

JMET MOCK TEST**SECTION – 1**

Directions for questions 1 – 5: 10 people – Brij, Nikhil, Arun, Vijay, Amit, Anand, Subham, Sachin, Rishi, Suketu, are to be seated in two rows of five seats each. The two rows are parallel to each. The first row is numbered from 1 to 5 from left to right and the second is numbered 6 to 10 from left to right. The person in the first row sees the back of the persons in the second row. All the ten people have to be seated in the chairs by taking into consideration some conditions, which are given. The conditions are as follows.

- Nikhil always sits in chair 2.
 - Subham always sits in an odd chair.
 - Rishi always sits two chairs to the right Subham.
 - Anand always sits in the last chair of row 1 or row 2.
 - Amit always sits in a chair diagonally behind Subham.
 - Rishi never sits in the same row as Anand.
1. In which of the following chairs can Amit sit?
(A) 1 (B) 2 (C) 4 (D) 5
 2. If Suketu has to sit diagonally in front of Arun and Brij sits two places before Sachin then where must Vijay sit?
(A) Seat 1 (B) diagonally behind Subham
(C) two places to the left of Nikhil (D) none of these
 3. If Vijay has to sit diagonally behind Suketu and Brij cannot sit next to Subham then where can Brij sit?
(A) 1, 3 or 10 (B) 3 and 10 (C) 10 and 8 (D) None of these
 4. If Brij sits diagonally in front of Vijay and Arun sits diagonally behind Subham, then which of the following must sit next to Rishi?
(A) Brij (B) Subham (C) Anand (D) None of these
 5. If the positions of Anand and Nikhil were interchanged, then...
(A) Anand would sit directly behind Subham (B) Rishi would sit diagonally in front of Nikhil
(C) Both (A) and (B) (D) Neither (A) nor (B)

Directions for questions 6 – 10: These are based on the following information.

There are some tigers, lion and panthers in the National Park. Manu, Nelson, Olga, Pyari, Queenie and Ramu are tigers. Addy, Besty, Charlie, Darkie, and Edgar are panthers. Gori, Himba, King, and Lord are lions. Olga, Pyari, Queenie, Addy, Betsy, Gori, Himba are females. The rest are males. Some of these wildcats, have to be shifted to the Bhilwara Sanctuary. They will be travelling in a special coach with no compartments and there certain constraints based on the nature of animals and their mating patterns. No male panther and female tiger can be put together. No male lion and female panther can be put together. Also, the Bhilwara sanctuary does not want more than two male tigers.

6. If two wildcats of each type are sent, then which of the following is an impossible combination?
(A) Charlie, Edgar, King, Lord, Nelson, Ramu
(B) Addy, Betsy, Gori, Himba, Manu, Nelson
(C) Charlie, Darkie, King, Lord, Olga, Pyari
(D) Addy, Betsy, Gori, Himba, Olga, Pyari

7. If two panthers, three female tigers and two lions are put together, which of the following combinations is possible?
- (A) Charlie, Darkie, Olga, Queenie, Gori, Himba
 (B) Addy, Betsy, Olga, Pyari, Queenie, Gori, Himba
 (C) Charlie, Darkie, King, Lord, Olga, Pyari, Queenie
 (D) Darkie, Edgar, Gori, Himba, Olga, Pyari, Queenie
8. If two panthers, four tigers and one lion are put together, all of the following combinations are possible except
- (A) Addy, Betsy, Gori, Manu, Nelson, Olga, Pyari
 (B) Addy, Betsy, King, Nelson, Ramu, Pyari, Queenie
 (C) Addy Betsy, Himba, Manu, Olga, Pyari, Queenie
 (D) Addy, Betsy, Himba, Manu, Ramu, Pyari, Queenie
9. If three panthers, two tigers and two male lions are put together, which of the following combinations is possible?
- (A) Charlie, Darkie, Edgar, King, Lord, Manu, Nelson
 (B) Addy, Betsy, Charlie, King, Lord, Manu, Ramu
 (C) Charlie, Darkie, Edgar, King, Lord, Pyari, Ramu
 (D) Betsy, Charlie, Darkie, King, Lord, Nelson, Ramu
10. If two panthers, two female tigers and two lions are put together, all of the following combinations are possible except
- (A) Olga, Pyari, Gori, Himba, Addy, Betsy
 (B) Addy, Betsy, Gori, Himba, Pyari, Queenie
 (C) Addy, Betsy, Gori, Himba, Olga, Queenie
 (D) Addy, Betsy, King, Lord, Pyari, Queenie

Directions for questions 11 – 15: Each item has a question followed by two statements.

- Mark (A) if only conclusion I follows
 Mark (B) if only conclusion II follows
 Mark (C) if neither I nor II follows
 Mark (D) if both I and II follow

11. Some rooms are brooms. All brooms are grooms.
Conclusion I: Some rooms are grooms. **Conclusion II:** Some brooms are rooms.
12. All holes are poles. No pole is a dole
Conclusion I: Some holes are doles. **Conclusion II:** Some doles are poles.
13. All heroes are zeros. Some heroes are zeros.
Conclusion I: Some zeros are heroes. **Conclusion II:** Some zeros are heroes.
14. All walks are chalks. All chalks are talks.
Conclusion I: All talks are walks **Conclusion II:** All walks are talks

15. Some girls are flowers. Some flowers are books

Conclusion I: Some girls are books.

Conclusion II: No book is a girl.

Directions for questions 16 – 20: Four players Sachin, Amit, Kapil and Dilip have been awarded medals for their commendable performance in their respective sport. Each of them plays exactly one of the sports – cricket, football, tennis and hockey and each has been awarded exactly one the awards – Arjuna Award, Rajeev Gandhi, Khel Ratna, Padmashree and Ceat Cricketer of the year. Answer the following questions on the basis of the clues given.

- Sachin neither plays football nor received the Ceat Cricketer of the year Award.
- The player who played hockey received Rajeev Gandhi Khel Ratna.
- Arjuna award was not given to Kapil.
- The Tennis player did not receive Padmashree.
- Dilip plays hockey but did not receive Arjuna Award.

16. The player who received Padmashree plays which sport?

- (A) Football (B) Cricket (C) Hockey (D) Tennis

17. Who received Rajeev Gandhi Khel Ratna?

- (A) Sachin (B) Amit (C) Kapil (D) Dilip

18. Which award did Sachin get?

- (A) Arjuna Award (B) Padmashree
(C) Ceat Cricketer of the year (D) Rajeev Gandhi Khel Ratna

19. If Amit was awarded the Padmashree, then the game played by Kapil is...

- (A) Tennis (B) Football (C) Cricket (D) Hockey

20. Amit plays the sport....

- (A) Tennis (B) Football (C) Cricket (D) Can't be determined

Directions for questions 21 – 23: Each of the following questions are based on a condition or a set of conditions. Mark as the answer

- (A) If only sentence 1 follows,
(B) if only sentence 2 follows,
(C) if both follow
(D) is neither follows.

21. All babies are not blue. Some basmatis are blue. All kids are basmatis.

1. Some kids are blue.
2. Some kids are not babies.

22. All arms are dangerous. All dangerous things are deadly. All deadly things are arms. Therefore.....

1. All dangerous things are arms.
2. Some dangerous things are arms.

23. All kittens are not feline. All kittens purr. Some felines purr. Therefore.....
1. Some kittens are not feline.
 2. Some felines are not kittens.

Read the statements and answer the questions 24 – 26:

Mohan's wife name is Radha. They have three sons (Suresh, Ramesh, Mahesh) and one daughter (Bimla).

Suresh is the eldest, Ramesh comes next and then come Mahesh and Bimla in the order. Names of wives of the three sons respectively are Sudha, Savitri and Sita. Bimla's husband's name is Raghunatha. Suresh has two daughters, Kamla and Sarla and one son, Deepak. Ramesh has three sons, Mohan, Ram and Krishna. Mahesh has one daughter, Shobha and one son Srikant. Bimla has a daughter, Sarika and a son, Sagar.

24. What is the name of Kamla's paternal aunt?
 (A) Sudha (B) Savitri (C) Sita (D) Bimla
25. What is the total of all the male members?
 (A) 4 (B) 7 (C) 9 (D) 11
26. If we consider Mohan and Radha as the first generation people, then the ratio of the number of second generation people in the family to that of the third generation is:
 (A) 4 : 5 (B) 5 : 10 (C) 10 : 8 (D) None of these
27. India is playing a match against Pakistan. If India bats first then Pakistan will bat second. If Tendulkar is in the Indian team then India will win the match. If Pakistan bats first then Pakistan will win the match. If Pakistan does not bat second then.....
 (A) Pakistan will win the match (B) India does not bat first
 (C) India bats second (D) Both (A) and (B)
28. If Anup is on time for work then Sachin is late for work. If Suketu is late for work then Sachin is on time for work. If Anup is late for work then Suketu and Sachin are not one time for work. If Sachin is late for work.....
 (A) Anup is on time for work (B) Suketu is on time for work
 (C) Suketu is late for work (D) None of these
29. If David's average increases then Rahul's average will decrease. If Rahul's average does not increase then Saurav's average will not decrease. If Saurav's average increases then David's average will not decrease. If Rahul's average increases then David's average will increase. If David's average will not increase then....
 (A) Rahul's average decreases (B) Saurav's average will not increase
 (C) Saurav's average decreases (D) None of these
30. If Amit uses a Parker pen his essay will look good and people will appreciate his essay. If Amit's essay does not look good....
 (A) Amit does not use a Parker pen (B) People will not appreciate his essay
 (C) Both (A) and (B) (D) Insufficient data

SECTION – 2

Directions for questions 31 – 35: Fill in the blanks with the word or phrase that fits best in the given sentence.

31. The author's technique has established him as an impeccable artist. He proceeds from a simple narrative where the individual events seem to perfectly _____ with the rest of the plot.
 (A) concatenate (B) fabricate (C) conceptualise (D) mix
32. The reaction of the Labour Party when the Liberals won was _____ and definitely surprising in view of their foiled expectations.
 (A) factious (B) upbeat (C) unruly (D) childish
33. The circumstances undoubtedly called for an _____ on whomever was found responsible for the act.
 (A) Inadvertent (B) animadvert (C) explanation (D) None of these
34. Carrying out of quick relief operations was _____ because of sirauli's anterior location.
 (A) disruptive (B) impossible (C) probable (D) possible
35. Mr. Badri moved from London to Burmingham in order to _____.
 (A) concuss (B) contuse (C) convalesce (D) deform

Directions for questions 36 – 39: Select the pair of words which do not have a relationship between themselves least similar to the one between the two words in bold.

36. **PEDESTRIAN : LAMENESS**
 (A) photographer : blindness (B) debater : laryngitis
 (C) violinist : deafness (D) typist : dumbness
37. **POLICEMAN : DETECTIVE**
 (A) doctor : neurologist (B) scientist: physicist (C) officer : gentleman (D) musician : pianist
38. **WOUND : PAIN**
 (A) medicine : health (B) fire : heat (C) disease : treatment (D) exertion : fatigue
39. **LATHE : MACHINE**
 (A) jet : aeroplane (B) car : vehicle (C) pyramid: tomb (D) sea : ocean

Directions for questions 40 – 44: The following questions present a sentence, part of which or all of which is underlined. Beneath the sentence you will find four ways of phrasing the underlined part. The first of these repeats the original; the other four are different. If you think the original is best, choose the first answer; otherwise choose one of the others.

40. While it is certainly true that almost all literate citizens could be taught to improve their ability to read and reason, it must first be demonstrated that such an undertaking would increase the general welfare
- (A) While it is certainly true that almost all literate citizens could be taught to improve their ability to read and reason, it must first be demonstrated that such an undertaking would increase the general welfare
- (B) While it is certainly true that almost all literate citizens could improve their reading and reasoning skills, such a vast undertaking requires a clear demonstration of benefit before being undertaken
- (C) Before undertaking to improve the reading and reasoning of almost all citizens, it is necessary to show that the project will work
- (D) Before the project of improving almost all citizens' reading and reasoning skills is undertaken, that the outcome will be increased happiness must be demonstrated
41. It has been shown through extensive physical and statistical testing that domestic cars accelerate like foreign cars do.
- (A) accelerate like foreign cars do. (B) can accelerate like foreign cars do.
- (C) accelerate as foreign cars. (D) accelerate as foreign cars do.
42. Upset by the recent downturn in production numbers during the first half of the year, the possibility of adding worker incentives was raised by the board of directors at its quarterly meeting.
- (A) the possibility of adding worker incentives was raised by the board of directors at its quarterly meeting
- (B) the addition of worker incentives was raised as a possibility by the board of directors at its quarterly meeting
- (C) the board of directors raised at its quarterly meeting the possibility of worker incentives being added
- (D) the board of directors, at its quarterly meeting, raised the possibility of adding worker incentives
43. In the last twenty years, despite the chauvinism of European connoisseurs, Californian wines are respected throughout the world.
- (A) are respected (B) are becoming better respected
- (C) which have gained respect (D) have gained respect
44. Like the government that came before it, which set new records for growth, laissez-faire capitalism is the cornerstone of the new government.
- (A) laissez-faire capitalism is the cornerstone of the new government
- (B) the cornerstone of the new government is laissez-faire capitalism
- (C) the new government has made laissez-faire capitalism its cornerstone
- (D) the new government has a laissez-faire cornerstone of capitalism

Direction for questions 45 – 54: Read the following passages carefully and answer the questions that follow.

PASSAGE – I

The fundamental and stale feature of Russian history is the slow tempo of her development, with the economic backwardness, primitiveness of social forms and low level of culture resulting from it.

The population of this gigantic and austere plain, open to eastern winds and Asiatic migrations, was condemned by nature itself to a long backwardness. The struggle with nomads lasted almost up to the end of the 17th century; the struggle with winds, bringing winter cold and summer drought, continues still. Agriculture, the basis of the whole development, was advanced by extensive methods. In the north, they cut down and burned down the forests. In the south they ravaged the virgin steppes. The conquest of nature went wide and not deep.

While the western barbarians settled in the ruins of roman culture, where many an old stone lay ready as building material, the Slavs in the East found no inheritance upon their desolate plane; their predecessors had been on even a lower level of culture than they. The western European peoples soon found their natural boundaries, created those economic and cultural clusters, the commercial cities. The population of the eastern plane, at the first sign of crowding, would go deeper into the forest or spread out in to the steppes. The more aggressive and enterprising elements of the peasantry in the west became burghers, craftsman, and merchants. The more active and bold in the East became some of them, traders, but most of them Cossacks, frontiersmen, and pioneers. The process of social differentiation, intensive in the west was delayed in the east and diluted by the process of expansion. "The Tsar of Muscovia although a Christian, rules a lazy minded people," wrote Vico, a contemporary of Peter I. That 'lazy' mind of Muscovites was a reflection of the slow tempo of economic development, the formlessness of class relations, the meagerness of inner history.

The ancient civilisation of the Egypt, India and China had a character that was self-sufficient and they had time enough at their disposal to bring their social relations in spite of low productive powers almost to the same detailed completion to which their craftsman brought the products of their crafts. Russia stood not only geographically but also socially and historically, between Europe and Asia. She was marked off from the European West but also from the Asiatic East, approaching at different periods and in different features, now one and now the other. The East gave her the Tartar yoke, which entered as an important element into the structure of the Russian State. The west was still more threatening foe but at the same time a teacher. Russia was unable to settle in the forms of the East because she continually had to adapt herself to military and economic pressure from the West. The existence of feudal relations in Russia, denied by former historians, maybe considered unconditionally established by later investigations. Furthermore the fundamental elements of Russian feudalism were the same as in the West. But the mere fact that the existence of the feudal epoch had to be established by means of extended scientific arguments sufficiently testified to the incompleteness of the Russian feudalism, its formlessness, its poverty of cultural monument.

45. How does the author compare the civilisations of Egypt, China and India with Russia?
- (A) Russian civilisation underwent a slow process of development whereas civilisations of Egypt, China and India experienced a rapid progress.
 - (B) Russian productive powers are primitive whereas they are advanced in Egypt, China and India.
 - (C) Russian civilisation had a character inadequate whereas the others had a character that was self-sufficient.
 - (D) Russian civilisation is similar to the civilisations of Egypt, China and India.
46. According to the author the attitude of the West towards Russia is
- (A) aggressive
 - (B) ambiguous
 - (C) hypocritical
 - (D) dubious

47. The existence of the feudal epoch had to be established by
- (A) The fundamental elements of Russian feudalism.
 - (B) Scientific arguments that testify its incomplete elements.
 - (C) Poverty of its cultural monuments.
 - (D) Formlessness of Russian feudalism.
48. The difference between the Eastern European people and the Western European people is/are
- (A) The Eastern European people created the commercial cities whereas the Western European people created cultural clusters.
 - (B) The Western European people unlike the east settled in the desolate plains.
 - (C) Social differentiation was intensive in the west and delayed in the east.
 - (D) Eastern European people became merchants whereas people in west became pioneers.
49. Russia was unable to settle in the forms of the east because
- (A) She was marked off from the Asiatic east
 - (B) East gave her the Tartar yoke.
 - (C) She considered West as her teacher.
 - (D) She had to adapt herself to military pressure from the West.

PASSAGE – II

We shall take a simpler approach and see how the brain functions. Whether you are asleep or doing something when awake, the brain is constantly working. Would you say the mind is working when you are asleep? Perhaps, if you are dreaming. Otherwise, what is the mind doing? It is sleeping (or rather you are asleep) – everything seems slippery when one discusses mind. And what is the brain doing? It is sustaining the body activities necessary to keep it alive. Our brains have the extraordinary capacities for consciousness, emotion, memory, learning, language, intelligence and creativity. These are the attributes of what is known as mind. Crucially, much of human brains' capabilities have evolved through aeons in generations of human brains interacting with other human brains. As the brains have evolved the mind has evolved. The modern mind is a storehouse of human development since 1500AD. Yet the human mind has left evidence of its operations for the last 2.8 million years since our evolutionary ancestors were using stone tools.

When the brain is asleep, there is a little area on the brain stem called the reticular formation, the night watchman of the brain, which ensures that most areas in the brain are functioning in a minimal manner. By this we mean that the nerve cells are firing randomly at low speeds. An electroencephalogram (ECG), a device that records electrical activity on the skull, shows a distinctive pattern of slow firings. During deep sleep, only the autonomous parasympathetic nervous system is working. It acts in such a way that the heartbeat and breathing slow down and digestive activity increases. Muscles are relaxed, but we may make some movements that we are not conscious about. Significantly, the neocortex, the outer surface of the brain, sends slow nerve firings. As a result the brain is not aroused. And of course, the mind is not awake.

But there is a stage in sleep when the eyeballs are seen to move rapidly. This is known as the REM (rapid eye movements) when most of the dreaming takes place. The flow of blood of the brain and oxygen uptake increases. Muscles are toned during this state. This is also the time when the brain is believed to consolidate the memory of the events occurred when it is awake. By the way we still do not know how sleep is initiated. But one thing is clear that it is regulated by a biological clock that is located in the cluster of nerve cells of the hypothalamus, which by the way is an important part of the basal ganglia, an area of the forebrain which initiates and regulates movements. Signals in the nerves are sent to this area and cause them to fire slowly, and hence you seldom move when you are asleep. The hypothalamus is responsible for much more than putting the brain to sleep. It controls the basic drives for survival, such as eating, drinking and sexual behaviour. It also controls the release of hormones and plays a vital role in emotional behaviour. It is the works manager of blue-collar workers in the brain Organisation.

50. The passage would be likely to appear in
 (A) a technical article for psychologists
 (B) an introductory college textbook on biology
 (C) a magazine article on the functions of brain
 (D) a teaching manual accompanying a science text
51. The work of parasympathetic nervous system is
 (i) It increases heartbeat and breathing (ii) It increases digestive activity and heart beat
 (iii) It slows down heart beat and breathing (iv) It increases digestive activity
 (A) Only (ii) (B) both (i) and (ii) (C) both (iii) and (iv) (D) only (i)
52. Muscles are toned
 (A) When the nerve cells are firing randomly at low speeds
 (B) During deep sleep when the parasympathetic nervous system is working
 (C) During the rapid eye movement
 (D) When the signals in the nerves are sent to the hypothalamus
53. The works manager of the blue-collar workers in the brain Organisation is responsible for
 (i) Emotional behaviour (ii) Putting the brain to sleep
 (iii) The release of hormones (iv) The arousal of the brain
 (A) Both i & ii (B) only iv (C) i, ii & iii (D) None of these
54. What is the difference between parasympathetic nervous system and REM?
 (A) PNS works during deep sleep whereas REM works when you are awake
 (B) Muscles are relaxed in PNS whereas they are toned in REM
 (C) Heartbeat increase in PNS but it slows down in REM
 (D) Eyeballs move rapidly in REM whereas it moves slowly in PNS.

Directions for questions 55 – 57: Select the word which is closet in meaning to the given word.

55. **CONTINENCE :**
 (A) national (B) global (C) chastity (D) conduct
56. **IMMANENT :**
 (A) forthcoming (B) immediate (C) ingrained (D) planned
57. **NAUSEATING :**
 (A) bedridden (B) sickening (C) amusing (D) threatening

Directions for questions 58 – 60: Arrange the following jumbled sentences in a logical manner.

58. A. Roberts begins his account with the Fairlone Hotel, an indication of things to come.
 B. If only good intentions and good literature were synonymous.
 C. Over the next 300 pages, he genuflects at the shrines of Fleury's and Kalighaat, visits marble palace, spends an evening with an author and his friends and writes about all this in agonizing and dutiful detail, interspersed with chunks of potted regurgitated.
 D. His musings are conscientious and completely devoid of novelty for anyone who knows even a tad about the city.
 (A) ACDB (B) DBAC (C) DACB (D) ACBD

59. A. Says Satish Reddy, managing director, 'It is a question of using our expertise and reputation in finished formulations and reaching out to the global market. China is among the top 10 markets we need to tap.'
- B. His company also wants to tap the low-cost Chinese advantage in components and gearless scooters.
- C. For many though, the Chinese option is a defensive move.
- D. The lure of china is manifold.
- (A) BACD (B) DCBA (C) DABC (D) DBCA
60. A. The IMF's foray into political issues like governance and corruption in Turkey has insisted that all the coalition partners in the government sign the IMF agreement.
- B. Conditionality is the link between IMF financing and specific actions by borrowing countries.
- C. In East Asia for example the argument is that the IMF insisted on a tight fiscal policy and caused a recession-an admission made by Fischer himself recently.
- D. Some believe that the IMF's conditionalities are wrong.
- (A) BDCA (B) CDAB (C) CDBA (D) ACBD

T

C

Y

SECTION – 3

61. A semicircular road track has to be constructed joining village hospital and B.D. Centre. If the village hospital is 1 km east of the B.D. Centre and the village school is 1 km north to B.D. Centre, what is the cost of the construction of road? (Cost of construction is Rs. 1 lack / km)
- (A) $\pi/2$ (B) $\pi/4$ (C) $3\pi/2$ (D) $\pi/8$
62. Two casks A and B contain Milk and Water in the ratio 2 : 1 respectively. In what ratio the mixture in them should be mixed so that the resultant mixture contains Milk and Water in ratio 1 : 1.
- (A) 2 : 3 (B) 1 : 1 (C) 4 : 7 (D) 1 : 2
63. A professor from IIT Kharagpur plans to leave from Kharagpur to Calcutta, which is a three hours journey. The maximum number of trucks leave Calcutta between 6 am to 9 am and 2 pm to 4 pm. At what time should he leave in order to avoid the traffic as far as possible?
- (A) 6 am (B) 9 am (C) 12 noon (D) 2 pm
64. Two pipes X and Y can fill a tank separately in 10 min and 15 min. Both the pipes are opened and after 4 min pipe, X is closed. After how much time will the tank be full?
- (A) 4 min (B) 5 min (C) 6.5 min (D) 3 min
65. A flight from Ahmedabad to Calcutta (which is 1500 km away) takes off at 8 am. But just after the take off the plane has to reduce its speed by 150 km/hr due to bad weather and the flight gets delayed by half an hour. What is the scheduled time of flight at Calcutta?
- (A) 10:00 am (B) 9:30 am (C) 11:00 am (D) None of these
66. Three pipes A, B and C can fill a cistern in 6, 12 and 18 hours respectively, while another pipe D can empty it in 15 hours. In which of the following case tank will be filled in minimum time.
- (A) B alone is opened (B) A and D are opened together
(C) A, B and D are opened (D) B, C and D are opened
67. Three trains P, Q & R move between stations A & B at a distance of 440 km, at 50, 40, & 60 kmph respectively. P & Q leave A at 4 a.m. and 5:15 a.m. respectively and R leaves B at 7:30 a.m. Train P will be equidistant from Q & R at
- (A) 8 a.m. (B) 8:15 a.m. (C) 9 a.m. (D) 9:15 a.m.
68. Gill and Konika start to swim the length of the pool at opposite ends of a 90 feet pool. Gill at the rate of 3 ft/s and Konika at 2 ft/s. They swim back and forth for 12 minutes. Allowing no loss of time at the turns, find the number of times they meet each other at either ends of the pool.
- (A) 8 times (B) 12 times (C) 16 times (D) 24 times
69. If $\log 2 = 0.30103$, $\log 3 = 0.47712$ and $\log 7 = 0.84509$ what is the value of $\log 8400$?
- (A) 3.7314 (B) 2.8627
(C) 3.9242 (D) cannot be determined
70. Three men Govinda, Salman and Shahrukh went to a disco with six girls. If one man can dance with one girl, in how many ways did the 3 guys dance?
- (A) 36 (B) 80 (C) 180 (D) 120

71. Three casks of equal volume are filled with mixture of wine and water. The proportion of wine to water in the three casks is 2 : 3, 3 : 4 and 4 : 5 respectively. The contents of three casks are emptied into a single cask. What is the proportion of wine and water in it?
 (A) 401 : 449 (B) 401 : 544 (C) 401 : 344 (D) 3 : 4
72. The population of a village is 3600; $\frac{5}{9}$ th of them are males and the rest females: 40% of the males are married. Find the percent of married females? Assume that the husband/wife of every married person in the village is alive.
 (A) 40% (B) 80% (C) 60% (D) 50%
73. What is the number of printing figures required to number the book with 200 pages?
 (A) 200 (B) 600 (C) 492 (D) 372
74. Which of the following can be a product of two 3-digit numbers of the form $xx3$ and $xx6$?
 (A) 1000046 (B) 86508 (C) 92436 (D) 8918
75. If $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$. Then $A^2 - 5A + 7I = ?$, where I is a unit matrix of second order.
 (A) 1 (B) -1 (C) 0 (D) None of these
76. $f(x) = \frac{[(1+x)^{1/2} + (1-x)^{1/2}]}{[(1+x)^{1/2} - (1-x)^{1/2}]}$, then $f(\sqrt{3}/2) = ?$
 (A) $2/\sqrt{3}$ (B) $1/\sqrt{3}$ (C) $\sqrt{3}$ (D) $\sqrt{3}/2$
77. A starts a business with a capital of Rs. 1700 and admits, two partners B & C after 3 and 6 months respectively. After a year the profits are divided in the ratio of 2 : 3 : 5. What amount, in rupees, did B & C contribute?
 (A) 8500, 5100 (B) 3400, 8500 (C) Rs. 3750 (D) Rs. 5000
78. A, B and C start a business. A receives $\frac{2}{3}$ of profits, B and C divide the remainder equally. A's income is decreased by Rs. 200, when the rate of profit falls from 5% of capital of 45 of capital. Find the capital of B.
 (A) Rs. 10000 (B) Rs. 3000 (C) Rs. 3750 (D) Rs. 5000
79. $\lim_{x \rightarrow 0} (1+x)^{1/x}$ is equal to
 (A) 1 (B) ∞ (C) e (D) e^2
80. A score of 5 or 9 is to be obtained from a throw of two dice. The probability is greater in which case
 I. for a score of 5 II. for a score of 9
 (A) I (B) II (C) both are equal (D) None of these
81. The angle of elevation of the top of an incomplete tower from a point 100 mts away from the base is 45? How much higher is the tower if the angle of the top from the same point is 60?
 (A) 41.4 m. (B) 73.2 m. (C) 56.4 m. (D) 36.4 m.
82. The product of n positive numbers is unity. Then their sum is
 (A) a positive integer (B) divisible by n (C) equal to $n + \frac{1}{n}$ (D) never less than n.

83. If x and y are different integers, both divisible by 5, then which of the following is not necessarily true?
(A) xy is divisible by 25 (B) $(x + y)$ is divisible by 5
(C) $(x - y)$ is divisible by 10 (D) $(x - y)^2$ is divisible by 5
84. What will be the last digit of $2^{3^{4^5}} \times 5^{4^{3^2}}$?
(A) 1 (B) 0 (C) 5 (D) None of these
85. The product of two numbers is 2160 and their HCF is 12. Find the possible pair of numbers.
(A) 36, 60 (B) 24, 36 (C) 36, 48 (D) 12, 60
86. Poles are erected on either side of a highway. If on one side poles are erected every 80 m starting from 40th m and on the other side every 70 m starting from 80th m, how many poles will be exactly in front of each other if the highway is 5 km long.
(A) 12 (B) 23 (C) 8 (D) 9
87. If for every management book in a library there are 2 books on history and on every book of history there are 7 books of psychology, the ratio of the books of psychology, history and management in the library is
(A) 14 : 7 : 2 (B) 14 : 2 : 1 (C) 7 : 2 : 1 (D) None of these
88. A train after travelling for 100 km met with an accident and proceeds with a reduced speed, thus reaching the destination 35 minutes late. Had the accident occurred 50 km ahead, the train would have reached 25 min sooner. What is the total distance travelled by the train?
(A) 150 km (B) 170 km (C) 250 km (D) 270 km
89. Top Careers & You provides a four-letter scancode to every student. If the every scancode begins with R, then how many students can get the scancode if repetition of letters is allowed?
(A) 17576 (B) 15600 (C) 35880 (D) None of these
90. Basanti travels a part of the journey by car at 56 km/h and the remaining by tonga at 32 km/h. If she reaches the destination in 12 hrs, find the distance travelled by her car, if ratio of distance travelled by car to tonga is 7 : 8?
(A) 124 km (B) 156 km (C) 224 km (D) 256 km

SECTION – 4

Directions for questions 91 – 96: These are based on the following graphs.

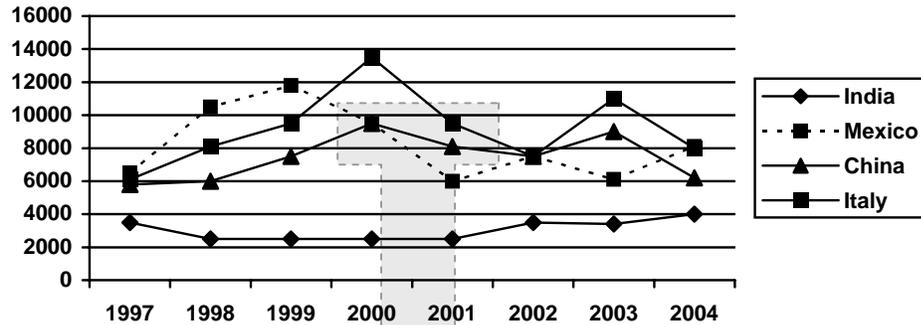
INDIA'S EXPORTS (Rs. CRORES)

Note: Exports of Agricultural and non-agricultural products together need not add up to total exports.



91. What percent of India's total trade, i.e. (exports + imports) do agricultural exports form in 1992?
 (A) 20% (B) 30% (C) 40% (D) 50%
92. If 50% of the agricultural exports of 1993 were pulses, what percent of India's total exports in 1993 were pulses?
 (A) 26.7 (B) 27.6 (C) 28.6 (D) 29.6
93. The year in which India had the most unfavourable trade balance, (Trade balance = Exports - Imports) the export of non agricultural products from what percent of export of agriculture products?
 (A) 40% (B) 50% (C) 62.5% (D) 70%
94. If India registers a growth of 25% in total exports in the year 1994, find the value of agricultural products exported in the year 1994 given that ratio of total exports to export of agricultural products remains unchanged from the 1993 figure?
 (A) 100 crores (B) 500crores (C) 1000 crores (D) 1200crores
95. The average export of non agricultural products for the period 1990-1993 is what percent of average total exports for the period 1990-1993?
 (A) 33.4% (B) 29.3% (C) 31.6% (D) 34.4%
96. The average exports per year from 1990 to 1993 forms what percentage of the average imports per year for the same period?
 (A) 66.9% (B) 67.4% (C) 64.6% (D) 65.5%

Directions for questions 97 – 103: The following questions are based on the line graph which gives the data about the exports of the four countries in million US dollars for the years 1997 – 2004.



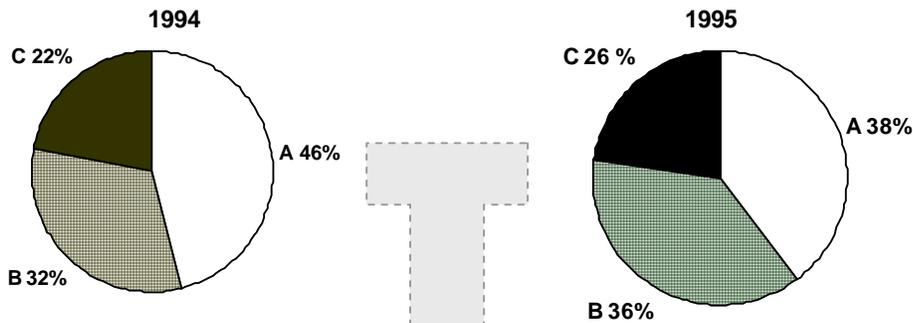
97. Which of the following countries has shown maximum percent increase for any of the given years?
 (A) Mexico (B) India (C) China (D) Italy
98. For how many times were atleast two countries' exports equal in the same year?
 (A) 2 (B) 3 (C) 1 (D) 4
99. In the year 93-94 exports of India and China taken together show what percent increase
 (A) 25% (B) 19.8% (C) 15% (D) 32%
100. How many times has a country shown a consistent decline in exports for 3 years?
 (A) 1 (B) 2 (C) 3 (D) 0
101. How many times over the period exports of atleast three countries taken together didn't decline?
 (A) 3 (B) 5 (C) 2 (D) 4
102. If the exports of India increases by 25% but that of Italy decreases by 20% while that of the other countries remains constant then the increase or decrease in the total exports of the four countries for the years 98-99 in US dollars will be....
 (A) 600 billion decrease (B) 0.6 billion decrease
 (C) 0.6 million increase (D) cannot be determined
103. The average cost of a dollar in year 1994 was 32 Indian rupees. India imported Rs. 8750 crores worth goods that year. What was the trade surplus or trade deficit for India for year 93-94?
 (A) 750 Cr. deficit (B) 750 Cr. surplus (C) 7500 Cr. deficit (D) can't be determined

Directions for questions 104 – 109: The following questions are based on the table depicting the defence expenditure of a country along with the population and the value of rupee for the given years.

Year	Defence Expenditure (Rs. crore)	Population (in millions)	Number of Soldiers	Value of Rupee (in paise)
59-60	268	50	1,50,000	100
69-70	800	55	1,80,000	75
79-80	1100	65	2,25,000	50
89-90	2400	70	2,00,000	30
99-00	4200	80	2,88,000	20

104. In which of the years the ratio of defence expenditure to population was less than the previous given in the table with respect to the value of the rupee in 59-60?
 (A) 59-60 (B) 69-70 (C) 79-80 (D) 89-90
105. In which of the following years the defence expenditure was double the previous year (Taking population into account)?
 (A) 59-60 (B) 69-70 (C) 79-80 (D) 89-90
106. Which of the following years showed the maximum percent increase in defence expenditure per capita over previous year?
 (A) 99-00 (B) 89-90 (C) 79-80 (D) 69-70
107. Talking in absolute terms (and considering the depreciation of rupee), in how many years the defence expenditure was more than the previous year?
 (A) 1 (B) 2 (C) 3 (D) 5
108. In which year was the ratio of number of soldiers to total population the least?
 (A) 59-60 (B) 69-70 (C) 79-80 (D) 89-90
109. In which year was the defence expenditure per soldier the least keeping in mind the depreciation in the value of the rupee over the years?
 (A) 69-70 (B) 79-80 (C) 89-90 (D) 99-00

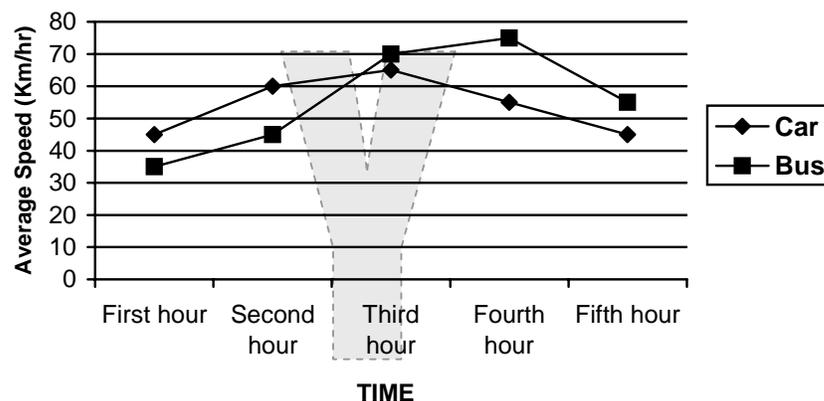
Direction for questions 110 – 111: Study the following information and answer the question given below.



Year 1994		Year 1995	
Type	Number	Type	Number
A	92	A	57
B	64	B	54
C	44	C	39
Total	200	Total	150

110. If the number of B type is reduced by 15 and C type is increased by 32 in 1995. Approximately what will be the new percentage of A?
 (A) 24 (B) 28 (C) 44 (D) 48
111. If the number of A type is increased by 20 in 1994 what will be the new percentage of C?
 (A) 20 (B) 24 (C) 28 (D) Data inadequate

Direction for questions 112 – 115: These are based on the following graph.



112. What is the difference in distance traveled by the bus and the car after the third hour assuming that both started at the same time?
 (A) 20 km (B) 15 km (C) 10 km (D) Indeterminable

113. The bus started at 7:30 p.m. and the car started at 7:54 p.m. in the same direction as the bus. At what time would the car have overtaken the bus?
(A) 9:18 p.m. (B) 9:26 a.m. (C) 8:54 p.m. (D) Indeterminable
114. Assuming the two start at the same time, in approximately what time are the speeds of the bus and the car likely to coincide?
(A) 1 hr. 48 mins (B) 2 hrs. 32 mins (C) 2 hrs. 12 mins (D) 3 hrs. 15 mins
115. In five hours, the distance travelled by the car
(A) is greater than that by the bus (B) is less than that by the bus
(C) is equal to that by the bus (D) None of these.

Direction for questions 116 – 120: The questions are followed by two statements I and II. Mark the answer as

- (A) If I alone is sufficient to answer the question.
(B) If II alone is sufficient to answer the question.
(C) If I and II both taken together are sufficient to answer the question.
(D) If even I and II taken together are not sufficient to answer the question.
116. Two persons A and B move towards each other. After how much time will they meet?
I. Distance between the two is known.
II. A's speed is twice that of B.
117. Is $M > N$, where M and N are integers.
I. $M / N > 1$
II. $|M| > |N|$
118. What is the area of a rectangle of length 40 cm?
I. The diagonals of the rectangle are equal and bisect each other.
II. The length of diagonal of the rectangle is 50 cm.
119. What is the age of Karim?
I. Karim is older than his brother Salim by 2 years.
II. Salim was born in 1980.
120. Is x greater than zero?
I. When x is rounded to the nearest integer, the final value is greater than the greatest integer smaller than x.
II. $1/x > x$.

JMET MOCK TEST**ANSWERS**

1. (A)	2. (B)	3. (A)	4. (A)	5. (C)	6. (C)	7. (B)	8. (B)
9. (A)	10. (D)	11. (D)	12. (C)	13. (D)	14. (B)	15. (C)	16. (A)
17. (D)	18. (A)	19. (C)	20. (D)	21. (D)	22. (A)	23. (C)	24. (D)
25. (D)	26. (A)	27. (D)	28. (D)	29. (D)	30. (A)	31. (A)	32. (B)
33. (B)	34. (D)	35. (C)	36. (D)	37. (C)	38. (C)	39. (D)	40. (A)
41. (D)	42. (D)	43. (D)	44. (D)	45. (C)	46. (A)	47. (B)	48. (C)
49. (D)	50. (C)	51. (C)	52. (C)	53. (A)	54. (B)	55. (C)	56. (C)
57. (B)	58. (A)	59. (C)	60. (A)	61. (A)	62. (B)	63. (C)	64. (B)
65. (A)	66. (C)	67. (C)	68. (A)	69. (C)	70. (C)	71. (B)	72. (D)
73. (B)	74. (B)	75. (C)	76. (C)	77. (B)	78. (D)	79. (C)	80. (C)
81. (B)	82. (D)	83. (C)	84. (B)	85. (A)	86. (D)	87. (B)	88. (B)
89. (A)	90. (C)	91. (A)	92. (C)	93. (C)	94. (C)	95. (C)	96. (D)
97. (A)	98. (B)	99. (B)	100. (D)	101. (D)	102. (B)	103. (D)	104. (C)
105. (D)	106. (D)	107. (C)	108. (D)	109. (B)	110. (B)	111. (A)	112. (A)
113. (B)	104. (C)	115. (B)	116. (D)	117. (D)	118. (B)	119. (D)	120. (D)

