

## English Section - I

**Qs. 1-15.** Read the following passage carefully and answer the questions given below it. Certain words are given in **bold** in the passage to help you locate them while answering some of the questions.

Though the Cold War has ended, selective tactics are still continuing for ensuring the military and economic **dominance** of developed countries. Various types of technology denial regimes are still being enforced which are now being mainly targeted against developing countries like India.

Today, we in India encounter twin problems. On one side there is a large scale strengthening of our neighbours through supply of arms and clandestine support to their nuclear and missile programmes and on the other side all efforts are being made to weaken our indigenous technology growth through control regimes and dumping of low-tech systems, accompanied with high commercial pitch in critical areas. Growth of **indigenous** technology and self-reliance are the only answer to the problem.

Thus in the environment around India, the number of missiles and nuclear powers are **continuously** increasing and destructive weapons continue to pile up around us, in spite of arms reduction treaties.

To understand the implications of various types of warfare that may affect us, we need to take a quick look at the **evolution** of war weaponry and the types of warfare. I am **highlighting** this point for the reason that in less than a century we could see change in the nature of warfare and its effects on society.

In early years of human history it was mostly direct human warfare. During the twentieth century upto about 1990, the warfare was weapon driven. The weapons used were guns, tanks, aircraft, ships, submarines and the nuclear weapons deployed on land/sea/air and also **reconnaissance** spacecraft. **Proliferation** of conventional nuclear and biological weapons was at a peak owing to the competition between the superpowers.

The next phase, in a new form, has just started from 1990 onwards. The world has graduated into economic warfare. The means used is control of market forces through high technology. The participating nations, apart from the USA, are Japan, the UK, France, Germany, certain South-East Asian countries and a few others. The driving force is the generation of wealth with certain types of economic doctrine.

The urgent issue we need to address collectively as a nation is, how do we handle the tactics of economic and military dominance in this new form coming from the backdoor? Today technology is the main driver of economic development at the national level. Therefore, we have to develop indigenous technologies to enhance our competitive edge and to generate national wealth in all segments of economy. Therefore, the need of the hour is *arm India with technology*.

**1.** Why do certain countries use selective tactics against developing countries?

- (1) To help developing countries gain military and economic independence
- (2) To help developing countries govern themselves and be economically independent
- (3) To ally with developing countries to dominate over other developed countries
- (4) To curtail their domination over developing countries
- (5) None of these

**2.** Which are the issues of great concern that India is facing at present, according to the author of the passage?

- (A) The supply of high-tech weaponry by other countries to India's neighbours who are likely to use the same against India.
- (B) Other countries secretly helping India's neighbours to strengthen their nuclear might.
- (C) Obstruction of India's genuine efforts to develop its own nuclear technology.

- (1) (A) and (B) only      (2) (B) and (C) only
- (3) (A) and (C) only      (4) All (A), (B) and (C)
- (5) None of these

**3.** Enforcement of technology denial regimes by developed countries implies which of the following?

- (1) Dominance of developing countries over developed ones
- (2) Exploitation of developing nations by the mightier ones
- (3) Targeting of developed countries by developing countries
- (4) Sympathizing with underprivileged countries
- (5) None of these

**4.** The striking difference in warfare before and after 1990 was the shift from:

- (1) guns, tanks, etc to nuclear weapons
- (2) ships and submarines to spacecraft

- (3) weaponry to economic warfare
- (4) economic forces to high technology driven warfare
- (5) None of these

**5.** Why according to the author, is it necessary to examine how weaponry and warfare have evolved?

- (A) To understand their implications for us.
- (B) To learn the rapid changes that have taken place in weaponry and warfare.
- (C) To master them and enable us to attack our enemies.

- (1) All (A), (B) and (C)
- (2) (A) and (B) only
- (3) (A) and (C) only
- (4) (B) and (C) only
- (5) None of these

**6.** According to the author, the most effective way to counter our major problems is to:

- (A) develop indigenous technologies.
- (B) compete with other countries in their warring tactics.
- (C) generate national wealth in all segments of economy.

- (1) All (A), (B) and (C)
- (2) (A) and (B) only
- (3) (B) and (C) only
- (4) (A) and (C) only
- (5) None of these

**7.** What, according to the author, is the solution to our problems in the international field?

- (A) Importing up-to-date technology and nuclear equipments from developed countries.
- (B) Developing our own in-house technology.
- (C) Eliminating dependence on developed countries.

- (1) (A) and (B) only
- (2) (A) and (C) only
- (3) (B) and (C) only
- (4) All (A), (B) and (C)
- (5) None of these

**8.** What is the general outcome of arms reduction treaties as a whole according to the author of the passage?

- (1) They seem to have become totally defunct
- (2) They have achieved the desired outcome in most cases
- (3) They have resulted in curbing the trade of destructive weapons
- (4) Piling up of weapons has significantly reduced due to such treaties
- (5) None of these

**9.** What, according to the author, is the immediate problem to be collectively resolved by our country?

- (1) To counter the dominance of developed countries through money and muscle power
- (2) To eradicate poverty and become economically self-reliant
- (3) To control the exorbitant rate of population growth
- (4) To develop indigenous technology to manufacture mightier weapons
- (5) None of these

**Qs. 10-12.** Choose the word which is **MOST** nearly the **SAME** in meaning as the word printed in **bold** as given in the passage.

**10. Reconnaissance**

- (1) Investigation
- (2) Reserved
- (3) Recognizable
- (4) Remedy
- (5) Attack

**11. Proliferation**

- (1) Explosion
- (2) Devastation
- (3) Discomfiture
- (4) Abundance
- (5) Extraction

**12. Evolution**

- (1) Magnification
- (2) Expansion
- (3) Progression
- (4) Modification
- (5) Changing

**Qs. 13-15.** Choose the word which is **MOST OPPOSITE** in meaning of the word printed in **bold** as given in the passage.

**13. Indigenous**

- (1) Local
- (2) Domestic
- (3) Abroad
- (4) Foreign
- (5) Exported

**14. Dominance**

- (1) Aggression
- (2) Submission
- (3) Assertion
- (4) Ignorance
- (5) Lethargy

**15. Continuously**

- (1) Illegitimately
- (2) Unconditionally
- (3) Insensitively
- (4) Uninterrupted
- (5) Intermittently

**Qs. 16-20.** In each question below four words which are numbered (1), (2), (3) and (4) have been printed in **bold** of which one word may be wrongly spelt or inappropriate in the context of the sentence. The number of that word is the answer. If all the four words are correctly spelt, mark (5) i.e. "All Correct" as the answer.

**16.** Non-communicable(1) diseases(2) are a major(3) concerned(4) for people in this region. All correct.(5)

**17.** The industry is poised(1) for a quantum(2) jump as it has ventured into Indian markets which have excellent(3) growth opportunities.(4) All correct.(5)

**18.** The government administration is required to undergo(1) a radicle(2) transformation(3) for better service orientation(4). All Correct.(5)

**19.** The squwad(1) that was entrusted with the task of detection(2) of explosives and their neutralization(3) has completed the assignment.(4) All Correct.(5)

**20.** The equipments(1) used for surveillance(2) must be reliability(3) and of appropriate(4) quality. All Correct.(5)

**Qs. 21-35.** Which of the phrases (1), (2), (3) and (4) given below should replace the phrase given in **bold** in the following sentence 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.

**21.** As soon as she opened the umbrella, a scorpion **fell about of it**.

- (1) fell up from
- (2) fell off from
- (3) fell out off
- (4) fell from off
- (5) No correction required

**22.** A true leader's life is a saga of **dedicating to** the cause of welfare of human beings.

- (1) of dedicated
- (2) of having dedication in
- (3) of dedication to
- (4) for dedication at
- (5) No correction required

**23.** He firmly believes that a **significant change in** the structures of our various departments is necessary.

- (1) significant in change among the structures
- (2) significant changing structures
- (3) significantly changing throughout the structures
- (4) significant change among the structures
- (5) No correction required

**24.** Despite being **considerable difficulty**, this is one of the most popular exercises.

- (1) considerably difficult
- (2) considerable difficult
- (3) considerable difficulties
- (4) considerably and difficulty
- (5) No correction required

**25.** The prayer is **most likely to start** at 6.00 a.m.

- (1) be most likely started by
- (2) is mostly liked to start at
- (3) is mostly like to starting at
- (4) is most likely start at
- (5) No correction required

**26.** If you would like to reconsider your decision, please **give a word to me**.

- (1) have a word to
- (2) have a word with
- (3) give a word for
- (4) have to give a word to
- (5) No correction required

**27.** If I were you, I **cannot have granted** him any relief.

- (1) did not have granted
- (2) would not granted
- (3) would not have been granting
- (4) would not have granted
- (5) No correction required

**28.** The issues were so complicated that they could **not be easily resolved**.

- (1) easily been resolved

- (2) have been resolving
- (3) be easily resolve
- (4) had to be easily resolved
- (5) No correction required

**29.** Over-exploitation of ground water **has been led to** their levels falling drastically and causes draughts.

- (1) has led to their levels falling drastically
- (2) was leading its levels to be fallen drastically
- (3) has been led to their levels drastically fell
- (4) was being led to levels fell drastically
- (5) No correction required

**30.** Why you **refrained from mention** this point is a surprise to me.

- (1) refrained from mentioning
- (2) refrained from mention of
- (3) refrain from any mention of
- (4) refrained to have any mention of
- (5) No correction required

**31.** The production of the factory's various departments **had not been** satisfactory this year.

- (1) have not been
- (2) was not been
- (3) will not have been
- (4) has not been
- (5) No correction required

**32.** A committee **comprising of imminent** scholars from various technical institutes was set up.

- (1) comprising with eminent
- (2) comprised eminent
- (3) comprising eminent
- (4) comprising eminently
- (5) No correction required

**33.** In the recent **held** cricket match, most of players recorded more than fifty runs.

- (1) recent holding
- (2) recently held
- (3) recent held
- (4) recent holding of
- (5) No correction required

**34.** Inhabitants of that locality **can classify into** only two groups, namely the poor and very poor.

- (1) will classify in
- (2) can classify for
- (3) will be classified between
- (4) can be classified into
- (5) No correction required

**35.** He gathered courage and rushed to the **blast sight to save** his colleague.

- (1) blast site to save
- (2) blast sight for saving
- (3) blast site for safety
- (4) blast sight so that to save
- (5) No correction required

**Qs. 36-40.** Rearrange the following sentences (A),

(B), (C), (D), (E) and (F) into a meaningful paragraph and then answer the questions given below it.

- (A) Moreover salaries in public sector enterprises are not as competitive as those offered by private or foreign corporates.
- (B) This trend should be a wake up call for stakeholders to examine why employees are seeking better opportunities with private companies in India and abroad.
- (C) Public Sector Enterprises (PSEs) have been experiencing severe challenges in attracting, motivating and retaining their key staff.
- (D) Having identified these as the reasons employees leave PSEs it is important to empower stakeholders to find ways to remedy the situation.
- (E) One reason is that young employees lured away by private firms are more willing to undertake professional risks.
- (F) Employees in specialist roles especially have become increasingly difficult to retain.

**36.** Which of the following should be the **FIRST** sentence after rearrangement?

- (1) (A) (2) (B) (3) (C) (4) (D) (5) (E)

**37.** Which of the following should be the **SECOND** sentence after rearrangement?

- (1) (B) (2) (C) (3) (D) (4) (E) (5) (F)

**38.** Which of the following should be the **THIRD** sentence after rearrangement?

- (1) (A) (2) (B) (3) (C) (4) (D) (5) (E)

**39.** Which of the following should be the **FIFTH** sentence after rearrangement?

- (1) (A) (2) (B) (3) (C) (4) (D) (5) (F)

**40.** Which of the following should be the **LAST (SIXTH)** sentence after rearrangement?

- (1) (A) (2) (B) (3) (C) (4) (D) (5) (E)

**Qs. 41-50.** In the following passage there are blanks each of which has been numbered. These numbers are printed below the passage and against each five words have been suggested, one of which fills the blanks appropriately. Find out the appropriate word in each case.

Traditional bank architecture is based on bank branches. These branches ensure the physical (41) of a customer's savings. A customer may go there to deposit and withdraw money. (42) loans and (43) in other financial transactions. In the past two decades banking architecture has changed—the Automated Teller Machine (ATM) has been a big (44) and credit and debit cards have created new financial spaces. (45) the bank branch has remained the bedrock of the banking system—after all a person needs a bank account in a branch before he can operate a debit or ATM card. This may be about to change as technocrats now (46) cell phones as the new architecture of virtual banks. This has the potential to

make branches (47). Cell phone banking looks especially relevant for India since it can penetrate the countryside cheaply and (48). The world over cell phones are spreading at a (49) rate and in India alone new cell phone connections are growing at the rate of six million a month a rate of customer (50) that no bank can dream of.

- 41.** (1) knowledge (2) security  
(3) presence (4) confidentiality  
(5) guarantee
- 42.** (1) negotiate (2) advance  
(3) credit (4) disburse  
(5) sanction
- 43.** (1) pursue (2) interact  
(3) operate (4) enable  
(5) engage
- 44.** (1) drawback (2) hurdle  
(3) consequence (4) luxury  
(5) innovation
- 45.** (1) Despite (2) Although  
(3) Even (4) Yet  
(5) Until
- 46.** (1) view (2) realise  
(3) display (4) engineer  
(5) assess
- 47.** (1) essential (2) obsolete  
(3) extant (4) retreat  
(5) expired
- 48.** (1) moderately  
(2) occasionally  
(3) compulsorily  
(4) indiscriminately  
(5) effectively
- 49.** (1) phenomenal (2) gradual  
(3) proportionate (4) competitive  
(5) projected
- 50.** (1) discount (2) base  
(3) expansion (4) satisfaction  
(5) relationship

**ANSWERS**

- |                     |         |         |         |         |
|---------------------|---------|---------|---------|---------|
| 1. (5)              | 2. (4)  | 3. (1)  | 4. (4)  | 5. (2)  |
| 6. (4)              | 7. (3)  | 8. (1)  | 9. (2)  | 10. (1) |
| 11. (4)             | 12. (3) | 13. (4) | 14. (2) | 15. (5) |
| 16. (4) concern     |         |         |         |         |
| 17. (5) All correct |         |         |         |         |
| 18. (2) radical     |         |         |         |         |
| 19. (1) squad       |         |         |         |         |
| 20. (3) reliable    |         |         |         |         |
| 21. (2)             | 22. (3) | 23. (5) | 24. (1) | 25. (5) |
| 26. (2)             | 27. (4) | 28. (5) | 29. (1) | 30. (3) |
| 31. (4)             | 32. (3) | 33. (2) | 34. (4) | 35. (1) |
| 36. (3)             | 37. (5) | 38. (5) | 39. (4) | 40. (2) |
| 41. (2)             | 42. (4) | 43. (3) | 44. (5) | 45. (4) |
| 46. (1)             | 47. (1) | 48. (5) | 49. (1) | 50. (3) |

**Q. 1-15.** Read the following passage carefully and answer the questions given below it. Certain words/phrases are given in **bold** to help you to locate them while answering some of the questions.

We are well into the 21st century yet half the world's population live in squatter settlements and work in shadow economies, which generate more than one-third of the developing world's GDP. Slums are not caused by the poor but by governments denying people the right to own and exchange property. When people own their own property they have incentives to invest time, money and energy to improve it because they know that they will be able to benefit from any such improvements *i.e.* the ability to obtain mortgages etc. In short, property rights **beget** capital, which begets innovation, which begets wealth. Sadly the poor typically don't have secure title to their land as there are bureaucratic restrictions on transferring title or there is no clear system for titling. Without legal deeds they live in constant fear of being evicted by landlords or municipal officials. Illiteracy is a major reason poor people often choose not to seek the protection of local courts since in so many countries laws established under colonial rule have never been translated into local languages. When entrepreneurs do set out to legally register business they are discouraged by red tape and costly fees. In Egypt, starting a bakery takes 500 days, compliance with 315 laws and 27 times the monthly minimum wage. The proprietors of such businesses cannot get loans, enforce contracts or expand a personal network of familiar customers and partners. As a result the poor have no choice but to accept insecurity and instability as a way of life.

In India **severe** restrictions on free transfer of property in most rural areas inhibit investment and encourage urban flight. Planning policies however discourage building homes for these migrants as numerous homes are destroyed if they do not comply with planning rules, essentially forcing people to live in slums and **perversely** blaming it on population growth. U.N. Habitat, the UN agency for housing the poor has implemented more plans to **stabilise** the unplanned aspects of urban growth but grandiose plans like UN Schemes and government housing projects simply ignore or worsen the underlying problems. It is when governments grant people legal means to control their assets they empower them to invest and plan ahead. In Buenos Aires, economists studied the experience of two Argentine communities. One had received legal title to its land in the 1980s and **surpassed** the other group, which had not, in a range of social indicators including

quality of house construction and education levels. The Commission on Legal Empowerment of the Poor—a UN affiliated initiative made up of two dozen leaders—is exploring ideas to extend enforceable legal rights to impoverished members of society and is seeking to bring about a consensus on incentives for national and local leaders. As the growth of illegal settlements amply demonstrates the poor are not helpless, all they need is governments to grant them fundamental human rights of freedom and responsibility.

**1.** What did the Argentine study indicate?

- (A) Argentina's economy is booming and the percentage of poor has fallen.
  - (B) When the government gives people the legal means to control their assets they plan for the future.
  - (C) The Government succeeded in widening the gap between the rich and the poor.
- (1) Only (A)
  - (2) Both (A) and (B)
  - (3) Only (B)
  - (4) All (A), (B) and (C)
  - (5) None of these

**2.** According to the author, which of the following factors is responsible for the creation of a slum?

- (1) Migration of landless labourers to cities.
- (2) Municipal authorities building low-cost housing for the poor.
- (3) Unchecked population growth.
- (4) Government failure to secure property rights for citizens.
- (5) Exorbitant cost of living in cities.

**3.** The author's main objective in writing the passage is to\_\_\_

- (1) exhort the UN to play a greater role in rehabilitating slum dwellers.
- (2) praise government initiatives for migrant slum dwellers.
- (3) convince governments to empower the poor.
- (4) enlist the aid of developed countries to tackle the issue of slums.
- (5) chastise slum dwellers for illegal activities that they engage in.

**4.** What benefit does the author see in providing land ownership rights to the poor?

- (1) Steady increase in GDP.
- (2) Gaining independence from colonial rulers.
- (3) Municipal services afforded to the poor will improve.

- (4) It will be an inheritance for future generations
- (5) None of these

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

- (1) Additional UN projects will exacerbate the plight of slum dwellers.
- (2) Although the government allocates land for them the poor choose not to invest in building houses.
- (3) With the spread of slums populations are drifting back to rural areas.
- (4) In order to accumulate profit slum dwellers avoid legally registering their business.
- (5) U.N. has declared the right to housing as a fundamental right.

**6.** What impact do planning policies have on the development of slums?

- (1) They encourage the poor to invest in land thereby perpetuating slums.
- (2) They focus on developing rural rather than urban areas so people have to live in slums.
- (3) They offer alternative practical suggestions for construction of low cost housing.
- (4) They advocate demolishing homes which violate planning rules, encouraging slums.
- (5) None of these

**7.** What is the objective of the Commission on Legal Empowerment of the Poor?

- (1) Coerce international leaders to implement housing projects.
- (2) Bring sanctions against countries denying their citizens the right to housing.
- (3) Selecting experts to recommend ideas to do away with poverty.
- (4) Establish practical ways for governments to empower the underprivileged.
- (5) None of these

**8.** Which of the following difficulties do unregistered businesses face?

- (A) Banks do not give loans in the absence of security.
  - (B) They are unable to earn the loyalty of any customer
  - (C) They cannot enforce contracts.
- (1) Only (A)
  - (2) Both (A) and (C)
  - (3) Both (A) and (B)
  - (4) Only (B)
  - (5) None of these

**9.** What does the growth of illegal settlements indicate?

- (1) The Government needs to implement more restrictions on property transfer.
- (2) Capital earned from underground economies is beneficial to a country's economy.
- (3) The poor are capable of investing resources in their development.

- (4) U.N. housing projects are not properly implemented.

- (5) None of these

**10.** Which of the following prevents the poor from obtaining a business license?

- (1) They do not want to make an effort.
- (2) Government officials are discourteous.
- (3) They lack funds to bribe government officials.
- (4) They do not want to pay taxes.
- (5) They are intimidated by bureaucratic procedures.

**Q. 11-13.** Choose the word which is most nearly the **SAME** in meaning as the word printed in **bold** as used in the passage.

**11. severe**

- (1) acute
- (2) dangerous
- (3) bad
- (4) flexible
- (5) demanding

**12. beget**

- (1) lead
- (2) produce
- (3) happens
- (4) effect
- (5) result

**13. surpassed**

- (1) excel
- (2) matched
- (3) outshone
- (4) won
- (5) competed

**Q. 14-15.** Choose the word which is most **OPPOSITE** in meaning of the word printed in **bold** as used in the passage.

**14. perversely**

- (1) reasonably
- (2) stubbornly
- (3) conveniently
- (4) formally
- (5) helpfully

**15. stabilise**

- (1) insecure
- (2) fixed
- (3) weaken
- (4) unsure
- (5) unreliable

**Q. 16-25.** Read each sentence to find out if there is any error in it. The error, if any will be in one part of the sentence. The number of that part is the answer. If there is no error the answer is (5). (Ignore errors in punctuation if any).

**16.** The company has launched(1) a creative marketing campaign(2) to reach for(3) its rural

customers.(4) No error.(5)

**17.** After her retiring(1) she established many (2) institutions to train(3) underprivileged but talented children(4). No error.(5)

**18.** Against his family's wishes(1) Rajesh plans to(2) take up a job(3) as a journalist.(4) No error.(5)

**19.** The candidate has appealed(1) for donations from younger voters,(2) who will be used(3) to defray campaign expenses.(4) No error.(5)

**20.** Most of that country(1) hilly land is not only(2) unsuitable for building(3) but also for agriculture.(4) No error.(5)

**21.** It is now(1) possible for customers(2) to handle nearly all(3) their transactions online.(4) No error.(5)

**22.** The minister has(1) recently announced(2) a detail insurance plan to(3) meet the needs of the poor.(4) No error.(5)

**23.** In the circumstance(1) the manager has(2) no option(3) except to resign.(4) No error.(5)

**24.** On account of(1) its new investment rules(2) more companies are planning(3) for open its business in China.(4) No error.(5)

**25.** He deserves a lot(1) of praise for all(2) the records he achieves(3) during his career.(4) No error.(5)

**Q. 26-30.** Which of the phrases (1), (2), (3), (4) given below each sentence should replace the phrase printed in bold type to make the sentence grammatically correct? If the sentence is correct mark (5) i.e. 'No correction required' as the answer.

**26.** For honour to the social worker on her tenth death anniversary the government has planned a series of events.

- (1) In honouring of
- (2) With honour
- (3) The honouring of
- (4) To honour
- (5) No correction required

**27.** He is decided to build a luxury hotel for the convenience of tourists visiting the ancient monument.

- (1) Having decided to
- (2) He has decided to
- (3) His decision to
- (4) Deciding to
- (5) No correction required

**28.** Except another restaurants this one offers no discounts.

- (1) Unlike other
- (2) Beside other
- (3) Without another
- (4) Unless other
- (5) No correction required

**29.** He made it a rule to arrive early in order to avoid no delay in the presentation.

- (1) to no delay

- (2) not to avoid
- (3) to avoid any delay
- (4) without avoiding
- (5) No correction required

**30.** The so serious challenge to companies face is to retain its younger staff.

- (1) more serious of challenge to
- (2) very serious challenge for
- (3) most serious challenge
- (4) quite serious challenge against
- (5) No correction required

**Q. 31-35.** In each of the following sentences there are two blank spaces. Below each five words have been denoted by numbers (1), (2), (3), (4) and (5). Find out which pair of words can be filled up in the blanks in the sentence in the same sequence to make the sentence meaningfully complete.

**31.** The\_\_\_business trips though\_\_\_at times gave the executive a unique chance to meet interesting people.

- (1) demanding...memorable
- (2) frequent...monotonous
- (3) crucial...regular
- (4) prolonged...exhausted
- (5) significant...influential

**32.** In order to put an end to the\_\_\_that exist regarding the implementation of the policy the company should issue\_\_\_guidelines.

- (1) ambiguities...clear cut
- (2) differences...cautious
- (3) burden...stringent
- (4) inhibition...appropriate
- (5) reservations...fundamental

**33.** The government has\_\_\_that the infrastructure for the new project must be completed\_\_\_the next six months.

- (1) stipulated...for
- (2) sanction...by
- (3) assurance...in
- (4) mandated...within
- (5) envisage...during

**34.** The official not only\_\_\_the renewal of the contract but also\_\_\_the information about its status.

- (1) revealed...classified
- (2) withdrawn...leaked
- (3) delayed...withheld
- (4) interfere...refused
- (5) impeded...excluding

**35.** To\_\_\_any tensions in the minds of the employees and investors alike the company has promised to consider job cuts as a last\_\_\_\_\_.

- (1) erase...effort
- (2) rid...hurdle
- (3) overcome...decision



1. What will be next term in the following series?

A B B D C F D H E J

- (1) N (2) O (3) K (4) F (5) None of these

2. How many such digits are there in the number 3246759, each of which will occupy the same position when rearranged in ascending order as in the number?

- (1) None (2) One (3) Two  
(4) Three (5) More than three

3. Shyam walked 6 metres facing towards East, then took a right turn and walked a distance of 9 metres. He then took a left turn and walked a distance of 6 metres. How far is he from the starting point?

- (1) 15 metres (2) 21 metres (3) 18 metres  
(4) Cannot be determined (5) None of these

4. If the positions of the first and the sixth letters in the word CONTAGIOUS are interchanged, similarly the positions of the second and the seventh letters are interchanged and so on. Which letter will be the second to the right of the fifth letter from the right?

- (1) O (2) N (3) I (4) T (5) None of these

5. How many such pairs of letters are there in the word RECRUIT, each of which has as many letters between them in the word as they have in the English alphabet?

- (1) None (2) One (3) Two  
(4) Three (5) More than three

Qs. 6-10. In each of the questions below are given four statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements:

6. All clouds are storms.  
Some storms are cyclones.  
All cyclones are thunders.  
Some thunders are lightening.

Conclusions:

- I. Some lightening are cyclones.  
II. No lightening is cyclone.  
III. Some cyclones are clouds.  
(1) Only I follows (2) Only II follows  
(3) Only III follows (4) Only either I or II follows  
(5) None of these

Statements:

7. Some pins are needles.

Some needles are handles.  
Some handles are locks.  
Some locks are keys.

Conclusions:

- I. Some keys are handles.  
II. Some handles are pins.  
III. Some pins are keys.  
(1) None follows (2) Only I and II follow  
(3) Only II and III follow (4) Only I and III follow  
(5) All follow

Statements:

8. All hills are mountains.  
All mountains are dams.  
Some dams are rivers.  
All rivers are lakes.

Conclusions:

- I. Some hills are lakes.  
II. Some dams are lakes.  
III. Some dams are hills.  
(1) Only I and II follow (2) Only II and III follow  
(3) Only I and III follow (4) All follow  
(5) None of these

Statements:

9. Some receipts are challans.  
Some challans are papers.  
Some papers are books.  
All books are files.

Conclusions:

- I. Some papers are files.  
II. Some books are receipts.  
III. No book is receipt.  
(1) Only I follows (2) Only I and II follow  
(3) Only I and either II or III follow  
(4) Only I and III follow (5) None of these

Statements:

10. All bottles are jars.  
All jars are containers.  
All containers are lids.  
All lids are caps.

Conclusions:

- I. All bottles are lids.  
II. All containers are jars.  
III. Some lids are jars.  
(1) Only I and II follow (2) Only II and III follow  
(3) Only I and III follow (4) None follows  
(5) All follow

Qs. 11-15. Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide the data provided in which of the statements are sufficient to answer the question. Choose your answer accordingly.

11. Among P, T, J, F and L who scored the highest?

- I. P scored less than J and F.
- II. T scored more than F but less than L.
- III. J has not scored the highest.

- (1) Only I and II
- (2) Only I and III
- (3) Only II and either I or III
- (4) Only I and either II or III
- (5) All I, II and III

12. Pillar 'P' is in which direction with respect to pillar 'Q'?

- I. Pillar 'M' is to the East of pillar 'T' which is to the South of pillar 'Q'.
- II. Pillar 'P' is to the North of pillar 'M'.
- III. Pillar 'R' is to the North of pillar 'P' and to the East of pillar 'Q'.

- (1) Only I and II
- (2) Only I and III
- (3) Only II and either I or III
- (4) Only III
- (5) All I, II and III

13. What is the code for 'adequate' in a code language?

- I. In the code language, 'rainfall is adequate' is written as 'vo al ji'.
- II. In the code language, 'food is adequate' is written as 'vo ji fa'.
- III. In the code language, 'food is delicious' is written as 'fa vo re'.

- (1) Only I and II
- (2) Only II and III
- (3) Only I and II
- (4) All I, II and III
- (5) None of these

14. How is Sanjeev related to Radha?

- I. Sanjeev is son of Radha's grandfather's only daughter.
- II. Sanjeev has no siblings
- III. Radha has only one brother.

- (1) Only I and II
- (2) Only I and III
- (3) Only II and III
- (4) Only I and either II or III
- (5) None of these

15. How many children are there in the class?

- I. Saurabh is fifth from the top if arranged in descending order of marks.
- II. Sulabha who is ten ranks below Saurabh is 25th from the bottom.
- III. Jatin is four ranks above Sulabha.

- (1) Only I and III
- (2) Only II and III
- (3) Only I and II
- (4) Any two of three
- (5) None of these

Qs. 16-20. In a certain instruction system the different computation processes are written as follows:

- (i)  $x @ y \# z$  means x is multiplied by the sum of y and z.
- (ii)  $x \odot y \% z$  means y is divided by z and the resultant is added to square of x.
- (iii)  $x \$ y \star z$  means z is subtracted from the product of x and y.
- (iv)  $x \bullet y \bar{e} z$  means z is subtracted from y and the resultant is added to x.

In each of the following questions, a set of instruction sequence is given. You are required to find out the outcome which should come in place of the question mark (?) in each of the given sets of sequence.

16.  $13 @ 4 \# 3 = p$

$$p \$ 5 \star 55 = ?$$

- (1) 45
- (2) 75
- (3) 340
- (4) 400
- (5) None of these

17.  $5 \odot 49 \% 7 = a$

$$a \bullet 87 \bar{e} 29 = ?$$

- (1) 118
- (2) 108
- (3) 98
- (4) 80
- (5) None of these

18.  $17 \$ 4 \star 8 = t$

$$7 \odot t \% 15 = ?$$

- (1) 11
- (2) 53
- (3) 13
- (4) 51
- (5) None of these

19.  $m \bullet 78 \bar{e} 56 = 50$

$$m @ 7 \# 13 = ?$$

- (1) 560
- (2) 56
- (3) 280
- (4) Cannot be determined
- (5) None of these

20.  $b \$ 15 \star 18 = 42$

$$b \odot 36 \% 9 = ?$$

- (1) 12
- (2) 16
- (3) 20
- (4) 18
- (5) None of these

Qs. 21-25. In each of the following questions, a group of letters is to be coded by number/symbol codes as per the codes given below and the conditions that follow. In each question, a group of letters is given followed by groups of number/symbol code numbered (1), (2), (3) and (4). The correct combination of codes is your answer. If none of the four combinations is correct, your answer is (5), i.e. None of these.

Letter : P D A F L H M R K T B E U

Number/

Symbol Code : 3 6 # 8 \$ 4 2 7 @ 9 5 1 %

Conditions: (i) If the first letter is a vowel and the last letter is a consonant, both are to be coded as '0'.

(ii) If the first letter is a consonant and the last letter is a vowel, both are to be coded as '@'.

(iii) If the first as well as the last letter are vowels, both are to be coded as the code for first letter.

21. KEDURT

- (1) @16%7@
- (2) 916%7@
- (3) 916%79
- (4) @16\$79
- (5) None of these

22. EDRTMP

- (1) 167923
- (2) 167921
- (3) 067920
- (4) 067923
- (5) None of these

23. FHRAMU

- (1) 847#28
- (2) %47#28
- (3) 847#2%
- (4) @47#2@
- (5) None of these

24. ULTPHE

- (1) %\$934%
- (2) 1\$9341
- (3) %\$9341
- (4) 1\$934%
- (5) None of these

25. HKEDLB

- (1) 5@16\$4
- (2) 4@16\$5
- (3) @@16\$4
- (4) 0@16\$5
- (5) None of these

Qs. 26-30. Study the following information carefully and answer the questions given below:

A private bank deputed eight of its managers P, T, D, E, J, Q, M and R to different cities Bangalore, Delhi, Chennai, Hyderabad, Jaipur, Cochin, Pune and Ahmedabad for marketing of three different products X, Y and Z. The order of managers, cities and products is not necessarily the same. Each product is marketed in not less than two cities and not more than three cities.

T goes to Delhi for marketing of product Y. J goes to Hyderabad for marketing of product Z. E does not go to Bangalore or Jaipur and markets the same product as M who goes to Ahmedabad. R goes to Chennai for marketing of product Z. Same product is marketed in Bangalore and Delhi. E and Q are marketing the same product. P goes to Pune for marketing of product Z.

**26.** Which of the following group of managers go for marketing product 'X'?

- (1) E, Q, R      (2) J, Q, M      (3) J, M, R  
(4) Q, M, R      (5) None of these

**27.** E goes to which of the following cities?

- (1) Jaipur      (2) Cochin      (3) Ahmedabad  
(4) Cannot be determined      (5) None of these

**28.** Which of the following combination of product, manager and city is correct?

- (1) X—Q—Jaipur      (2) X—Q—Cochin  
(3) X—E—Bangalore      (4) Y—D—Cochin  
(5) None of these

**29.** Which of the following persons go for marketing of product Y?

- (1) Q, D, M      (2) Q, T      (3) T, D, Q  
(4) T, D      (5) None of these

**30.** Who goes to Bangalore?

- (1) Q      (2) M      (3) D  
(4) D or Q      (5) None of these

**Qs. 31-35.** In the following questions, the symbols @, #, \$, \* and © are used with different meanings as explained below:

- 'A @ B' means 'A is neither smaller than nor equal to B'.  
'A # B' means 'A is not greater than B'.  
'A \$ B' means 'A is neither greater than nor equal to B'.  
'A \* B' means 'A is neither greater than nor smaller than B'.  
'A © B' means 'A is not smaller than B'.

Assuming the above statements to be true, you have to decide which of the conclusions is/are **definitely true** and then mark your answer accordingly.

**Statements:**

- 31.** F @ J, J # R, R \* L, L © M

**Conclusions:**

- I. F \$ R  
II. M # R  
III. M © J  
(1) None is true      (2) Only I is true  
(3) Only II is true      (4) Only either II or III is true  
(5) All are true

**Statements:**

- 32.** T # W, W \$ Q, Q © D, D @ J

**Conclusions:**

- I. J \$ T  
II. T # J  
III. T \$ Q  
(1) Only I and III are true  
(2) Only either I or II is true  
(3) Only II and III are true  
(4) Only III and either I or II are true  
(5) None of these

**Statements:**

- 33.** L # V, V \$ E, E © U, U @ B

**Conclusions:**

- I. B \$ E  
II. L \$ E  
III. B \* L  
(1) Only I and II are true  
(2) Only III is true  
(3) Only either I or II is true  
(4) All are true  
(5) None of these

**Statements:**

- 34.** M \$ T, T \* R, R @ H, H # G

**Conclusions:**

- I. M \$ H  
II. R @ G  
III. M # R  
(1) Only I is true  
(2) Only II is true  
(3) Only III is true  
(4) All are true  
(5) None is true

**Statements:**

- 35.** H © R, R @ W, W \* E, J \$ F

**Conclusions:**

- I. H @ F  
II. J \$ W  
III. R @ J  
(1) Only I and II are true  
(2) Only II and III are true  
(3) Only III is true  
(4) Only either I or III is true  
(5) All are true

**Qs. 36-40.** Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H are sitting around a rectangular table in such a way that two persons sit on each of the four sides of the table facing the centre. Persons sitting on opposite sides are exactly opposite to each other.

D faces North and sits exactly opposite to H. E is to the immediate left of H. A and G sit on the same side. G is exactly opposite of B who is to the immediate right of C. A is next to the left of D.

**36.** Who is sitting opposite to A?

- (1) G      (2) D      (3) E  
(4) A      (5) None of these

**37.** Who is next to E in clockwise direction?

- (1) G                    (2) B                    (3) F  
 (4) A or F            (5) None of these

**38.** Which of the following pairs of persons has both the persons sitting on the same side with first person sitting to the right of second person?

- (1) DF                    (2) CB                    (3) FC  
 (4) AG                    (5) None of these

**39.** Who is sitting opposite to E?

- (1) D                    (2) A                    (3) F  
 (4) A or D            (5) None of these

**40.** Which of the following statements is definitely true?

- (1) A is facing North  
 (2) E is sitting opposite to F  
 (3) F is to the left of G  
 (4) C is to the left of A  
 (5) None of these

**Qs. 41-45.** Below in each question are given two statements (A) and (B). These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements. Mark answer:

- (1) if statement (A) is the cause and statement (B) is its effect.  
 (2) if statement (B) is the cause and statement (A) is its effect.  
 (3) if both the statements (A) and (B) are independent causes.  
 (4) if both the statements (A) and (B) are effects of independent causes.  
 (5) if both the statements (A) and (B) are effects of some common cause.

**41.** (A) State government has ordered immediate ban on airing of certain movie channels on television.

(B) Few social activists have come together and demanded ban on telecasting 'Adult' movies on television.

**42.** (A) Employment scenario in the country has remarkably improved recently.

(B) The number of prospective job-seekers going abroad has increased recently.

**43.** (A) Government has tightened security checks at all important places and also at various public places.

(B) Incidences of terrorist attacks are increasing day by day.

**44.** (A) High Court has fixed a time limit for repairing all the roads in the city.

(B) Road Development Authorities in the city are carrying out road repair work on urgent basis.

**45.** (A) There is an outbreak of several epidemics in the country.

(B) There was a worst flood situation ever experienced in the past in most parts of the country.

**Qs. 46-50.** In making decisions about important questions, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are both important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question.

Each question below is followed by two arguments numbered I and II. You have to decide which of the argument is a 'strong' argument and which is a 'weak' argument. Give answer:

- (1) if only argument I is strong.  
 (2) if only argument II is strong.  
 (3) if either I or II is strong.  
 (4) if neither I nor II is strong.  
 (5) if both I and II are strong.

**46.** Should the teenagers be denied access to internet?

*Arguments:*

I. Yes, most of the children particularly the teenagers are found to be indulged in accessing pornographic contents.

II. No, denying access to internet would mean denying access to a lot of useful information, instead the access may be controlled.

**47.** Should computer education be made a compulsory subject at school level by the Government?

*Arguments:*

I. No, it may be difficult to teach computers in the schools located in rural parts of the country.

II. Yes, it is difficult to function without computer in the era of modernization.

**48.** Should hand baggage on all international flights be permanently banned?

*Arguments:*

I. No, it causes a lot of inconvenience since items of minimum requirement need to be carried during long haul flights.

II. Yes, it is necessary to ensure security of passengers on board.

**49.** Should all the universities in the country switch over to grade system rather than awarding marks?

*Arguments:*

I. Yes, with this the students falling in a particular range of marks can be treated on par.

II. No, it will be difficult to rank the students when required to be short-listed.

**50.** Should there be complete ban on telecast of Adult movies on television?

*Arguments:*

I. Yes, such movies adversely affect the children and their interests are to be given top priority.

II. No, instead they can be telecast at certain fixed time when children are generally away from home.

**Qs. 51-55. Study the following information carefully and answer the given questions:**

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : say dry 42 96 get 39 kite 67

Step I : 96 say dry 42 get 39 kite 67

Step II : 96 dry say 42 get 39 kite 67

Step III: 96 dry 39 say 42 get kite 67

Step IV: 96 dry 39 say 67 42 get kite

Step V : 96 dry 39 say 67 get 42 kite

Arrangement in Step V is the final arrangement and Step V is the last step.

You have to answer the questions by following the same rules as illustrated above.

**51.** Which step will be the last step of an input for which third step is "91 go 28 mock pet 43 lead 37"?

- (1) Eighth
- (2) Seventh
- (3) Sixth
- (4) Fifth
- (5) None of these

**52.** If the second step of an input is "52 at deep follow 41 16 road 32", what will be the fifth step?

- (1) 52 at 16 road 32 deep follow 41
- (2) 52 at 16 road 41 deep follow 32
- (3) 52 at 16 road 32 follow 41 deep
- (4) There will be no such step
- (5) None of these

**53.** If the third step of an input is "65 daily 12 tie 42 23 foreign urgent" what will be definitely the input?

- (1) foreign 65 tie urgent 12 42 23 daily
- (2) foreign 65 urgent tie 42 daily 23 12
- (3) foreign 65 12 urgent tie 42 daily 23
- (4) Cannot be determined
- (5) None of these

**54.** If the second step of an input is "76 from 48 super itself 56 18 went", how many more steps will be required to complete the arrangement?

- (1) Five
- (2) Six
- (3) Four
- (4) Three
- (5) None of these

**55.** What will be the third step if the input is "thirty days from now 32 56 87 24"?

- (1) 87 thirty days from now 32 56 24
- (2) 87 days thirty from now 32 56 24
- (3) 87 days 24 thirty from now 32 56
- (4) 87 thirty 24 days 32 from now 56
- (5) None of these

**Qs. 56-60. In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing. Give answer:**

- (1) if only I follows.
- (2) if only II follows.
- (3) if either I or II follows.
- (4) if neither I nor II follows.
- (5) if both I and II follow.

*Statement:*

**56.** All resident doctors in Government Hospitals have gone on mass casual leave in protest against the Government's new reservation policy.

*Courses of action:*

- I. The Government should call a meeting of the representatives of the resident doctors and request them to resume their duties.
- II. The Government should order strict action against striking doctors if they do not resume duties immediately.

*Statement:*

**57.** Air pollution level in the city is observed to be rising up day by day.

*Courses of action:*

- I. City development authorities should offer incentive for those who are sharing a private vehicle.
- II. City development authorities should impose heavy taxes on use of individual private vehicle.

*Statement:*

**58.** Many students are unable to cope up with the pressure of examinations and results and commit suicide.

*Courses of action:*

- I. Education department should consider reforms in examination system.
- II. Examining authorities should partially do away with written examinations and instead give weightage to test the practical knowledge through other modes of assessment.

*Statement:*

**59.** Cases of robbery while travelling in public transport have increased substantially in the recent past.

*Courses of action:*

- I. Adequate number of security guards should be deployed in all public transport vehicles immediately.
- II. People should be advised to refrain from carrying highly valuable articles while travelling by public transport system.

*Statement:*

**60.** There is an overall outbreak of epidemics of water-borne diseases in the State as an after effect of recent floods.

*Courses of action:*

- I. The civic authorities should advise the people to use water purifiers before using drinking water and also advise them to maintain overall cleanliness in the locality.
- II. The civic authorities should instruct the water supply department to add extra purifying elements to the water tanks before supplying to the public.

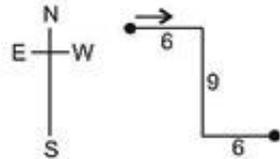
Qs. 61-75. In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?

	PROBLEM FIGURES					ANSWER FIGURES				
61.						1	2	3	4	5
62.						1	2	3	4	5
63.						1	2	3	4	5
64.						1	2	3	4	5
65.						1	2	3	4	5
66.						1	2	3	4	5
67.						1	2	3	4	5
68.						1	2	3	4	5
69.						1	2	3	4	5
70.						1	2	3	4	5
71.						1	2	3	4	5
72.						1	2	3	4	5
73.						1	2	3	4	5
74.						1	2	3	4	5
75.						1	2	3	4	5

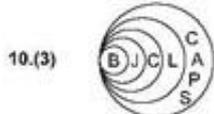
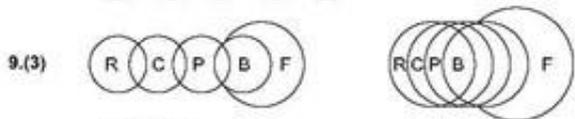
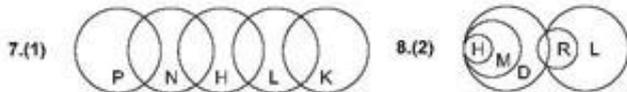
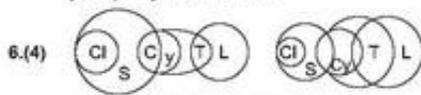
**ANSWERS AND EXPLANATIONS**

1. (4) There are two series, A, B, C, D, E, F and B, D, F, H, J.  
 2. (3) 4 and 9.

3. (1)  $\sqrt{(6+6)^2 + 9^2}$   
 i.e.  $\sqrt{144 + 81} = \sqrt{225}$



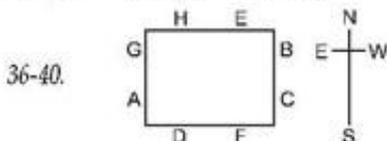
4. (2) The set of the second half letters will come in the beginning, GIOUSCONTA L - R  
 5. (2) E and I.  
 6-10. Consider all probabilities and make Venn diagrams to reach a fool-proof conclusion.



11. (5) 12. (4) 13. (2)  
 14. (5) Only I 15. (3)  
 16. (4)  $13 \times (4 + 3) = 91$ ;  $(91 \times 5) - 55 = 400$ .  
 17. (5)  $5^2 + (49 \div 7) = 32$ ;  $32 + (87 - 29) = 90$ .  
 18. (2)  $(17 \times 4) - 8 = 60$ ;  $7 + (60 \div 15) = 53$ .  
 19. (1)  $28 + (78 - 56) = 50$ ;  $28 \times (7 + 13) = 560$ .  
 20. (3)  $(4 \times 15) - 18 = 42$ ;  $4^2 + (36 \div 9) = 20$ .  
 21. (5) 22. (3) 23. (4) 24. (1) 25. (2)

City	Bangalore	Delhi	Chennai	Hydrabad	Jaipur	Cochin	Pune	Ahmedabad
Person	D	T	R	J	Q	E	P	M
Product	Y	Y	Z	Z	X	X	Z	X

26. (5) 27. (2) 28. (1) 29. (4) 30. (3)  
 31. (4) 32. (4) 33. (1) 34. (3) 35. (5)



36. (5) 37. (2) 38. (4) 39. (3) 40. (2)  
 41. (5) 42. (1) 43. (2) 44. (1) 45. (2)  
 46. (2) 47. (5) 48. (1) 49. (5) 50. (4)

51-55. The logic is, fix highest no. (96) at 1st place, without changing order of others and then alphabetically the lowest word (dry) in Step 2. After that lowest no. (39) and highest word in Step 4 (like say). In Step 5 next highest no. and lowest word and so on .....

51. (2) Given Step III—91 go 28 mock pet 43 lead 37  
 Step IV—91 go 28 pet mock 43 lead 37  
 Step V—91 go 28 pet 43 mock lead 37  
 Step VI—91 go 28 pet 43 lead mock 37  
 Step VII—91 go 28 pet 43 lead 37 mock.  
 Arrangement in Step VII is the final arrangement.  
 So Step VII is the last Step.  
 52. (2) Given Step II—52 at deep follow 41 16 road 32  
 Step III—52 at 16 deep follow 41 road 32  
 Step IV—52 at 16 road deep follow 41 32  
 Step V—52 at 16 road 41 deep follow 32  
 53. (4) In this type of problems—going back is not possible.  
 So, input cannot be determined.  
 54. (3) Given Step II—76 from 48 super itself 56 18 went  
 Step III—76 from 18 48 super itself 56 went  
 Step IV—76 from 18 went 48 super itself 56  
 Step V—76 from 18 went 56 48 super itself  
 Step VI—76 from 18 went 56 itself 48 super  
 Arrangement completes in Step VI—it means 4 more Steps are required to complete the arrangement.  
 55. (3) Input: thirty days from now 32 56 87 24  
 Step I—87 thirty days from now 32 56 24  
 Step II—87 days thirty from now 32 56 24  
 Step III—87 days 24 thirty from now 32 56  
 56. (1) 57. (4) 58. (3) 59. (5) 60. (5)  
 61. (1) 62. (2) 63. (3) 64. (5) 65. (2)  
 66. (4) 67. (2) 68. (4) 69. (2) 70. (2)  
 71. (5) 72. (2) 73. (1) 74. (1) 75. (4)

1. 'Teacher' is related to 'school' in the same way as 'cook' is related to '\_\_\_'

- (1) Food (2) Kitchen (3) Hostel  
(4) House (5) Market

2. Atul walks 20 metres towards South. Turning to the left he walks 30 metres, then turning right he walks 10 metres, then turning right he walks 40 metres, then turning right he walks 30 metres and stops. In what direction is he with respect to his starting point?

- (1) South-West (2) West (3) North-West  
(4) He is at starting point (5) None of these

3. What will come in place of question mark (?) in the following series?

- TG HU VI JW ?  
(1) KY (2) KX (3) YK  
(4) XK (5) None of these

4. Satish is 15 ranks above Sushil who ranks 28th in a class of 50. What is Satish's rank from the bottom?

- (1) 39 (2) 37 (3) 38  
(4) 35 (5) None of these

5. Four of the following five are alike in a certain way and hence form a group. Which one **does not** belong to the group?

- (1) Year (2) Month (3) Day  
(4) Week (5) Time

6. Four of the following five are alike in a certain way and hence form a group. Which one **does not** belong to the group?

- (1) Pencil (2) Chalk (3) Notebook  
(4) Pen (5) Crayon

7. In a row of boys facing North, Amit is 5th to the left of Ashok. Alok is 3rd to the right of Amit. Vilas is 3rd to the left of Ashok. Which of the following describes the position of Vilas?

- (1) To the immediate right of Amit  
(2) To the immediate left of Alok  
(3) To the immediate right of Alok  
(4) 3rd to the right of Amit  
(5) None of these

8. It is Thursday on 25th of September. What day will it be on the 25th of October in the same year?

- (1) Monday (2) Sunday (3) Friday  
(4) Saturday (5) None of these

9. If 'A' is called '2', 'B' is called '3', 'C' is called '5', 'D' is called '8' and so on, then what will be the

numerical value of 'F'?

- (1) 18 (2) 16 (3) 17  
(4) 20 (5) None of these

10. A, B, C, D, E and F are sitting in a row facing North. A is neighbour of B and D. E is neighbour of C. D is neighbour of C. How many members are there between A and E?

- (1) Two (2) One (3) three  
(4) Four (5) None of these

11. If in a clock, 12 is replaced by 1, 11 by 2, 10 by 3 and so on, then what will be the time in that clock corresponding to 'twenty minutes past three in the usual clock'?

- (1) Twenty minutes past eleven  
(2) Forty minutes past ten  
(3) Forty minutes past eleven  
(4) Twenty minutes past ten  
(5) None of these

12. If all the numbers divisible by 5 and also those having one of the digits as 5 are removed from the numbers 1 to 50, how many numbers will remain?

- (1) 38 (2) 41 (3) 39  
(4) 42 (5) None of these

13. If 'A' is written as 'B' and 'B' as 'A', 'C' as 'D' and 'F' as 'E' and so on, how will the word 'BRIG' be written?

- (1) AQJH (2) ASJH (3) AQHF  
(4) AQJF (5) None of these

14. How many pairs of letters are there in the word 'PRISON', each of which has as many letters between its two letters in the word as there are between them in the English alphabet?

- (1) Two (2) One (3) Four  
(4) Three (5) More than four

15. How many 5s are there in the following number series each of which is immediately followed by 4 but not immediately preceded by 6?

- 4 5 6 6 5 6 4 5 5 4 5 5 6 5 4 4 5 6 4 5 6 5 4 5 4  
(1) One (2) Three (3) Four  
(4) Two (5) None of these

16. If Ramesh's mother's brother is Alok's father's brother, then Ramesh's mother is Alok's \_\_\_

- (1) Grandmother (2) Aunt  
(3) Cousin (4) Sister-in-law  
(5) None of these

17. In a certain code language 'Ne Pe Le' means 'what is this', 'Bo Le Se' means 'is that okay' and 'Se Ni

Di' means 'that was easy'. What is the code for 'okay' in that code language?

- (1) Le (2) Se (3) Ne  
(4) Ni (5) None of these

**18.** Which of the following letters is as far away from M to the right as D is away from N?

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

- (1) X (2) V (3) C  
(4) Y (5) None of these

**19.** Among P, Q, R, S and T, T is shorter than S and P. Q is shorter than only P. Who among them is the shortest?

- (1) Cannot be determined (2) R  
(3) T (4) Q (5) None of these

**20.** In a certain code 'GIVE' is written as 'VIEG' and 'OVER' is written as 'EVRO'. How will 'DISK' be written in that code?

- (1) SIDK (2) KISD (3) KDSI  
(4) SIKD (5) None of these

**21.** In a certain code 'PRISM' is written as 'OSHTL' and 'RUBLE' is written as 'QVAMD'. How will 'WHORL' be written in that code?

- (1) XIPSM (2) VGNQK (3) UINSK  
(4) XGPQM (5) VINSK

**Qs. 22-27.** Study the following series of letters, symbols and numbers carefully and answer the questions given below.

P β 7 EN ? 2 L ★ f K W 8 \$ = 5 J D ÷ V 6 F G @ 3 © R

**22.** How many such numbers are there in the above series each of which is immediately followed by a symbol and also immediately preceded by letter?

- (1) Nil (2) Two (3) Three  
(4) One (5) None of these

**23.** If all the symbols are eliminated from the above series, then which of the following will be the 5th to the right of 10th element from the right end?

- (1) V (2) F (3) D  
(4) 6 (5) None of these

**24.** How many such symbols are there in the above series each of which is immediately preceded by a number?

- (1) Three (2) Nil (3) Two  
(4) One (5) None of these

**25.** Four of the following five are alike in a certain way based on the positions of their elements in the above series and hence form a group. Which one does not belong to the group?

- (1) NβE (2) KLf (3) V5÷  
(4) ©G3 (5) =W\$

**26.** How many such symbols are there in the above series each of which is immediately followed by a letter but not immediately preceded by a number?

- (1) One (2) Nil (3) Three  
(4) Two (5) None of these

**27.** How many such letters are there in the above series each of which is not immediately preceded by a symbol?

- (1) Ten (2) Nine (3) Six  
(4) Seven (5) None of these

**Qs. 28-32.** In each of the questions given below, a group of digits are given followed by four combinations of letters numbered (1), (2), (3) and (4). You have to find out which of the four combinations correctly represents the group of digits below. If none of the four combinations represents the group of digits correctly, give (5) i.e. 'None of these' as the answer.

Digits : 9 2 1 7 5 3 6 4 8

Letters : B V M L D P A F R

Conditions for coding the group of digits:

- (i) If the first as well as the last digits are even, both are to be coded by the code for the first digit.  
(ii) If the first as well as the last digits are odd, both are to be coded by the code for the last digit.

**28.** 397416

- (1) PBLFMP (2) ABLFMA  
(3) PVLfMA (4) PBDfMA  
(5) None of these

**29.** 562183

- (1) PAVMRP (2) DAVMRD  
(3) PAVMRD (4) DAVMRP  
(5) None of these

**30.** 734192

- (1) DPFMBV (2) LPAMBV  
(3) LPFMVB (4) LPFMBV  
(5) None of these

**31.** 812354

- (1) RLVPDF (2) FMVPDF  
(3) RMVPDR (4) RMVADF  
(5) None of these

**32.** 627851

- (1) PULRDM (2) AVL RDM  
(3) AVLFDM (4) ABL RDM  
(5) None of these

**33.** 'Smell' is to 'Flower' in the same way as 'taste' is to\_\_\_

- (1) Tongue (2) Water  
(3) Sweet (4) Food  
(5) Good

**34.** Four of the following five are alike in a certain way and hence form a group. Which one does not belong to the group?

- (1) 36 (2) 64 (3) 49  
(4) 81 (5) 16

**35.** Four of the following five are alike in a certain way and hence form a group. Which one does not belong to the group?

(1) OP (2) IJ (3) TU

(4) AB (5) EF

**36.** In the English alphabet 'BDG' is to 'CFJ' in the same way as 'EGJ' is to:

(1) FIL (2) FJM (3) FIM

(4) FIN (5) None of these

**37.** In the case of how many digits in the number 7214658, their position in the number and the position when the digits of the numbers are arranged in the ascending order is identical?

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

(4) Two (5) None of these

**Qs. 38-40.** Read the following information carefully to answer these questions:

(i) A, B, C, D and E are sitting along a circle facing the centre.

(ii) C is neighbour of A and B.

(iii) E is to the immediate left of B.

**38.** Which of the following is a false statement?

(1) E is to the immediate right of D

(2) D is 2nd to the right of C

(3) A is 3rd to the right of E

(4) A is between C and D

(5) None is false

**39.** What is the position of D?

(1) To the immediate right of E

(2) 3rd to the right of B

(3) To the immediate left of A

(4) 2nd to the left of C

(5) None of these

**40.** Which of the following is true statement?

(1) A is 2nd to the left of B

(2) B is 2nd to the left of D

(3) D is between A and E

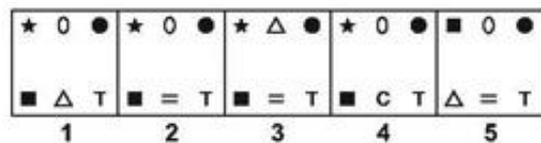
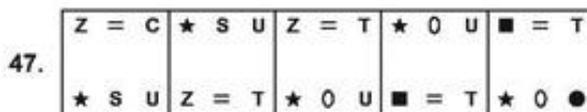
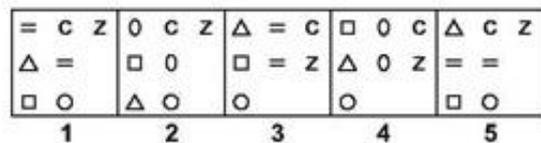
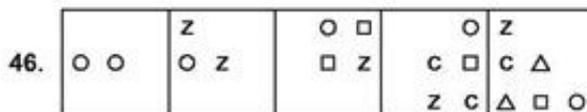
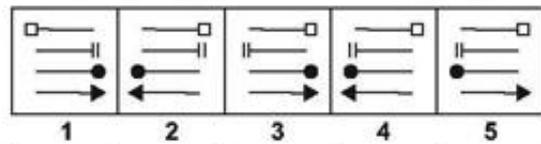
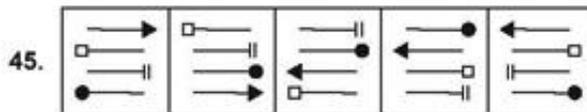
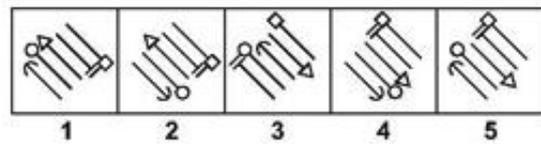
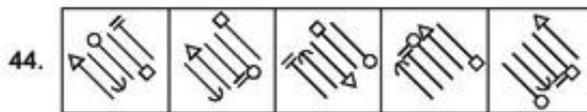
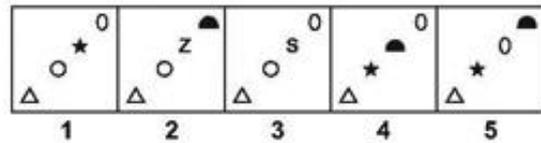
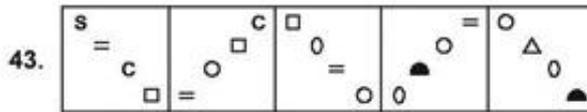
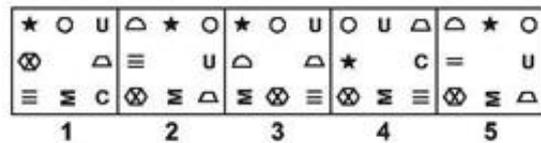
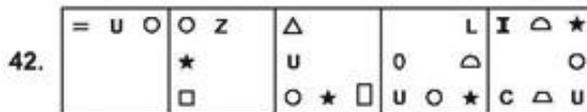
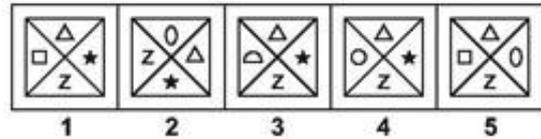
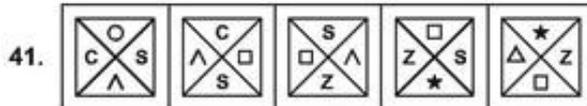
(4) C is 3rd to the right of E

(5) None of these

**Qs. 41-50.** In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?

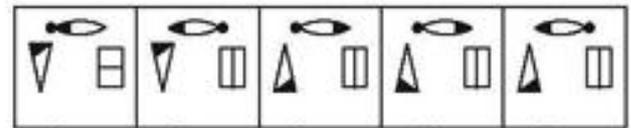
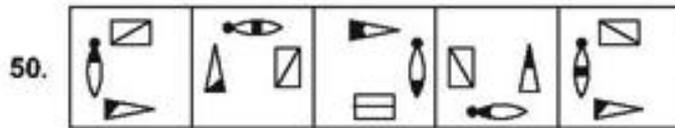
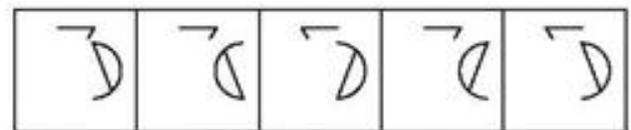
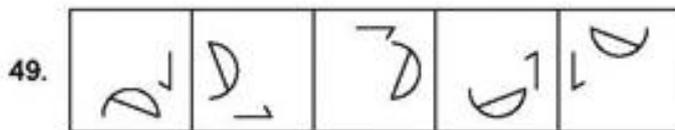
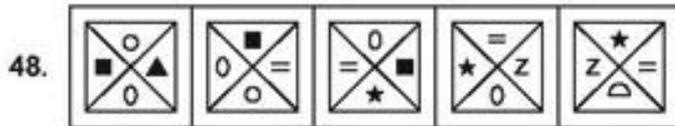
**PROBLEM FIGURES**

**ANSWER FIGURES**



**PROBLEM FIGURES**

**ANSWER FIGURES**



Q. 86-90. Below in each question five words are given. Which of them will come in the *middle* place if all of them are arranged alphabetically? Serial number of that word is the answer.

- |                         |              |
|-------------------------|--------------|
| <b>86.</b> (1) Spinner  | (2) Spinet   |
| (3) Spindle             | (4) Spinal   |
| (5) Spine               |              |
| <b>87.</b> (1) Donkey   | (2) Donjon   |
| (3) Donator             | (4) Donate   |
| (5) Donative            |              |
| <b>88.</b> (1) Harpoon  | (2) Harrow   |
| (3) Harmony             | (4) Harness  |
| (5) Harridan            |              |
| <b>89.</b> (1) Graduate | (2) Grading  |
| (3) Gradual             | (4) Gradient |
| (5) Gradine             |              |
| <b>90.</b> (1) Marine   | (2) Marigold |
| (3) Marmalade           | (4) Marital  |
| (5) Maritime            |              |

Q. 91-95. The letter group in each question below is to be codified in the following number codes:

Letter : D S O A R V T E B J  
 Number Codes : 9 2 5 1 7 0 3 8 6 4

You have to find out which of the answers (1), (2), (3)

or (4) has the correct coded form of the given letters and indicate it on your answersheet. If none of the coded form is correct mark (5) i.e. 'None of these' as the answer.

- 91.** ADTSEBV  
 (1) 1329680  
 (2) 1932860  
 (3) 1982360  
 (4) 1923860  
 (5) None of these
- 92.** SJDABOT  
 (1) 2496153  
 (2) 2941653  
 (3) 2491653  
 (4) 2946153  
 (5) None of these
- 93.** OAJSTDR  
 (1) 5142397  
 (2) 5142097  
 (3) 5134297  
 (4) 5143297  
 (5) None of these
- 94.** ESVBOJR  
 (1) 8260547  
 (2) 8602457  
 (3) 8026547

- (4) 8206547  
 (5) None of these  
**95.** TDBREOS  
 (1) 3697852  
 (2) 3968725  
 (3) 3698752  
 (4) 3967582  
 (5) None of these

**Q. 96-100.** The news item in each question below is to be classified into one of the following five areas:

(1) Politics, (2) Social Issues, (3) Sports, (4) Science and Health and (5) Miscellaneous.

**96.** Dowry deaths are still a cause of worry for the parents of young girls.

- (1) Politics  
 (2) Social Issues  
 (3) Sports  
 (4) Science & Health  
 (5) Miscellaneous

**97.** Bombay juniors beat the Kolkata juniors in the Ranji Trophy.

- (1) Politics  
 (2) Social Issues  
 (3) Sports  
 (4) Science & Health  
 (5) Miscellaneous

**98.** The super star says, his divorce has brought him luck.

- (1) Politics  
 (2) Social Issues  
 (3) Sports  
 (4) Science & Health  
 (5) Miscellaneous

**99.** A research suggests, 'Tea fights against cancer'.

- (1) Politics  
 (2) Social Issues  
 (3) Sports  
 (4) Science & Health  
 (5) Miscellaneous

**100.** The 'Party supporters' say that they have lost faith in their leaders.

- (1) Politics  
 (2) Social Issues  
 (3) Sports  
 (4) Science & Health  
 (5) Miscellaneous

3. (4)

4. (3)  $\frac{12 \text{ (SATI)} \quad 14 \text{ (SUSH)}}{13^{\text{th}} \quad 28^{\text{th}}}$

5. (5) Others are measures of time.

6. (3) All the others are mediums for writing or drawing.

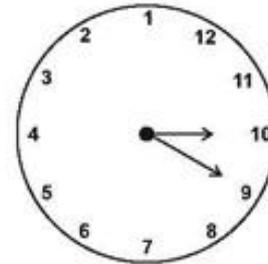
7. (2) 

8. (4)

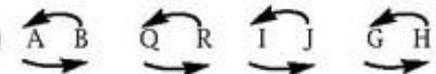
A B C D E F  
 9. (3) 1 + 1 2 + 1 3 + 2 5 + 3 8 + 4 12 + 5

10. (1) The arrangement is either BADCEF or FECDAB ↑

11. (2)



12. (5)

13. (1) 

14. (3) PS; RO; RN and ON.

15. (4) 16. (2) 17. (5) It is 'BO'

18. (5) W 19. (1) 20. (4) 21. (5) 22. (4)

23. (4) 24. (3) 25. (3) 26. (4) 27. (2)

28. (2) 29. (1) 30. (4) 31. (3) 32. (2)

33. (4) They have the natural quality and the item relationship.

34. (2) All the others are squares of numbers only, i.e.  $6^2, 8^2, 7^2, 9^2$  and  $4^2$ , this one is a cube as well  $4^3$ .

35. (3) In all the others, the vowel is preceded by the consonant.

36. (3) Gap increases by one E F, G H I; J KL M.

37. (1) 2, 6 and 8.

38. (5)

39. (2) 

40. (3)

41. (3) 42. (1) 43. (4) 44. (4) 45. (4)

46. (5) 47. (3) 48. (5) 49. (2) 50. (3)

86. (5) 87. (3) 88. (1) 89. (2) 90. (4)

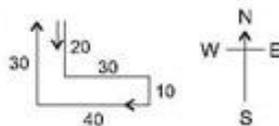
91. (2) 92. (3) 93. (1) 94. (4) 95. (5)

96. (2) 97. (3) 98. (5) 99. (4) 100. (1)

**ANSWERS AND EXPLANATIONS**

1. (2)

2. (2)



Quantitative Aptitude (Mathematics) Section – I

**Qs. 1-6.** What will come in place of the question mark (?) in the following questions?

**1.**  $0.01 \times 0.5 = ?$

- (1) 0.005            (2) 0.05            (3) 0.0005  
(4) 0.5            (5) None of these

**2.**  $99 \div \frac{1}{9} = ?$

- (1) 11            (2) 991            (3) 981  
(4) 9            (5) None of these

**3.**  $-36 - (-10) + (-20) - (+5) = ?$

- (1) -66            (2) -61            (3) -51  
(4) -71            (5) None of these

**4.**  $36 \div 4 \times 5 = ?$

- (1) 200            (2) 45            (3) 184  
(4) 56            (5) None of these

**5.**  $-40 \times -2 - 30 = ?$

- (1) 1280            (2) 50            (3) -2400  
(4) -110            (5) None of these

**6.**  $((4^3)^2) = (4)^?$

- (1) 5            (2) 6            (3) 8  
(4) 7            (5) None of these

**Qs. 7-12.** What approximate value will come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)

**7.**  $\sqrt{285.61} = ?$

- (1) 17            (2) 19            (3) 18  
(4) 16            (5) 15.5

**8.**  $2\frac{3}{4} \times 3\frac{1}{4} \times 1\frac{1}{8} = ?$

- (1) 6            (2) 14            (3) 18  
(4) 8            (5) 10

**9.**  $0.98 \times 1.01 \times 0.49 = ?$

- (1) 1            (2) 0.6            (3) 0.5  
(4) 0.75            (5) 0.35

**10.**  $(22.2)^2 = ?$

- (1) 493            (2) 484            (3) 625  
(4) 525            (5) 505

**11.**  $10.99898989\% \text{ of } \frac{101}{10.11} = \frac{10.1}{?}$

- (1) 1            (2) 5            (3) 15  
(4) 12.5            (5) 10

**12.**  $\frac{1}{3} \times \frac{1}{7} + \frac{1}{5} = ?$

- (1)  $\frac{1}{5}$             (2)  $\frac{1}{105}$             (3)  $\frac{1}{3}$   
(4)  $\frac{1}{4}$             (5)  $\frac{1}{7}$

**Q. 13-20.** What will come in place of the question mark (?) in the following number series?

**13.** 5 7 12 19 31 ?

- (1) 40            (2) 50            (3) 38  
(4) 41            (5) None of these

**14.** 2 4 16 256 ?

- (1) 65536            (2) 4096            (3) 32768  
(4) 8192            (5) None of these

**15.** 1 4 9 ? 25 36

- (1) 14            (2) 12            (3) 16  
(4) 18            (5) None of these

**16.** 1 2 3 5 7 11 13 17 19 ?

- (1) 21            (2) 20            (3) 25  
(4) 23            (5) None of these

**17.** 1 8 27 ? 125 216

- (1) 32            (2) 64            (3) 86  
(4) 81            (5) None of these

**18.** 15 16 ? 29 45

- (1) 17            (2) 25            (3) 20  
(4) 19            (5) None of these

**19.** 1 2 2 4 8 ? 256

- (1) 12            (2) 16            (3) 128  
(4) 64            (5) None of these

**20.** 4 5 14 51 ? 1125

- (1) 190            (2) 200            (3) 220  
(4) 210            (5) None of these

**Qs. 21-30.** Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read

both the statements and give answer:

- (1) if the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
- (2) if the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
- (3) if the data either in statement I alone or in statement II alone is sufficient to answer the question.
- (4) if the data in the statements I and II together are not sufficient to answer the question.
- (5) if the data in both the statements I and II together are necessary to answer the question.

**21.** What is a two digit number?

- I. The difference of the digits is 9.
- II. The sum of the digits is 9.

**22.** How much is the rate of simple interest?

- I. The sum is Rs 10,000.
- II. The interest earned in three years is Rs 3,000.

**23.** Is X an odd number?

- I. X is a two digit number.
- II. None of the digits is 2.

**24.** What is a two digit number?

- I. One of the digits is '0'.
- II. The product of the digits is '0'.

**25.** What is the speed of 150 metres long train?

- I. The train crosses a pole in 6 seconds.
- II. The train crosses 300 metres long platform in 18 seconds.

**26.** The average of the ages of A, B, C and D is 26 years.

How old is D?

- I. D is one year younger than C.
- II. The average age of A and B is 26 years.

**27.** What is the ratio of ages of A and B?

- I. B is younger than A by 4 years.
- II. The sum of their ages is 16 years.

**28.** Is Y an even number?

- I. Y is divisible by 2.
- II. Y is divisible by 5.

**29.** What is the area of a rectangular plot?

- I. The length of the plot is 100 metres.
- II. The area of the plot is 100 times it's breadth.

**30.** Is the product of two numbers even?

- I. The product is a three digit number.
- II. One of the numbers is even.

**31.** 25% profit is made if an article is sold for Rs 437.50.

What is the cost price of the article?

- (1) Rs 328.125
- (2) Rs 350
- (3) Rs 325
- (4) Cannot be determined
- (5) None of these

**32.** How many days will 6 persons take to do a work which is done by 12 persons in 18 days?

(1) 36 (2) 24 (3) 40

(4) 34 (5) None of these

**33.** Which of the following fractions are in ascending order?

(1)  $\frac{1}{3}, \frac{1}{4}, \frac{2}{5}, \frac{3}{7}$

(2)  $\frac{3}{7}, \frac{2}{5}, \frac{1}{4}, \frac{1}{3}$

(3)  $\frac{1}{4}, \frac{1}{3}, \frac{2}{5}, \frac{3}{7}$

(4)  $\frac{3}{7}, \frac{2}{5}, \frac{1}{3}, \frac{1}{4}$

(5) None of these

**34.** What should be added to 14399 to make it exactly divisible by 4?

(1) 1 (2) 2 (3) 3

(4) 4 (5) None of these

**35.** In how many different ways can 4 books be arranged?

(1) 24 (2) 16 (3)  $\frac{37}{4}$

(4) Cannot be determined

(5) None of these

**36.** 20 litres milk contains 2% water. What quantity of pure milk should be added so that water content comes down to 1%?

(1) 10 litres (2) 20 litres (3) 40 litres

(4) Cannot be determined (5) None of these

**37.** Which of the following is the smallest fraction?

(1)  $\frac{1}{3}$  (2)  $\frac{2}{11}$  (3)  $\frac{3}{13}$

(4)  $\frac{5}{21}$  (5)  $\frac{1}{5}$

**38.** A box has 2 black, 3 blue and 4 green balls. One ball is picked up at random. What is the probability that it is green?

(1)  $\frac{2}{9}$  (2)  $\frac{3}{9}$  (3)  $\frac{4}{9}$

(4)  $\frac{2}{5}$  (5) None of these

**39.** Which of the following numbers are in descending order?

(1) -6, -5, -4

(2) -1, -2, 3

(3) 2, 2.01, 1.99

(4) 4, -4, -6

(5) None of these

**40.** A sum doubles itself in 10 years at simple interest. What is the p.c.p.a. rate of interest?

(1) 5

(2) 20

(3) 12

(4) Cannot be determined

(5) None of these

Qs. 41-45. Study the following table to answer the given questions.

NUMBER OF CANDIDATES APPLIED, APPEARED AND QUALIFIED (Q)  
IN DIFFERENT PROGRAMMES FOR THE GIVEN YEARS

Year	Programme A			Programme B			Programme C		
	Applied	Appeared	Q	Applied	Appeared	Q	Applied	Appeared	Q
2000	2500	2000	1000	750	500	50	150	145	100
2001	2700	2100	1200	1000	800	100	170	170	110
2002	2835	2250	1200	625	400	60	125	125	90
2003	3000	2500	1300	525	400	65	200	198	130
2004	3500	2600	1500	870	670	65	210	209	132
2005	3500	2900	1700	1200	1100	110	300	300	160
2006	3700	2900	1900	1000	900	110	275	274	140

**41.** For Programme B, for how many years is the per cent of Qualified to Applied more than 10?

- (1) One (2) Two (3) Three  
(4) None (5) None of these

**42.** For Programme C, what is approximate percentage of Qualified over Appeared for the given years?

- (1) 68 (2) 70 (3) 60 (4) 55 (5) 65

**43.** In 2000, for Programme B, what is the respective ratio of Applied and Appeared?

- (1) 3 : 2 (2) 5 : 7 (3) 7 : 5  
(4) 2 : 3 (5) None of these

**44.** For Programme A, which year is the percentage of Qualified to Appeared the maximum?

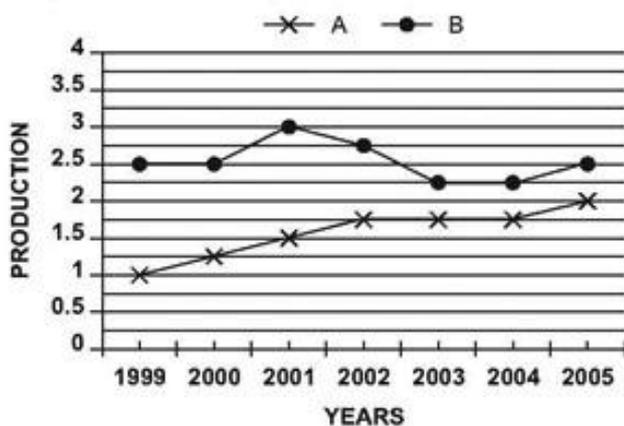
- (1) 2005 (2) 2001 (3) 2004  
(4) 2006 (5) None of these

**45.** For Programme B, which year is the percentage of Appeared to Applied the maximum?

- (1) 2006 (2) 2000 (3) 2003  
(4) 2004 (5) None of these

Qs. 46-50. Study the following graph carefully to answer the given questions.

PRODUCTION OF TWO COMPANIES A AND B  
(IN CRORE UNITS) OVER THE GIVEN YEARS



**46.** For Company A, how much is the per cent increase in production in 2000 from 1999?

- (1) 0.25 (2) 2.5 (3) 25  
(4) 12.5 (5) None of these

**47.** How many units is the total production of Company A for the given years?

- (1) 9 crores (2) 17.75 crores  
(3) 12.25 crores (4) 11 crores  
(5) None of these

**48.** What is the difference in units produced by the two companies in 1999?

- (1) 1,50,00,000 (2) 15,00,00,000 (3) 15,00,000  
(4) 15,000 (5) None of these

**49.** How many units is the approximate average production of Company B for the given years?

- (1) 3 crores (2) 2.55 crores  
(3) 2.75 crores (4) 2.25 crores  
(5) 2.34 crores

**50.** In which year did both the companies have no change in production from the previous year?

- (1) 2000 (2) 2002 (3) 2003  
(4) 2004 (5) None of these

### ANSWERS AND EXPLANATIONS

- (1)
- (5)
- (3)
- (4)
- (2)
- (2)
- (1)
- (5)
- (3)
- (2)
- (5)
- (4)
- (2)  $5 + 7 = 12$ ,  $12 + 7 = 19$ ,  $12 + 19 = 31$ ,  $19 + 31 = 50$
- (1) 2, 4, 16, 256, x or  $2^1, 2^2, 2^4, 2^8, 2^{16} = 65536$   
Powers of 2 are in G.P.
- (3)  $1^2, 2^2, 3^2, 4^2, 5^2, 6^2$   
 $4^2 = 16$
- (4) All nos. are prime nos. Next no. = 23
- (4) 1, 8, 27, \_\_\_\_, 125, 216 i.e.  $1^3, 2^3, 3^3, 4^3, 5^3, 6^3$   
 $4^3 = 64$
- (3) By adding  $1^2, 2^2, 3^2, 4^2, \dots$  we get the next no.
- (5)  $1 \times 2 = 2$ ,  $2 \times 2 = 4$ ,  $4 \times 2 = 8$ ,  $4 \times 8 = 32$ ,  
 $8 \times 32 = 256$   
The reqd. no. = 32
- (3) 4, 5, 14, 51, \_\_\_\_, 1125  
 $4 \times 1 + 1^2 = 5$ ,  $5 \times 2 + 2^2 = 14$ ,  $14 \times 3 + 3^2 = 51$ ,  
 $51 \times 4 + 4^2 = 220$ ,  $220 \times 5 + 5^2 = 1125$   
 $\therefore$  Reqd. no. = 220
- (5) Let the digits at unit's and ten's places be x and y  
A.T.S.  $y + x = 9$ ,  $y - x = 9$   
 $\therefore y = 9$ ,  $x = 0$ . No. = 90

$$22. (5) R = \frac{I \times 100}{P \times T}$$

$$23. (4) \quad 24. (4)$$

$$25. (3) \text{ Speed of train} = \frac{150}{6} \text{ or } \frac{300 + 150}{18}$$

$$26. (5) \text{ Total sum of ages of A, B, C and D} \\ = 26 \times 4 = 104$$

$$\text{Total sum of ages of A and B} = 26 \times 2 = 52$$

$$\text{Total age of C and D} = 104 - 52 = 52$$

$$\text{Age of D} = \frac{52 - 1}{2} = 25.5 \text{ years}$$

$$\text{Age of C} = 26.5 \text{ years}$$

$$27. (5) \frac{A - B}{A + B} = \frac{4}{16}$$

$$\therefore \frac{2A}{-2B} = \frac{20}{-12} \Rightarrow \frac{A}{3} = \frac{5}{3} \text{ (By C and D)}$$

$$28. (1) \quad 29. (4) \quad 30. (2)$$

$$31. (2) \text{ C.P.} = \frac{\text{S.P.} \times 100}{100 + P\%} = \frac{437.50 \times 100}{125} = \text{Rs } 350$$

$$32. (1) \text{ Reqd. no. of days} = \frac{12 \times 18}{6} = 36$$

$$33. (3)$$

$$34. (1) \text{ If we divide 14399 by 4, } R = 3$$

$$\therefore \text{No. to be added} = 4 - 3 = 1$$

$$35. (1) \text{ No. of ways} = 4! = 4 \times 3 \times 2 \times 1 = 24$$

$$36. (2) \text{ 2\% water means 98\% milk}$$

Let the quantity of pure milk added be  $x$  l

$$\text{A.T.S. } (20 + x) \frac{99}{100} - x = \frac{20 \times 98}{100} \Rightarrow x = 20$$

$$37. (2) \text{ Change into decimals}$$

$$38. (3) \text{ Total balls} = 2 + 3 + 4 = 9$$

$$\text{Reqd. prob.} = \frac{4}{9}$$

$$39. (4)$$

$$40. (5) R = \frac{x \times 100}{x \times 10} = 10 \quad 10\% \text{ p.a.}$$

$$41. (2) \text{ In 2000} \rightarrow \text{Reqd. \%} = \frac{50}{750} \times 100$$

Sly. calculate in other years.

In 2003 and 2006 it is more than 10

$$42. (3) \text{ Reqd. \%} = \frac{862}{1421} \times 100 = 60 \text{ (approx.) } 60.66$$

$$43. (1) \quad 44. (4)$$

$$45. (5) \text{ In 2005, the reqd. \% is max}$$

$$46. (3) \% \text{ increase} = \frac{.25 \text{ crore}}{1 \text{ crore}} \times 100 = 25$$

$$47. (4)$$

$$48. (1) (2.5 - 1) \text{ crores} = 1.5 \times 1,00,00,000 = 1,50,00,000$$

$$49. (2) \quad 50. (4)$$

Quantitative Aptitude (Mathematics) Section – II

Q. 1-5. What should come in place of question mark (?) in the following questions?

1.  $92.5\%$  of  $550 = ?$

- (1) 506.45 (2) 521.65  
(3) 518.55 (4) 508.75  
(5) None of these

2.  $12^4 \times 12^{13} = ?$

- (1)  $12^7$  (2)  $12^{39}$  (3)  $12^{17}$   
(4)  $12^{-7}$  (4) None of these

3.  $12.22 + 22.21 + 221.12?$

- (1) 250.55 (2) 255.50  
(3) 250.05 (4) 255.05  
(5) None of these

4.  $464 \div (16 \times 2.32) = ?$

- (1) 12.5 (2) 14.5  
(3) 10.5 (4) 8.5  
(5) None of these

5.  $78 \div 5 \div 0.5 = ?$

- (1) 15.6 (2) 31.2  
(3) 7.8 (4) 20.4  
(5) None of these

6. A bus covers a distance of 2,924 kms. in 43 hours. What is the speed of the bus?

- (1) 72 kms/hr (2) 60 kms/hr (3) 68 kms/hr  
(4) Cannot be determined  
(5) None of these

7. If  $(9)^3$  is subtracted from the square of a number, the answer so obtained is 567. What is the number?

- (1) 36 (2) 28 (3) 42  
(4) 48 (5) None of these

8. What would be the simple interest obtained on an amount of Rs 5,760 at the rate of 6 p.c.p.a. after 3 years?

- (1) Rs 1,036.80 (2) Rs 1,666.80 (3) Rs 1,336.80  
(4) Rs 1,063.80 (5) None of these

9. What is 333 times 131?

- (1) 46,323 (2) 43,623 (3) 43,290  
(4) 42,957 (5) None of these

10. The product of two successive numbers is 8556. What is the smaller number?

- (1) 89 (2) 94 (3) 90  
(4) 92 (5) None of these

11. The owner of an electronics shop charges his customer 22% more than the cost price. If a customer

paid Rs 10,980 for a DVD Player, then what was the cost price of the DVD Player?

- (1) Rs 8,000 (2) Rs 8,800 (3) Rs 9,500  
(4) Rs 9,200 (5) None of these

12. What would be the compound interest obtained on an amount of Rs 3,000 at the rate of 8 p.c.p.a after 2 years?

- (1) Rs 501.50 (2) Rs 499.20 (3) Rs 495  
(4) Rs 510 (5) None of these

13. What is the least number to be added to 4321 to make it a perfect square?

- (1) 32 (2) 34 (3) 36  
(4) 38 (5) None of these

14. 45% of a number is 255.6. What is 25% of that number?

- (1) 162 (2) 132 (3) 152  
(4) 142 (5) None of these

15. Find the average of the following Set of Scores: 221, 231, 441, 359, 665, 525

- (1) 399 (2) 428 (3) 407  
(4) 415 (5) None of these

16. If  $(78)^2$  is subtracted from the square of the number, the answer so obtained is 6,460. What is the number?

- (1) 109 (2) 111 (3) 113  
(4) 115 (5) None of these

17. In an examination it is required to get 40% of the aggregate marks to pass. A student gets 261 marks and is declared failed by 4% marks. What are the maximum aggregate marks a student can get?

- (1) 700 (2) 730 (3) 745  
(4) 765 (5) None of these

18. Pinku, Rinku and Tinku divide an amount of Rs 4,200 amongst themselves in the ratio of 7 : 8 : 6 respectively. If an amount of Rs 200 is added to each of their shares, what will be the new respective ratio of their shares of amount?

- (1) 8 : 9 : 6 (2) 7 : 9 : 5 (3) 7 : 8 : 6  
(4) 8 : 9 : 7 (5) None of these

19. Ms Suchi deposits an amount of Rs 24,000 to obtain a simple interest at the rate of 14 p.c.p.a. for 8 years. What total amount will Ms Suchi get at the end of 8 years?

- (1) Rs 52,080 (2) Rs 28,000 (3) Rs 50,880  
(4) Rs 26,880 (5) None of these

20. The average of 5 consecutive even numbers A, B, C, D and E is 52. What is the product of B and E?

(1) 2912 (2) 2688 (3) 3024

(4) 2800 (5) None of these

**21.** The difference between 42% of a number and 28% of the same number is 210. What is 59% of that number?

(1) 630 (2) 885 (3) 420

(4) 900 (5) None of these

**22.** What approximate value should come in place of the question mark (?) in the following question?

$$4275 \div 496 \times (21)^2 = ?$$

(1) 3795 (2) 3800 (3) 3810

(4) 3875 (5) 3995

**23.** A canteen requires 112 kgs of wheat for a week. How many kgs of wheat will it require for 69 days?

(1) 1,204 kgs (2) 1,401 kgs (3) 1,104 kgs

(4) 1,014 kgs (5) None of these

**24.** If an amount of Rs 41,910 is distributed equally amongst 22 persons. How much amount would each person get?

(1) Rs 1,905 (2) Rs 2,000 (3) Rs 1,885

(4) Rs 2,105 (5) None of these

**25.** The cost of 4 Cell-phones and 7 Digital cameras is Rs 1,25,627. What is the cost of 8 Cell-phones and 14 Digital cameras?

(1) Rs 2,51,254 (2) Rs 2,52,627 (3) 2,25,524

(4) Cannot be determined

(5) None of these

Q. 26-30. Each of the questions below consists of a question and two statements numbered I and II are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer:

(1) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.

(2) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.

(3) if the data in Statement I alone or in Statement II alone are sufficient to answer the question.

(4) if the data in both the Statements I and II are not sufficient to answer the question.

(5) if the data in both the Statements I and II together are necessary to answer the question.

**26.** What is the area of the circle?

I. Perimeter of the circle is 88 cms.

II. Diameter of the circle is 28 cms.

**27.** What is the rate of interest?

I. Simple interest accrued on an amount of Rs 25,000 in two years is less than the compound interest for the same period

by Rs 250.

II. Simple interest accrued in 10 years is equal to the principal.

**28.** What is the number of trees planted in the field in rows and columns?

I. Number of columns is more than the number of rows by 4.

II. Number of trees in each column is an even number.

**29.** What is the area of the right-angled triangle?

I. Height of the triangle is three-fourth of the base.

II. Diagonal of the triangle is 5 metres.

**30.** What is the father's present age?

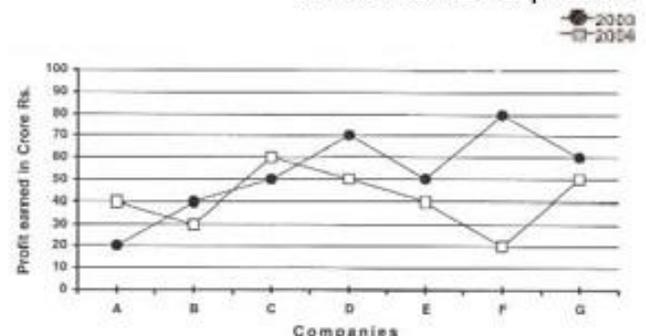
I. Father's present age is five times the son's present age.

II. Five years ago the father's age was fifteen times the son's age that time.

Q. 31-35. Study the following graph carefully to answer these questions:

**Profit earned (in Crore Rs) by Seven Companies during 2003-2004**

Profit = Income - Expenditure



**31.** What is the ratio between the profit earned by Company A in 2004 and the profit earned by Company B in 2003 respectively?

(1) 4 : 3 (2) 3 : 2 (3) 3 : 4

(4) 2 : 3 (5) None of these

**32.** What is the difference (in Crore Rs) between the total profit earned by Companies E, F and G together in 2003 and the total profit earned by these companies in 2004?

(1) 70 (2) 75 (3) 78

(4) 82 (5) None of these

**33.** What is the ratio between the total profit earned by Company C in 2003 and 2004 together and the total profit earned by Company E in these two years respectively?

(1) 11 : 9 (2) 9 : 10 (3) 10 : 11

(4) 11 : 10 (5) None of these

**34.** What was the average profit earned by all the companies in 2003? (In Crore Rs Rounded-Off to two digits after decimal).

(1) 52.75 (2) 53.86 (3) 52.86

- (4) 53.75 (5) None of these

**35.** Profit earned by Company B in 2004 is what per cent of the profit earned by the same company in 2003?

- (1) 133.33 (2) 75 (3) 67.66  
(4) 75.25 (5) None of these

Q. 36-40. Study the following table carefully to answer these questions:

**TABLE GIVING PERCENTAGE OF UNEMPLOYED MALE AND FEMALE YOUTH AND THE TOTAL POPULATION FOR DIFFERENT STATES IN 2005 AND 2006**

STATE	2005			2006		
	M	F	T	M	F	T
A	12	15	32	7	8	35
B	8	7	18	10	9	20
C	9	10	28	10	12	34
D	10	6	24	8	8	30
E	6	8	30	7	6	32
F	7	5	28	8	7	35

M = Percentage of unemployed Male youth over total population

F = Percentage of unemployed Female youth over total population

T = Total population of the State in lakhs

**36.** What was the total number of unemployed youth in State A in 2006?

- (1) 2,20,000 (2) 3,25,000  
(3) 5,20,000 (4) 5,25,000  
(5) None of these

**37.** How many female youth were unemployed in State D in 2005?

- (1) 14,400 (2) 1,44,000  
(3) 1,40,000 (4) 14,000  
(5) None of these

**38.** Number of unemployed male youth in State A in 2005 was what per cent of the number of unemployed female youth in State E in 2006?

- (1) 66 (2) 50 (3) 200  
(4) 133 (5) None of these

**39.** What was the difference between the number of unemployed male youth in State F in 2005 and the number of unemployed male youth in State A in 2006?

- (1) 70,000 (2) 45,000  
(3) 68,000 (4) 65,000  
(5) None of these

**40.** What was the respective ratio between unemployed male youth in State D in 2005 and the unemployed male youth in State D in 2006?

- (1) 1 : 1 (2) 2 : 3 (3) 3 : 2  
(4) 4 : 5 (5) None of these

**ANSWERS AND EXPLANATIONS**

1. (4)  
2. (3)  
3. (5) Ans. 255.55  
4. (1)  
5. (2)

6. (3)  $\text{Speed} = \frac{D}{t}$

7. (1)  $x^2 - 9^2 = 567 \Rightarrow x = 36$

8. (1)  $\text{S.I.} = \frac{5760 \times 6 \times 3}{100} = \text{Rs}1036.80$

9. (2) Ans. 43623

10. (4)  $x(x+1) = 8556 \Rightarrow x = 92$

11. (5)  $\frac{122}{100}x = 10980 \Rightarrow x = \text{Rs } 9000$

12. (2)  $\text{C.I.} = P \left[ \left( 1 + \frac{R}{100} \right)^n - 1 \right]$   
 $= 3000 \left[ \left( 1 + \frac{8}{100} \right)^2 - 1 \right] = \text{Rs } 499.20$

13. (5) 
$$\begin{array}{r} 65 \\ 6 \overline{) 4321} \\ \underline{36} \phantom{00} \\ 721 \\ 125 \overline{) 721} \\ \underline{625} \\ 96 \end{array} \quad \begin{array}{l} 65^2 < 4321 < 66^2 \\ \text{Reqd. no.} = 66^2 - 4321 = 35 \end{array}$$

14. (4)  $\frac{45}{100}$  of  $x = 255.6 \Rightarrow x = 255.6 \times \frac{100}{45}$   
 $\therefore \frac{25}{100} \times 255.6 \times \frac{100}{45} = 142$

15. (3)

16. (5)  $x^2 - 78^2 = 6460 \Rightarrow x = 112$

17. (5)  $\frac{40}{100}x = 261 + \frac{4}{100}x \Rightarrow x = 725$

18. (4) Shares of Pinku, Rinku and Tinku in

Rs 4200 are  $\frac{7}{7+8+6} \times 4200, \frac{8}{21} \times 4200,$

$\frac{6}{21} \times 4200$  i.e. 1400, Rs 1600, Rs 1200

Reqd. ratio

$= (1400 + 200) : (1600 + 200) : (1200 + 200)$   
 $= 8 : 9 : 7$

19. (3) Total Amount

$= \text{Rs } 24000 + \frac{24000 \times 14 \times 8}{100} = \text{Rs } 50880$

20. (4)  $A + B + C + D + E$   
 $x + (x+2) + (x+4) + (x+6) + (x+8)$   
 $= 5 \times 52 \Rightarrow x = 48 = A, B = 50$   
 $\therefore E = 48 + 8 = 56$   
 $\therefore BE = 50 \times 56 = 2800$

$$21. (2) (42 - 28)\% \text{ of } x = 210 \Rightarrow x = 210 \times \frac{100}{14} \\ = 1500$$

$$\therefore \frac{59}{100} \times 15 = 885$$

22. (2) Use BODMAS

$$23. (3) \frac{112}{7} \times 69 = 1104 \text{ kg}$$

= Reqd. quantity of wheat

24. (1)

$$25. (1) 4x + 7y = 125627] \times 2$$

$$\therefore 8x + 14y = 251254$$

$$26. (3) 2\pi r = 88 \Rightarrow r = \frac{88}{2\pi}$$

$$r = \frac{D}{2} = \frac{28}{2} = 14$$

Either (i) or (ii) is reqd.

$$A = \pi r^2$$

$$27. (3) 250 = 25000 \left[ (1 + R)^2 - 1 \right] - 25000 \times R \times 2$$

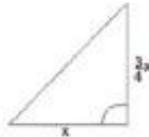
$$\text{or } R = \frac{x \times 100}{x \times 10} = 10\%$$

From either of statement we can find R

28. (4)

$$29. (5) x^2 + \left( \frac{3}{4}x \right)^2 = 5^2 \Rightarrow x = 4,$$

$$h = \frac{3}{4} \times 4 = 3$$



$$\text{Area} = \frac{1}{2} \left( x \times \frac{3}{4}x \right) = \frac{1}{2} (4 \times 3) = 6 \text{ sq. units}$$

Both (i) and (ii) statements are reqd.

30. (5) Let son's present age be x

$$\therefore \text{Father's present age} = 5x$$

$$\text{ATS } 5x - 5 = 15(x - 5) \Rightarrow x = 7$$

$$\therefore \text{Father's present age} = 35 \text{ yrs}$$

$$31. (5) \frac{40}{40} = \frac{1}{1}$$

$$32. (5) \text{Diff} = (50 + 80 + 60) - (40 + 20 + 50) = 80$$

$$33. (1) \text{Reqd ratio} = \frac{50 + 60}{40 + 50} = \frac{11}{9}$$

34. (3)

$$35. (2) 30 = x\% \text{ of } 40 \Rightarrow x = 75$$

36. (4)

37. (2)

38. (3)

39. (5) Ans 49000

$$40. (1) \frac{\frac{10 \times 24}{8 \times 30}}{100} = 1 : 1$$

\*\*\*\*\* END \*\*\*\*\*