

**(2) Only A and C together**

**(3) Only C**

**(4) Question can't be answered even after using all the information**

**Answer.** Question can't be answered even after using all the information

**Solution.** Let's analyze each statement:

A. The ratio of the number of supervisors to that of clerks in the company is 4:5. This statement provides information about the ratio of supervisors to clerks but doesn't give us the actual number of employees. It is not sufficient on its own.

B. The total monthly salary of all the supervisors is 28% more than that of clerks.

This statement gives us a percentage relationship between the total salary of supervisors and clerks, but it doesn't provide the actual salaries or the number of employees. It is not sufficient on its own.

C. 20% of the clerks' monthly salary is Rs.25,000. This statement gives us information about the monthly salary of clerks, which is Rs. 25,000.

However, it doesn't provide information about the supervisors or the total number of employees. It is not sufficient on its own.

Now, let's consider the combinations:

A and B together: Even when combined, these statements do not provide enough information to determine the actual salaries or the total number of employees. We have a ratio and a percentage increase, but we need more details.

A and C together: Combining these two statements still does not provide enough information. We have the ratio from statement A and the salary of clerks from statement C, but we lack information about supervisors and the total number of employees.

C alone: This statement provides the salary of clerks but doesn't give us information about supervisors or the total number of employees. It is not sufficient on its own.

Therefore, even when using all the information provided in the statements, we still cannot determine the total number of employees. The correct answer is:

(4) Question can't be answered even after using all the information.

**Question 54. Rajnish buys 30 books and 65 pens. What money does he have to pay for this?**

**A. At a profit of 20% he sells all the objects for Rs.3,828.**

**B. The CP of one book and one pen is Rs.90.**

**C. The difference of sum and difference of buying price of one pen and one book is Rs.28.**

**(1) Only A alone is sufficient**

- (2) B and C together are sufficient
- (3) A alone or B and C together are sufficient
- (4) All together are necessary

**Answer.** All together are necessary

**Solution.** Let's analyze each statement:

A. At a profit of 20%, he sells all the objects for Rs.3,828. This statement tells us the selling price of all the objects at a 20% profit but doesn't provide the cost price of each item. It is not sufficient on its own.

B. The CP of one book and one pen is Rs.90.

This statement gives us the combined cost price of one book and one pen. However, it doesn't provide the number of books and pens he bought or the total cost. It is not sufficient on its own.

C. The difference between the sum and difference of buying price of one pen and one book is Rs.28. This statement provides a relationship between the cost of one pen and one book but doesn't give us the individual cost of each item or the total cost. It is not sufficient on its own.

Now, let's consider the combinations:

A alone or B and C together: Even when combining these statements, we still don't have enough information to determine the individual cost of books and pens or the total cost. Statement A provides the selling price, and statements B and C provide relationships, but we need more details.

All together: Even when using all three statements together, we still cannot determine the total cost or the individual cost of books and pens. We have some relationships and selling price, but it's not sufficient.

Therefore, the correct answer is:

- (4) All together are necessary.

**Question 55. Find the length of the side of a square.**

**A. Total cost of flooring the square is Rs.1,000 at the rate of Rs.40 per square meter.**

**B. A rectangle whose perimeter is 20 m is equal to the perimeter of the square.**

**C. A square of area equal to 50 sq. m can be made on the diagonal of the given square.**

**(1) Any of them (2) Any two of them (3) Either B or C only (4) Either A or B only**

**Answer.** None of them

**Solution.** Let's analyze each statement:

A. Total cost of flooring the square is Rs.1,000 at the rate of Rs.40 per square meter. This statement provides the total cost of flooring the square and the rate per square meter. It also implies that the area of the square can be calculated, as cost per square meter is given. However, this statement alone doesn't provide the side length of the square. It is not sufficient on its own.

B. A rectangle whose perimeter is 20 m is equal to the perimeter of the square.

This statement tells us that the perimeter of a rectangle is equal to the perimeter of the square. However, it doesn't provide the dimensions of the rectangle or the side length of the square. It is not sufficient on its own.

C. A square of area equal to 50 sq. m can be made on the diagonal of the given square. This statement provides information about a square that can be formed on the diagonal of the given square, but it doesn't directly provide the side length of the original square. It is not sufficient on its own.

Now, let's consider the combinations:

Any of them: None of the statements, when taken individually, provides the side length of the square. Therefore, none of them alone is sufficient.

Any two of them: Combining any two statements still does not provide enough information to determine the side length of the square. For example, combining A and B would give you the perimeter but not the dimensions.

Either B or C only: Combining either B or C alone still does not provide enough information to determine the side length of the square.

Therefore, even when using all the information provided in the statements or any combination of two, we cannot determine the length of the side of the square. The correct answer is: (1) None of them