Sections	Number of questions	Marks	Duration of Exam		
1. English Language	30	30			
2. Reasoning	35	35	60 minutes		
3. Quantities Aptitude	35	35			
	Total = 100 Qs.	Total marks = 100			

1. English Language

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

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

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

assistance in parts of the world where traditional powers are cautious to tread China has signaled that its days of sitting on the sidelines, content to let others shape world affairs are emphatically over.

- **1.** Why has China traditionally been a passive spectator in global affairs?
- (1) To safeguard its oil resources
- (2) To maintain security in its vicinity
- (3) To conceal its economic predicament
- (4) To focus on domestic economic growth
- (5) Economic dominance of the US
- ademy 2. Which of the following best describes China's current international status?
- (1) Cause of insecurity among developing nations
- (2) Largest economy in the world
- (3) Largest donor of aid to developing countries
- (4) Pioneer of implementing a "harmonious world" philosophy
- (5) None of these
- 3. What has been the fallout of China's increased participation in world affairs?
- (1) International scrutiny of its economic policies
- (2) Growth of corruption among its politicians
- (3) Its influence and prestige have grown substantially
- (4) Its growth rate has stabilized
- (5) None of these
- **4.** On which of the following factors is China's economic growth dependent?
- (A) Increased supply of oil and other natural resources to developed countries.
- (B) Success of harmonious world policy.
- (C) Political stability in Africa.
- (1) Only (C)
- (2) Only (A)

- (3) Both (A) and (B)
- (4) All (A), (B) and (C)
- (5) None of these
- **5.** Which of the following is TRUE in the context of the passage?
- (1) China's current political standing internationally is disproportionate to its financial strength
- (2) China is a reluctant participant in military dialogues
- (3) The harmonious world theory is the only utilitarian remedy to the current challenges facing the world
- (4) The US has recognized and acknowledged China's growing international reputation
- (5) China has stopped dealing with corrupt countries because of international pressure
- **6.** The main purpose behind Beijing's intervention in North Korea is to
- (1) ensure that the US acknowledges China's growing military influence
- (2) prevent any hindrances to its domestic economic development programmers
- (3) protect its financial investment in neighboring countries
- (4) provide humanitarian assistance to one of its strongest allies Korea
- (5) None of these
- 7. Which of the following CANNOT be said about China's international relations theory?
- (1) The theory is ambiguous in nature
- (2) The theory reflects China's realization that it occupies a vital place in global affairs
- (3) It promotes the concept of common development for all nations
- (4) It is a theory which explains China's sustained growth rate
- (5) It emphasizes achieving prosperity through universal development
- 8. Which of the following is NOT a step taken by China to cement its role as a world leader?
- (A) Providing aid to countries when other nations are unwilling to do so
- (B) Curtailing its military modernization programmed to reassure neighboring countries
- (C) Negotiating bilateral treaties only with countries with good human rights records

(1) Only (A)
(2) Both (A) and (B)
(3) Both (B) and (C)
(4) Only (B)
(5) None of these
9. Which of the following is an outcome of Beijing's role in Africa?
(1) America's influence in the region has reduced
(2) Instability in the region
(3) The amount of aid from Europe and other countries has doubled
(4) The balance of power in Africa has shifted in favors of Europe over the US
(5) None of these
10. Which of the following is / are responsible for China's active international participation?
(A) Rapid economic growth as a result of selling its surplus foreign exchange reserves
(B)The need to explore and expand to new markets
(C)The need to modernize its armed forces
(1) Only (A)
(2) Both (A) and (B)
(3) Only (B)
(4) Both (B) and (C)
(5) None of these
Direction (Q. 11 - 13): Choose the word which is most similar in meaning to the word printed in bold as used in the passage.
11. Sustained
(1) sporadic (2) confirmed (3) steady (4) supported (5) encouraging
12. Potential
(1) promise (2) talent (3) opportunity (4) capable (5) possible

- **13.** Encompassing
- (1) surrounding (2) incorporating (3) enveloping (4) accepting (5) dealing

Direction (Q. 14 - 15): Choose the word which is most opposite in meaning to the word printed in bold as used in the passage.

- 14. Commendable
- (1) valuable (2) unreliable (3) undeserved (4) unworthy (5) deficient
- **15.** Allay
- (1) strengthen (2) alleviate (3) grow (4) expedite (5) discourage

Direction (Q. 16 - 20): Which of the phrases (1), (2), (3) and (4) given below each sentence should replace the phrase given in bold in the following sentences to make the sentence grammatically correct? If the sentence is correct as it is and No correction is required, mark (5) as the answer. Acad

- **16.** Balding is much more common in males than females.
- (1) at males than females
- (2) in males then females
- (3) at males then females
- (4) in males against females
- (5) No correction required
- 17. Sun is the force before ail natural phenomena.
- (1) behind all natural
- (2) responsible all natural
- (3) at all natural
- (4) pushing all natural
- (5) No correction required
- **18.** Many healthy people are been infected by the virus.
- (1) are having infected
- (2) are being infected
- (3) are in infection



(5) No correction required

19. It is predicted that oil reserves will finished by 2034.

- (1) reserves are finished
- (2) reserves would finish
- (3) reserves have finish
- (4) reserves should finish
- (5) No correction required

academiy **20.** The standard of English in the schools are highly uneven.

- (1) are being uneven
- (2) are often uneven
- (3) is highly uneven
- (4) is highly unevenly
- (5) No correction required

Direction (Q. 21 - 25): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

- (A) Lack of infrastructural support has been one reason.
- (B) Therefore number of people willing to learn the art has dropped.
- (C) Kalaripayattu is an ancient martial art of Kerala.
- (D) There have been several factors responsible for it.
- (E) It is now considered a dying form of art.
- (F) Also, the government has not taken any initiative to preserve it.
- **21.** Which of the following is the FOURTH sentence after rearrangement?
- (1) F (2)E (3) D (4)B (5) A
- **22.** Which of the following is the FIFTH sentence after rearrangement?
- (1)A (2)C (3) D (4) E (5) F

- **23.** Which of the following is the FIRST sentence after rearrangement?
- (1) A (2) B (3) C (4) D (5) E
- **24.** Which of the following is the SECOND sentence after rearrangement?
- (1) C (2) A (3) B (4)E (5) F
- **25.** Which of the following is the THIRD sentence after rearrangement?
- (1) E (2)F (3) C (4) D (5) A

Direction (Q. 26 - 30): Read each sentence to find out whether there is any grammatical 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) i.e. 'No error'. (Ignore the errors of punctuation, if any.)

- **26.** 1) The principle that /2) a pen is mightier than a sword /3) was known to early Greeks /4). /5) No error
- 27. 1) Martha missed her dog /2) who died of a /3) skin infection at a /4) very young age. /5) No error
- 28. 1) There was such /2) a crowd that /3) he would not /4) find his brother. /5) No error
- 29. 1) Having managed the /2) team of two /3) years, he knew /4) his players well. /5) No error
- **30.** 1) Because of heavy /2) rains the trains /3) are disable to /4) run on time. /5) No error

Answers:

- 1. (4) To focus on domestic economic growth
- 2. (5) None of these
- 3. (3) Its influence and prestige have grown substantially
- 4. (5) None of these
- **5.** (3) The harmonious world theory is the only utilitarian remedy to the current challenges facing the world
- **6.** (2) prevent any hindrances to its domestic economic development programmers
- 7. (1) The theory is ambiguous in nature
- **8.** (3) Both (B) and (C)
- 9. (1) America's influence in the region has reduced

10. (4) Both (B) and (C)

11. (3) The word 'sustained' (Adjective) means: uninterrupted; to make something continue for some time without becoming less. Look at its use in the sentence: China has seen a period of sustained economic growth in the recent past.

Out of the given alternatives, the word 'steady' (Adjective) means : fixed, uniform, regular.

Look at its use in the sentences: We are making slow but steady progress.

The castle receives a steady stream of visitors.

Hence, the words sustained and steady are synonymous.

12. (5) The word 'potential' (Adjective) means: that can develop into something or be developed in the future.

Look at its use in the sentence: First we need to identify actual and potential problems.

Hence, the words possible and potential are synonymous.

13. (2) The word 'encompass' (Verb) means: to include a large number or range of things; to surround or cover something completely.

Look at its use in the sentence The job encompasses a wide range Of responsibilities.

The fog soon encompassed the whole valley.

Out of the given alternatives, the words incorporate also means to include something so that it forms a part of something.

Look at its use in the sentences: The new car design incorporates all the latest safety measures.

Many of your suggestions have been incorporated in the plan.

Clearly, the words incorporating and encompassing are synonymous.

14. (4) The word 'commendable'

(Adjective) means: deserving

praise and approval: commendable honesty.

The meaning of the word 'unworthy' is: not having the necessary qualities to deserve something, especially respect.

Look at its use in the sentence:

He considered himself unworthy of the honor they had bestowed on him. Clearly, the words commendable and unworthy are antonymous.

15. (1) The word 'allay' (Verb) means: to make something especially a feeling, less strong.

Out of the given alternatives, the word 'strengthen' means : to become stronger; to make somebody/something stronger.

Look at its use in the sentences: Her position in the party has strengthened in recent years.

Repairs are necessary to strengthen the bridge, Hence the words allay and strengthen are antonymous.

- **16.** (5) No correction required
- 17. (1) behind all natural
- **18.** (2) are being infected
- 19. (2) reserves would finish
- **20.** (3) is highly uneven
- **21.** (5) A
- **22.** (5) F
- 23. (3) C
- **24.** (4) E
- **25.** (4) D
- **26.** (3) The group of words 'then a sword' should be replaced by 'than a sword', In comparative degree we use 'than', not then.

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- 27. (1) Use 'Martha is missing ' or 'Martha misses '
- **28.** (3) The sense of the sentence shows inability. Hence, it will be proper to use 'he could not' instead of 'he would not'.
- 29. (2) It is proper to use preposition 'for' as it shows period of time.
- **30.** (3) Replace 'are disable to' by 'are unable to'.

Look at the-sentence: I tried to meet him but was unable to.

2. Reasoning

1. 'Mustard' is related to 'Seed' in the same way as 'Carrot' is related to	the same way as 'Carrot' is related to	'Seed' in the s	related to	'Mustard' is	1.
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- (1) Fruit (2) Stem (3) Flower (8) Root (5) None of these
- **2.** How many meaningful English words can be formed with the letters ESTR using each letter only once in each word?
- (1) None (2) One (3) Two (4) Three (5) None of these
- **3.** Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- (1)Cup (2) Jug (3) Tumbler (4) Plate (5) Pitcher
- **4.** Four of the following five are alike in a certain way and so form a group. Which is the **one** that does not belong to that group?
- (1) Copper (2) Mercury (3) Iron (4) Aluminum (5) Zinc
- 5. 'FF is related to 'LO' in the same way as 'PS' is related to?
- (1) VY (2) VZ (3) WZ (4) UX (5) None of these
- **6.** Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- (1)217 (2)103 (3) 241 (4) 157 (5)131
- 7. K is brother of T. M is mother of K. W is brother of M. How is W related to T?
- (1) Maternal uncle (2) Paternal uncle (3) Grandfather (4) Data inadequate (5) None of these
- **8.** 'Gram' is related to 'Mass' in the same way as 'Centimeter' is related to?
- (1) Area (2) Volume (3) Length (4) Sound (5) Energy
- **9.** Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
- (1) 12 (2) 28 (3) 52 (4) 68 (5) 96
- **10.** If 'white' means 'black'; 'black' means 'red'; 'red' means 'blue, 'blue' means 'yellow' means 'grey', then which of the following represents the cooler of clear sky?
- (1) blue (2) red (3) yellow (4) Cannot be determined (5) None of these

- 11. How many such pairs of letters are there in the word STAPLER each of which has as many letters between them in the word as in the English alphabet?
- (1) None (2) One (3) Two (4) Three (5) More than three
- 12. In a certain code MODEL is written as '513#2 and DEAR is written as '3#%8'. How is LOAD written in that code?
- (1)21% 3 (2)23%1 (3) 25% 3 (4) 21 #3 (5) None of these
- 13. Town D is to the West of town M. Town R is to the South of town D. Town K is to the East of town R. Town K is towards which direction of town D?
- (1) South (2) East (3) North-East (4) South-East (5) None of these
- 14. How many such digits are there in the number 5261983 each of which is as far away from the beginning of the number as when the digits are arranged in ascending order within the number?
- (1) None (2) One (3) Two (4) Three (5) None of these
- 1CSO **15.** What should come next in the following letter series?

HGFEDCBAHGFEDCBHGFEDCH

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

Direction (Q. 16 -20): In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be a 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.

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

16. Statements:

All benches are cots.

No cot is lamp.

Some lamps are candles.

Conclusions:

- I. Some cots are benches.
- II. Some candles are cots.

17. Statements:

Some cats are dogs.

All dogs are goats.

All goats are walls.

Conclusions:

- I. Some walls are dogs.
- II. Some walls are cats.

18. Statements:

Some buildings are sofas.

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Some sofas are benches.

Some benches are tables.

Conclusions:

- I. Some tables are sofas.
- II. No table is sofa.

19. Statements:

All rats are bats.

Some bats are desks.

All desks are chairs.

Conclusions:

- I. Some desks are rats.
- II. Some chairs are rats.

20. Statements:

Some roads are ponds.

All ponds are stores.

Some stores are bags.

Conclusions:

- I. Some bags are ponds.
- II. Some stores are roads.

Direction (Q. 21 - 25): Study the following information carefully and answer the questions given below:

P, Q, R, S, T and M are six students of a school, one each studies in Class I-VI. Each of them has a favorite colour from red, black, blue, yellow, pink and green, not necessarily in the same order.

Q likes black and does not study in Class IV or V. The one who studies in class IV does not like green. P studies in class II. M likes blue and does not study in class IV. The one who likes yellow studies in class VI. S likes pink and studies in class I. R does not study in class VI.

- **21.** In which class does R study?
- (1)V (2) III (3) IV (4) Data in adequate (5) None of these
- 22. Which colour does R like?
- (1) Black (2) Yellow (3) Green (4) Blue (5) None of these
- 23. Which colour does P like?
- (1) Green (2) Yellow (3) Red (4) Data inadequate (5) None of these
- **24.** Which of the following combinations is correct?
- (1)P-II-Yellow (2) Q III Green (3) S I Black (4) T-V-Yellow (5) None of these
- **25.** In which class does M study?
- (1) IV (2) III (3) II (4) V (5) None of these

Direction (Q. 26 - 30): In the following questions, the symbols @, ©, \$, % and * are used with the following meaning as illustrated below:

'P © Q' means 'P is not greater than Q'.

'P % Q' means 'P is not smaller than Q'.

'P * Q' means 'P is neither smaller than nor equal to Q'.

'P @ Q' means 'P is neither greater than nor equal to Q'.

'P \$ Q' means 'P is neither greater than nor smaller than Q'.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true?

- (1) if only Conclusion I is true.
- (2) if only Conclusion II is true.
- (3) if either Conclusion I or II is true.
- (4) if neither Conclusion I nor II is true.
- ine academi (5) if both Conclusions I and II are true.
- **26.** Statements:

K@V,V@N,N%F

Conclusions:

I. F@V II. K@N

27. Statements:

H©W,W\$M,M@B

Conclusions:

I. B * H II. M % H

28. Statement:

D % B, B*T, T\$M

Conclusion:

I. T©D II. M©D

29. Statement:

M*T, T@K, K©N

Conclusion:

I. N*T II. N*M

30. Statement:

R\$J, J%D, D*F

Conclusions:

I. D\$R II. D@R

Direction (Q. 31 - 35): In each question below is given a group of letters followed by four combinations of digits/symbols numbered (1), (2), (3) and (4). You have to find out which of the combinations correctly represents the group of letters based on the following coding system and the conditions and mark the number of that combination as your answer. If none of the four combinations correctly represents the group of letters, give (5) i.e. 'None of these' as the answer.

Letters	M	D	R	Р	А	Т	W	Е	1	F	Н	U	K	Z
Digit	5	6	#	7	8	1	@	\$	2	%	3	©	4	9
symbol													T.	
Code												-0		

10-

Conditions:

- (i) If the first letter is a consonant and the last letter is a vowel, their codes are to be interchanged.
- (ii) If both the first and the last letters are vowels, both are to be coded as *.
- (iii) If the first letter is a vowel and the last letter is a consonant, both are to be coded as the code for the consonant.
- 31. TUKDIP
- (1) 1©4627 (2)1©4621 (3) 7©4621 (4) 1©6427 (5) None of these
- 32. EFDMKA
- (1) \$%6548 (2) \$%654\$ (3) *%654* (4) 8%6548 (5) None of these
- 33. APWTUH
- (1) *7@1©* (2) 87@1©3 (3) 37@1©8 (4) 87@1©8 (5) None of these
- **34.** MARTWE
- (1) 58#1@\$ (2) 58#1@5 (3) \$8#1@5 (4) \$8#1@5 (5) None of these
- 35. HEMKZI
- (1) 2\$5493 (2) 3#5492 (3) 3\$5493 (4) 2\$5492 (5) None of these

Answers:

- **1.** (4); Mustard is an oilseed (seed). Similarly, carrot is a modified root.
- 2. (2); Meaningful Word = REST
- **3.** (4); Except Plate, all others are used for storing water (liquid).
- 4. (2); Except Mercury, all others are solid at normal room temperature. Mercury is liquid at normal room temperature.
- **5.** (1);

$$F \xrightarrow{+6} L$$

Similarly,

$$P \xrightarrow{+6} V$$

$$S \xrightarrow{+6} Y$$

- cademi **6.** (1); Except the number 217, all others are Prime Numbers.
- 7. (1); M is mother of K and T.

W is brother of M.

Therefore, W is maternal uncle of T.

8. (3); Gram is the unit of mass. Similarly, Centimeter is the unit of length.

9. (5);
$$1 + 2 = Odd Number$$

$$2 + 8 = 1 + 0 = Odd Number$$

$$5 + 2 = 7$$
 = Odd Number

$$6 + 8 = 14$$
 = $1 + 4 = 5$

= Odd Number

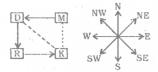
$$9+6=15$$
 = $1+5=6$

= Even Number

- **10.** (3); The colors of sky is blue. But here blue has been called yellow.
- **11.** (3);

12. (1);

13. (4);



14. (3);

5 2 6 1 9 8 3

1 2 3 5 6 8 9

15. (3);

HGFEDCBA

HGFEDCB

HGFEDC

HG

16. (1);

All benches are cots

No cots lamps

A + E = E-type of Conclusion

No bench is lamps

No cost is lamps

Some lamps are candles

E + I = O1 - type of Conclusion

Some candles are not cots.

Conclusions I is Converse of the first Premise.

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17. (5);

Some cats are dogs

All dogs are goats

I + A = Ai-type of Conclusion

Some cats are goats

All dogs are goats

All goats are walls.

A + A = A-type of Conclusion

All dogs are walls.

Conclusion I is Converse of it

Some cats are goats

All goats are walls

I + A = I-type of Conclusion

Some cats are walls

Conclusion II is Converse of it.

18. (3);

All the three Premises are Particular Affirmative (I-tpe)

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No Conclusion follows from the two particular Premises.

Conclusion I and II form Complementary Pair.

Therefore, either Conclusion I or II follows.

19. (4); some bats are desks

All desks are chairs

I + A = I-type of Conclusion

Some bats are chairs

20. (2); Some roads are ponds.

All ponds are stores.

I + A = I-type of Conclusion

Some roads are stores

Conclusion II is Converse of it.

21. (3); R does study in Class IV.

22. (5); R likes Red colour

23. (1); likes Green colour.

24. (5); None

25. (4); M does study in class V.

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26. (2); K @ V = K < V

 $V \otimes N = V \leq N$

 $N \% F = N \ge F$

Therefore,

K < V < N > F

Conclusion

I. F @ V = F < V: Not True

II. K @ N = K < N: True

27. (5);

H © W = H < W

W \$ M = W = M

M @ B = M < B

Therefore,

H < W = M < B

Conclusion

I. B * H = B > H : True

II. M % $H = M \ge H$: True

28. (4);

 $D \% B = D \ge B$

B * T = B > T

T \$ M = T = M

Therefore,

 $\mathsf{D} \geq \mathsf{B} > \mathsf{T} = \mathsf{M}$

Conclusion

I. T © D = T \leq D: Not True

Shime academy II. M © D = $M \le D$: Not True

29. (1);

M * T = M > T

T @ K = T < K

 $K \odot N = K \leq N$

Therefore,

 $\mathsf{M} > \mathsf{T} < \mathsf{K} \leq \mathsf{N}$

Conclusion

I. N * T = N > T: True

II. N * M = N > M: Not True

30. (3):

 $R \ \$ \ J = R = J$

 $J\%D = J \ge D$

D * F = D > F

Therefore,

 $R = J \ge D > F$

Conclusion

I. $D \$ R = D = R: Not True

II. D @ R = D < R: Not True

Either I or II is True

31. (1);

32. (3);

E F D M K A

1 1 1 1 1 1

* % 6 5 4 *

Condition (ii) is applicable

33. (5);

A P W T U H 1 1 1 1 1 1 3 7 @ 1 @ 3

Condition (iii) is applicable

34. (3);

Condition (i) is applicable

35. (1);

Condition (i) is applicable.

3. Quantities Aptitude

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Direction (Q. 1 - 15): What will come in place of the question mark (?) in the following questions?

1. 2.8 x 1.5+ 8% of 250 = ?

- (1) 24.2 (2) 24.02 (3) 242.2 (4) 2.42 (5) None of these
- **2.** $3\frac{2}{7}$ $2\frac{1}{14}$ $1\frac{1}{7}$ = ? + $2\frac{1}{14}$
- (1) $1\frac{1}{7}$ (2) $1\frac{2}{7}$ (3) $\frac{1}{7}$ (4) $\frac{3}{7}$ (5) None of these
- 3. $\frac{3}{8}$ of $\frac{4}{5}$ of $\frac{2}{3}$ of 730 = ?
- (1) 86 (2) 146 (3) 156 (4) 93 (5) None of these
- **4.** $8^7 \times 2^6 \div 8^{2.4} = 8^?$
- (1) 10.6 (2) 9.6 (3) 8.6 (4) 6.6 (5) None of these
- **5.** 160% of 250 + ? = 120% of 400
- (1) 160 (2) 40 (3) 80 (4) 120 (5) None of these
- **6.** 38 x 5.6 x 11.5 31.653 = ?
- (1) 234.880 (2) 265.404 (3) 213.067 (4) 256.072 (5) None of these

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- 7. $\frac{4}{5}$ of $\frac{4}{7}$ of $\frac{5}{6}$ of 1218 = ?
- (1) 415 (2) 384 (3) 492 (4) 346 (5) None of these
- **8.** 93% of 456 = ?
- (1) 435.06 (2) 419.02 (3) 443.04 (4) 424.08 (5) None of these
- **9.** 8.2 x ? = 465.76
- (1) 56.8 (2) 48.6 (3) 62.4 (4) 74.2 (5) None of these
- **10.** $1485 \div (44 \times 0.75) = ?$
- (1) 33 (2) 56 (3) 45 (4) 67 (5) None of these
- **11.** $128 \div 8 \div 0.4 = ?$
- (1) 36 (2) 42 (3) 48 (4) 54 (5) None of these
- **12.** 9358-5086-2384 = ?
- (1) 1788 (2) 1988 (3) 2188 (4) 2388 (5) None of these
- **13.** $8\frac{5}{6} \div 10\frac{11}{36} = ?$

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(1)\frac{5}{8} (2)\frac{5}{7} (3)\frac{6}{7} (4)\frac{6}{11} (5) None of these
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Direction (Q. 16 - 20): What will come in place of the question mark (?) in each of the following number series?

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16. 2 8 26 ? 242

17. 3 4 12 ? 196

19. 7 13 ? 49 97

20. 5 3 6 ? 64.75

21. Present ages of Amit and his father are in the ratio of 2 : 5 respectively. Four years hence the ratio of their ages becomes 5:11 respectively. What was father's age five years ago?

22. Twice the square of a number is six times the other number What is the ratio between the first number and the second number?

23. Manoj sold an article for Rs. 15,000. Had he offered a discount of 10% on the selling price he would have earned a profit of 8%. What is the cost price?

24. Cost of 8 pens and 4 pencils is Rs. 176 and the cost of 2 pens and 2 pencils is Rs. 48. What is the cost of one pen?

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

25. B and C together can complete a work in 8 days, A and B together can complete the same work in 12 days and A and C together can complete the same work in 16 days. In how many days can A, B and C together complete the sam5e work?

(1) $3\frac{9}{13}$ (2) $7\frac{5}{13}$ (3) $7\frac{5}{12}$ (4) $3\frac{5}{12}$ (5) None of these

26. What will be the compound interest accrued on an amount of Rs. 10.000 at the rate of 20 p.c.p.a. in two years if the interest is compounded half yearly?

(1) Rs. 4,400 (2) Rs. 4,600 (3) Rs. 4,641 (4) Rs. 4,680 (5) None of these

27. Income of A is 150% of the income of B and income of C is 120% of the income of A. If the total income of A, B and C together is Rs. 86,000, what is C's income?

(1) Rs. 30,000 (2) Rs. 32,000 (3) Rs. 20,000 (4) Rs. 36,000 (5) None of these

28. The average of 5 consecutive even numbers A, B, C, D and E is 106. What is the product of B and D?

(1)11440 (2) 11024 (3)10608 (4) 11232 (5) None of these

29. The owner of a cell phone shop charges his customer 23% more than the cost price. If a customer paid Rs. 7,011 for a cell phone, then what was the cost price of the cell phone?

(1) Rs.5,845 (2) Rs.6,750 (3) Rs.5,900 (4) Rs.6,925 (5) None of these

30. If the fractions, $\frac{1}{5}$, $\frac{2}{7}$, $\frac{3}{5}$, $\frac{5}{6}$ and $\frac{11}{13}$ are arranged in decreasing order of their values, which one will be the fourth ?

 $(1)\frac{11}{13}$ $(2)\frac{2}{3}$ $(3)\frac{5}{6}$ $(4)\frac{1}{5}$ (5) None of these

31. Ms. Vishakha deposits an amount of Rs. 35,800 to obtain a simple interest at the rate of 15 p.c.p. a for 4 years. What total amount will Ms. Vishakha get at the end of 4 years?

(1) Rs.45,680 (2) Rs.39,880 (3) Rs.21,480 (4) Rs.57, 280 (5) None of these

32. There are 2010 employees in an organization, out of which 30% got transferred to different places. How many such employees are there who got transferred?

(1) 603 (2) 402 (3) 804 (4) 703 (5) None of these

33. What would be the simple interest obtained on an amount of Rs 8,930 at the rate of 8 p.c.p.a after 5 years?

34. What is the least number to be added to 7700 to make it a perfect square?

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(1) 131 (2) 221 (3) 77 (4) 98 (5) None of these

35. Find the average of the following set of scores:

125, 133, 298, 345, 446, 507

(1) 312 (2) 309 (3) 315 (4) 306 (5) None of these

Answers:

1. (1); ? = 2.8 x 1.5 +
$$\frac{8 \times 250}{100}$$

$$= 4.2 + 20 = 24.2$$

$$\frac{23}{7} - \frac{29}{14} - \frac{8}{7} = ? + \frac{29}{14}$$

$$= ? + \frac{23}{7} - \frac{29}{7} - \frac{8}{7}$$

$$=\frac{23-29-8}{7}=\frac{14}{7}=-2$$

$$? = \frac{3}{8} \times \frac{4}{5} \times \frac{2}{3} \times 730 = 146$$

$$8^{?} = \frac{87x26}{824} = \frac{87x82}{824}$$

$$= 8^? = 8^{7+2-2.4} = 8^{6.6}$$

$$\frac{160 \times 250}{100} + ? = \frac{120 \times 400}{100}$$

$$= 400 + ? = 480$$

Therefore, ? = 480 - 400 = 80

$$? = 3.8 \times 5.6 \times 11.5 - 31.653$$

$$= 244.72 - 31.653$$

? = 1218 x
$$\frac{5}{6}$$
 x $\frac{4}{7}$ x $\frac{4}{5}$

$$? = \frac{456 \times 93}{100} = 424.08$$

$$? = \frac{465.76}{8.2} = 56.8$$

$$? = \frac{1485}{44 \times 0.75} = 45$$

$$? = \frac{128}{8 \times 0.4} = 40$$

$$= 464$$
8. (4);
$$? = \frac{456 \times 93}{100} = 424.08$$
9. (1);
$$? = \frac{465.76}{8.2} = 56.8$$
10. (3);
$$? = \frac{1485}{44 \times 0.75} = 45$$
11. (5);
$$? = \frac{128}{8 \times 0.4} = 40$$
12. (5);
$$? = 9358 - 5086 - 2384$$

$$? = 8\frac{5}{6} \div 10\frac{11}{36}$$

$$=\frac{53}{6} \div \frac{371}{371} = \frac{6}{7}$$

$$(?)^2 = 25^3 \times 4^3 - 800^2$$

$$= (25 \times 25 \times 25 \times 4 \times 4 \times 4 - 8 \times 8)$$

= 360000

15. (1);

16. (5);

The pattern is:

$$2 \times 3 + 2 = 6 + 2 = 8$$

$$8 \times 3 + 2 = 24 + 2 = 26$$

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$$26 \times 3 + 2 = 78 + 2 = 80$$

$$80 \times 3 + 2 = 240 + 2 = 242$$

17. (1)

The pattern is:

$$3 \times 1 + 1^2 = 3 + 1 = 4$$

$$4 \times 2 + 2^2 = 8 + 4 = 12$$

$$12 \times 3 + 3^2 = 36 + 9 = 45$$

$$45 \times 4 + 4^2 = 180 + 16 = 196$$

18. (4);

The pattern is:

$$9 \times 2 - 1 = 18 - 1 = 17$$

$$17 \times 2 - 1 = 34 - 1 = \boxed{33}$$

$$88 \times 2 - 1 = 66 - 1 = 65$$

$$65 \times 2 - 1 = 130 - 1 = 129$$

19. (2);

The pattern is:

$$7 \times 2 - 1 = 14 - 1 = 13$$

20. (3);

The pattern is:

$$5 \times 0.5 + 0.5 = 2.5 + 0.5 = 3$$

$$6 \times 2.5 + 2.5 = 15 + 2.5 = 17.5$$

$$17.5x3.5 + 3.5 = 61.25 + 3.5$$

$$= 64.75$$

21. (4);

th. Let the present ages of Amit and his father be 2x years and 5x years respectively.

Therefore,
$$\frac{2x+4}{5x+4} = \frac{5}{11}$$

$$= 25x + 20 = 22x + 44$$

$$= 3x = 24 = x = \frac{24}{3} = 8$$

Therefore, Father's age 5 years ago

$$= 5x - 5 = 5 \times 8 - 5 = 35 \text{ years}$$

22. (4);

Let the numbers be x and y respectively.

Therefore,
$$2x^2 = 6y = x2 = 3y$$

No ratio can be obtained between x and y.

23. (1);

Let the cost price be Rs x.

Therefore, 90% of 15000 = 108% of x

$$= \chi = \frac{90 \times 15000}{108}$$

Therefore, x = Rs. 12500

24. (5);

Let the cost price of 1 pen be

Rs. X and that of 1 pencil be Rs. Y.

Therefore, 8x + 4y = 176(i)

And
$$2x + 2y = 48$$

$$= x + y = 24 = y = 24 - x$$

Putting this value in equation (i),

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$$8x + 4(24 - x) = 176$$

$$= 8x - 4x = 176 - 96 = 4x = 80$$

$$= x = \frac{80}{4} = 20$$

Therefore, CP of 1 pen = Rs. 20

25. (2);

(B+C)'s 1 day's work =
$$\frac{1}{8}$$
....(i)

(A+B)'s 1 day's work

$$=\frac{1}{12}$$
....(ii)

(A+C)'s 1 day's work

$$=\frac{1}{16}$$
....(iii)

On adding all these three equations

$$2 (A + B + C)$$
's $1 day$'s work

$$=\frac{1}{8} + \frac{1}{12} + \frac{1}{16} = \frac{6+4+3}{48} = \frac{13}{48}$$

$$= (A + B + C)$$
's 1 day's work

$$=\frac{13}{96}$$

Therefore, A, B and C together can complete the work in $\frac{96}{13}$ = $7\frac{5}{13}$ days

26. (3);

Interest is compounded half yearly.

shine academy Therefore, R = 20% p.a. = 10% half years

T = 2 years = 4 half years

Therefore, C.I. =
$$P[(1 + \frac{R}{100})^T - 1]$$

$$= 10000[(1 + \frac{10}{100})^4 - 1]$$

$$= 10000[(\frac{11}{10})^4 - 1]$$

$$=10000[(\frac{121}{100}+1)(\frac{120}{100}-1)]$$

$$= 10000 \times \frac{221}{100} \times \frac{21}{100}$$

27. (4);

Let B's income = Rs. X

Therefore, A's income =
$$\frac{150}{100}$$
 x x = Rs. $\frac{3x}{2}$

C's income =
$$\frac{120}{100} \times \frac{3x}{2} = \text{Rs.} \frac{9x}{5}$$

Therefore,
$$x + \frac{3x}{2} + \frac{9x}{5} = 86000$$

$$=\frac{10x+15x+18x}{10}=86000$$

$$= 43x = 860000$$

$$= x = \frac{860000}{43} = 20000$$

Therefore, C's income

= Rs.
$$(\frac{9}{5} \times 20000)$$
 = Rs. 36000

28. (4);

According to the questions,

$$X + x + 2 + x + 4 + x + 6 + x + 8$$

$$= 5 \times 106$$

$$= 5x + 20 = 530$$

$$= 5x = 530 - 20 = 510$$

$$= x = \frac{510}{5} = 102$$

Therefore, B = x + 2 = 102 + 2 = 104

$$D = x + 6 = 102 + 6 = 108$$

ine academiy Therefore, B x D = $104 \times 108 = 11232$

29. (5);

Let the CP of the call phone be Rs. X

According to the question,

$$X \times \frac{123}{100} = 7011$$

$$= x = \frac{7011 \times 100}{123} = 5700$$

30. (2);

Decimal equivalents of the fractions:

$$\frac{1}{5} = 0.2;$$
 $\frac{2}{7} = 0.29;$

$$\frac{3}{5} = 0.6;$$
 $\frac{5}{6} = 0.83$

$$\frac{11}{13}$$
 = 0.85

Clearly,

Or,
$$\frac{11}{13} > \frac{5}{6} > \frac{3}{5} > \frac{2}{7} > \frac{1}{5}$$

Therefore, Fourth fraction = $\frac{2}{7}$

31. (4);

$$\mathsf{SI} = \frac{PRT}{100} = \frac{35800 \ x \ 4 \ x \ 15}{100}$$

= Rs. 21480

Therefore, Amount = Principal + SI

$$= Rs. (35800 + 21480)$$

32. (1);

2 Anime Alcademiy Number of transferred employees

= 30% of 2010

$$=\frac{2010 \times 30}{100} = 603$$

33. (3);

$$SI = +\frac{PRT}{100}$$

$$=\frac{8930 \times 5 \times 8}{100}$$
 = Rs. 3572

34. (5);

Clearly, 7569 < 7700 < 7744

Therefore, Required number

$$= 7744 - 7700$$

= 44

35. (2);

Required average

$$=\frac{125+133+298+345+446+507}{6}$$

 $=\frac{xx5}{100}=49$

