## Quantitative Aptitude

Directions ( $\mathbf{1}$ to 10): What should come in place of the question mark (?) in the following questions?

1) $(12 \times 19)+(13 \times 8)=(15 \times 14)+$ ?
a) 124
b) 122
c) 126
d) 128
e) None of these
2) $\sqrt{65 \times 1250+54=?}$
a) $\sqrt{28}$
b) $28^{2}$
c) 28
d) 784
e) None of these
3) $15 \%$ of $524 \quad 2 \%$ of $985+?=20 \%$ of 423
a) 25.9
b) 27.7
c) 25.7
d) 24.9
e) None of these
4) $151 \times 8+(228 \div 19)^{2}=$ ?
a) 1360
b) 1354
c) 1368
d) 1381
e) None of these
5) $\sqrt{1521}+\sqrt{225}=$ ?
a) 56
b) 58
c) 54
d) 62
e) None of these
6) $38.734+8.638 \quad 5.19=$ ?
a) 41.971
b) 42.179
c) 43.072
d) 42.182
e) None of these
7) $7^{8.9} \div(343)^{1.7} \times(49)^{4.8}=7$ ?
a) 13.4
b) 12.8
c) 11.4
d) 9.6
e) None of these
8) $\sqrt[3]{512} \div \sqrt[4]{16} \div \sqrt{576}=$ ?
a) 24
b) 31
c) 22
d) 18
e) None of these
9) $(42 \times 3.2) \div(16 \times 1.5)=$ ?
a) 5.9
b) 5.6
c) 6.1
d) 4.8
e) None of these
10) $\quad 199+5^{3} \div 4 \times 4^{2}=$ ?

## SBI PO Preliminary Exam Model Paper 9

a) 969
b) 655
c) 966
d) 799
e) None of these

Directions (Q. 11-15) Study the following pie-charts and answer the questions given below:

## Budget of a State



11) The central angle for sales tax is
a) $126^{\circ}$
b) $110^{\circ}$
c) $140^{\circ}$
d) $120^{\circ}$
e) $70^{\circ}$
12) If an amount of 21 Lakhs is obtained as Excise and Custom Duty, what is the total income of the State?
a) 29.4 Lakhs
b) 30 Lakhs
c) 150 Lakhs
d) 300 Lakhs
e) None of these
13) If the expenditure on plan and non-plan is 6.25 Crores, then the expenditure on Agriculture (in Crores) is
a) 100
b) 10
c) 1
d) 16
e) 4
14) If the income from miscellaneous is $250 \%$ more than the expenditure on interest, then the total expenditure is $\qquad$ than the total income
a) $56 \%$ more
b) $44 \%$ less
c) $36 \%$ less
d) $11 \%$ more
e) $10 \%$ less
15) What is the ratio of the combined expenditure for Defence and Agriculture to all other expenditures?
a) $20: 11$
b) $9: 16$
c) $21: 10$
d) $16: 9$
e) None of these

Directions (16 to 20): Study the following bar graph carefully to answer the questions.

Marks obtained by five students in Physics and Chemistry


## Students

16) Marks obtained by $S$ in Chemistry is what percent of the total marks obtained by all the styudents in Chemistry?
a) 25
b) 28.5
c) 35
d) 31.5
e) 22
17) If the marks obtained by $T$ in Physics were increased by $14 \%$ of the original marks, what would be his new approximate percentage in Physics if the maximum marks in Physics were 140 ?
a) 57
b) 32
c) 38
d) 48
e) 41
18) Fill in the blank space in order to make the sentence correct as per the given information. Total marks obtained by T in both the subjects together is more than the marks obtained by
a) Q in Chemistry
b) R in Physics
c) S in Chemistry
d) P in Physics
e) $R$ in both the subjects together
19) What is the respective ratio between the total marks obtained by P in Physics and Chemistry together to the total marks obtained by T in Physuics and Chemistry together?
a) $3: 2$
b) $4: 3$
c) $5: 3$
d) $2: 1$
e) None of these
20) What is the respective ratio between the total marks obtained by Q and S together in Chemistry to the total marks obtained by P and R together in Physics?
a) $23: 25$
b) $23: 21$
c) $17: 19$
d) $17: 23$
e) None of these
21) Meera purchased 23 bracelets at the rate of Rs. 160 per bracelet. At what rate per bracelet should she sell the bracelets so that profit earned is 15\%
a) Rs. 184
b) Rs. 186
c) Rs. 192
d) Rs. 198
e) None of these
22) Kajal spends $55 \%$ of her monthly income on grocery, clothes and education in the ratuio of $4: 2: 5$ respectively. If the amount spent on clothes is Rs.5540, what is Kajal's monthly income?
a) Rs. 55400
b) Rs. 54500
c) Rs. 55450
d) Rs. 55650
e) None of these
23) 35 percent of a number is two times 75 percent of another number. What is the ratio between the first and the second number respectively?
a) $35: 6$
b) $31: 7$
c) $23: 7$
d) $32: 9$
e) None of these
24) Area of a rectangular field is $3584 \mathrm{~m}^{2}$ and the length and the breadth are in the ratio $7: 2$ respectively. What is the perimeter of the rectangle?
a) 246 m
b) 292 m
c) 286 m
d) 288 m
e) None of these
25) Last year there were 610 boys in a school. The number decreased by 20 percent this year. How many girls are there in the school if the number of girls is 175 percent of the total number of boys in the school this year?
a) 854
b) 848
c) 798
d) 782
e) None of these
26) Aryan got 350 marks and Vidya scored 76 percent marks in the same test. If Vidya scored 296 marks more than Aryan, what were the maximum marks of the test?
a) 650
b) 900
c) 850
d) 950
e) None of these
27) A student was awarded certain marks in an examination. However, after re-evaluation, his marks were reduced by $40 \%$ of the marks that were originally awarded to him so that the new score now became 96 . How many marks did the student lose after re-evaluation?
a) 58
b) 68
c) 63
d) 56
e) 64
28) 855 candidates applied for a job, out of which $80 \%$ of the candidates wsere rejected. How many candidates were selected for the job?
a) 684
b) 151
c) 676
d) 179
e) None of these
29) Average of five numbers is 61 . If the average of first and third number is 69 and the average of second and fourth number is 69 , what is the fifth number?
a) 31
b) 29
c) 25
d) 35
e) None of these
30) The respective ratio between the present ages of father, mother and daughter is $7: 6: 2$. The difference between mother's and the daughter's age is 24 years. What is the father's age at present?
a) 43 years
b) 42 years
c) 39 years
d) 38 years
e) None of these
31) Average weight of 19 men is 74 kg and the average weight of 38 women is 63 kg . What is the average weight (rounded off to the nearest integer) of all the men and the women together?
a) 59 kg
b) 65 kg
c) 69 kg
d) 67 kg
e) 71 kg
32) What should come in place of the question mark so that it satisfies equality of the equation?
$32 \%$ of $750<$ ?
a) $23 \%$ of 600
b) $46 \%$ of 207
c) $98 \%$ of 250
d) $75 \%$ of 320
e) None of these
33) Mathew scored 42 marks in biology, 51 marks in chemistry, 58 marks mathematics, 35 marks in physics and 48 marks in English. The maximum marks a student can score in each subject are 60 . How much overall percentage did Mathew get in this exam?
a) 76
b) 82
c) 68
d) 78
e) None of these
34) Bus fare between Raipur and Mirpur for one adult is six times the fare for one child. If an adult's bus fare is Rs.114, how much amount will be paid by 4 adults and 5 children together for travelling the same distance?
a) Rs. 505
b) Rs. 551
c) Rs. 572
d) Rs. 560
e) None of these
35) A truck covers a distance of 368 km at a certainn speed in 8 hours. How much time would a car take at an average speed which is $18 \mathrm{~km} / \mathrm{hr}$ more than that of the speed of the truck to cover a distance which is 16 km more than that travelled by the truck?
a) 7 hours
b) 5 hours
c) 6 hours
d) 8 hours
e) None of these

## Reasoning Ability

Directions (Q. 36-38) Study the following information to answer the given questions.
$\mathrm{L}, \mathrm{M}, \mathrm{N}, \mathrm{O}, \mathrm{P}, \mathrm{Q}$ andR are sitting around a circle facing the centre. O is sitting between $L$ and $R$. $Q$ is $2^{\text {nd }}$ to the right of $R$ and $P$ is $2^{\text {nd }}$ to the right of $Q$. N is not an immediate neighbour of R .
36. Which of the following is not correct?
a) $R$ is $2^{\text {nd }}$ to the right of $L$
b) M is $2^{\text {nd }}$ to the left of N
c) L sits exactly between O and P
d) P and N are immediate neighbours
e) P sits to the opposite of N
37. How many persons are seated between L and Q if we count anticlockwise from L to Q ?
a) One
b) Two
c) Three
d) Four
e) More than four
38. Who is to the immediate left of P ?
a) L
b) N
c) M
d) O
e) None of these

Directions (Q. 39-40) Four of the following five are alike in a certain way based on their seating positions in the above arrangement and so form a group. Which is the one that does not belong to the group?
39.a) QPN
b) MOR
c) LRO
d) RQM
e) ROL
40.a) LP
b) RM
c) MQ
d) NP
e) OR

Directions (Q. 41-45) Study the following information to answer the given questions.

A, B, C, X, Y, Z are seated in a straight line facing North. C is $3^{\text {rd }}$ to the right of $Z$ and $B$ sits $2^{\text {nd }}$ to the right of $C$. $X$ sits to the immediate right of $A$.
41. Which of the following represents the pair of persons sitting exactly in the middle of the line?
a) XB
b) ZB
c) BX
d) XC
e) $X Y$
42. What is X 's position with respect to Z ?
a) Immediate right of $Z$
b) $2^{\text {nd }}$ to the left
c) $3^{\text {rd }}$ to the right
d) $2^{\text {nd }}$ to the right
e) None of these
43. Four of the following five are alike in a certain way based on their seating positions in the above arrangement and so form a group. Which is the one that does not belong to the group?
a) ZA
b) XC
c) CY
d) YB
e) XA
44. How many persons are seated between A and C?
a) One
b) two
c) Three
d) Four
e) None of these
45.If $\mathrm{A}: \mathrm{X}$ and $\mathrm{Z}: \mathrm{A}$, then Y :
a) Y
b) B
c) A
d) X
e) None of these

Directions (Q. 46-50) Study the following information to answer the given questions.

In a certain code, ' 829 ' means 'how art thou', '953' means 'thou art good' and ' 15873 ' means 'thy good and thou bad'.
46. What may be the possible code for 'thy'?
a) 1 or 7
b) 7
c) 3
d) 5
e) None of these
47. What is the code for 'thou'?
a) 9
b) 6
c) 2
d) 5
e) None of these
48. What is the code for 'how'?
a) 5
b) 8
c) 2
d) 9
e) None of these
49. Which of the folloing may possibly be the code for 'thou no good'?
a) 508
b) 780
c) 507
d) 709
e) None of these
50. What is the code for 'how good thou art'?
a) 7589
b) 8295
c) 7183
d) 8795
e) Can't be determined

Directions (Q. 51-55) Below in given a passage followed by several possible inferences which can be drawn from the facts stated in the passage. You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

Mark answer (1) if the inference is "definitely true", i.e., it properly follows from the statement of facts given
Mark answer (2) if the inference is "probably true" though not "definitely true" in the light of the facts given
Mark answer (3) if the "data is inadequate", i.e., from the facts given, you cannot say whether the inference is likely to be true or false
Mark answer (4) if the inference is "probably false" though not "definitely false" in the light of the facts given
Mark answer (5) if the inference is "definitely false", i.e., it cannot possibly be drawn from the facts given or it contradicts the given facts
Note: Each of the five questions has only one distinct answer i.e., no two questions can have the same answer. If you get the same answer for more than one question, consider both again and decide which one of the two would more definitely be that answer and in the same way review the others also.

Cardiovascular disease is so prevalent that virtually all businesses are likely to have employees who suffer from, or may develop, this condition. Research shows that between $50-80 \%$ of all people who suffer a heart attach are able to return to work. However, this may not be possible if they have previously been involved in heavy physical work. In such cases, it may be possible to move the employee to lighter duties, with appropriate retraining where necessary. Similarly, high pressure, stressful wok, even where it does not involve physical activity, should also be avoided. Human resource managers should be aware of the implications of job roles for employees with a cardiac condition.
51.Employees who suffer from cardiovascular diseases are mostly unable to return to work.
52.Employees suffering from cardiovascular diseases are unable to handle stressful situations.
53.Employees above the age of 50 are found to suffer from cardiovascular diseases.
54.Physical and stressful work definitely leads to a heart attack.
55. Heart disease can affect employee in any type of business.

Directions (Q. 56-60) 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 questions. 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
Give answer (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
Give answer (3) if the data either in statement I or in statement II alone are sufficient to answer the question
Give answer (4) if the data even in both statements I and II together are not sufficient to answer the question
Give answer (5) if the data in both statements I and II together are necessary to answer the question
56. Who is oldest among Peter Kelvin, Joseph and Jason?
I. Jason is older than Peter and Joseph.
II. Kevin is younger than Joseph.
57. How is 'happy' written in a code language?
I. 'I happy today' is written as 'ke ne que' and 'today happy day' is written as 'ke joi ne'.
II. 'I play' is written as 'qua pa'.
58. H is the mother of J . How is J related to V ?
I. $\quad \mathrm{V}$ is the only daughter of H .
II. V is the sister of J.
59. What is the colour of white snow in a colour code?
I. 'Green' is called 'Black', 'Black' is called Blue, and 'Blue' is called 'Red'.
II. 'Red' is called 'White' and 'White' is called 'Orange'.

60 . Six people $P, Q, R, S, T$ and $U$ are seated around a circular table and are equidistant from each other. Who is $2^{\text {nd }}$ to the right of $T$ ?
I. $\quad \mathrm{P}$ is to the immediate left of Q and Q sits opposite R .
II. $S$ is to the immediate left of $U$.

Directions (Q. 61-66) Study the following information to answer the given questions.
$\mathrm{J}, \mathrm{P}, \mathrm{Q}, \mathrm{R}, \mathrm{S}, \mathrm{T}, \mathrm{U}$ and V are 4 married couples sitting in a circle facing the centre. The profession of the males within the group are Lecturer, Lawyer, Doctor and Scientist. Among the males, only R (the Lawyer) and V (the Scientist) are sitting together. Each man is seated besides his wife. U, the wife of the Lecturer is seated $2^{\text {nd }}$ to the right of V . $T$ is seated between U and V . P is the wife of the Doctor. Q is not the Doctor. S is a male.
61. Which of the following is P's position with respect to S ?
a) $2^{\text {nd }}$ to the right
b) $2^{\text {nd }}$ to the left
c) Immediate right
d) Immediate left
e) $3^{\text {rd }}$ to the left
62. Which of the following is J's position with respect to T?
a) $3^{\text {rd }}$ to the left
b) $4^{\text {th }}$ to the right
c) $3^{\text {rd }}$ to the right
d) Opposite T
e) $2^{\text {nd }}$ to the right
63. Which of the following is not true regarding the couples?
a) $P$ is the wife of $S$
b) $T$ is the wife of $Q$
c) $R$ is the husband of $J$
d) J and S are seated adjacent to each other
e) All are true
64.The wives of which two husbands are immediate neighbours?
a) UT
b) SR
c) $V Q$
d) RV
e) None of these
65.Four of the following are alike in a certain way based on their seating position in the above arrangement and so form a group. Which is the one that does not belong to the group?
a) RSJ
b) TRV
c) UTV
d) SGP
e) UPQ
66. Who is the Lawyer's wife?
a) T
b) P
c) J
d) U
e) None of these

Directions (Q. 67-68) Study the following information to answer the given questions.
"TRAVEL" is related to 'UDKUSB' and 'CORNER' is related to 'MDQDPS'.
67. 'SURVEY' is related to
a) UDXSTV
b) UXDTSV
c) TVSUDX
d) UDXTVS
e) UDXVTS
68. 'GROUPS' is related to
a) TORHSP
b) TOHRSP
c) TORPHS
d) ROTHSP
e) ROTPHS

Directions (Q. 69-70) Study the following information to answer the given questions.

A word and number arrangement machine when given an input line of words and numbes rearranges them following a particular rule. The following is an illustration of input and rearrangement. (Single digit numbers are preceded by a zero. All other numbers are two digit numbers)

Input: when 19 will you 07 be 40 coming 62 home 10089
Step I: be when 19 will you 0740 coming 62 home 10089
Step II: be 07 when 19 will you 40 coming 62 home 10089
Step III: be 07 coming when 19 will you 4062 home 10089
Step IV: be 07 coming 19 when will you 4062 home 10089
Step V: be 07 coming 19 home when will you 406210089
Step VI: be 07 coming 19 home 40 when will you 6210089
Step VII: be 07 coming 19 home 40 when 62 will you 10089
Step VIII: be 07 coming 19 home 40 when 62 will 89 you 100
Step VIII is the last step of the arrangement of the above input as the intended arrangement is obtained.
As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Directions (Q. $\qquad$ ) Input: next 57 problem 8214 trend 02 purchase growth 41
69.How many steps would be needed to complete the arrangement?
a) V
b) VI
c) VIII
d) VII
e) Can't be determined
70. Which of the following would be the final arrangement?
a) growth 02 next 14 problem 41 purchase 5782 trend
b) growth next problem purchase trend 0214415782
c) growth 02 next 14 problem 41 purchase 57 trend 82
d) growth 82 next 57 purchase 41 problem 14 next 02
e) None of these

## English Language

## Directions (Q. 71-77) Read the passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

India's external debt profile appears similar to that of other major market economies. But its short term external debt stock is now higher than countries such as Brazil and Russia (in terms of percentage of GDP), according to Taimur Baig and Kaushik Datta, economists at Deutsche Bank. India's share of short term debt relative to the stock of total external debt is also higher than other emerging market economies, with the exception of Turkey, they say.

Though short term debt was contained in FY 14, it was largely due to a slowdown in imports and may again rise once there is a rebound in growth and imports pick up. Some economists point out that since GDP is expressed in dollar terms, a weak rupee translates into a lower GDP number and hence, a lower ratio could be misleading.

However, the composition of long term debt which is reckoned to be durable and 'safe' is also worrisome. While the share of almost risk free sovereign, multilateral and bilateral credit has reduced significantly over the years, it is private corporate sector debt and 'retail' component in terms of NRI deposits that has swelled over the years. Proceedsfrom the FCNR (B) swap and overseas borrowing schemes were, in fact, t he main contributors to the $\$ 31.2$ bn increase in external debt in FY 14, which were facilitated by the Reserve Bank to stabilise the Indian currency.
"NRI deposits do not pose material risks (as they are generally rolled over). But the increase in the share of external commercial borrowings exposes the domestic corporate sector significantly t o external shocks, including adverse exchange rate movements," says Samiran Chakrabarty, Chief India Economist, Standard Ch artered Bank. Every year about \$20 bn is scheduled for
repayment. The amount may not seem alarming, but the r isk arises if there is a global liquidity squeeze.

The recent trouble in Iraq has added another dimension to external sector woes, which is that the reduction in trade deficit in FY 14 may reverse again. "Already struggling with a record low growth, high inflation, a weak currency, low manufacturing growth and possibility of sub-normal monsoon, the threat of oil supply shock and the resultant increase in prices add to the risks faced by the country, which could hamper India's envisaged improvement in economic growth in FY 15," say Madan Sabnavis and Kavita Chacko of Care Ratings. If crude price risks persist, the current account deficit, which was contained in 2013-14, could deteriorate further and also add to pressure on the rupee. Care Ratings has projected a CAD for the year at $2.5 \%$ of GDP, assuming stable crude oil prices and a re covery in industrial production. Higher persistent crude prices would upset this calculation.
71. Which of the following statements is contrary to the facts mentioned in the given passage?
a) In FY 14, short term debt was contained due to slowdown in imports.
b) Short term debt is directly proportional to $t$ he quantum of imports.
c) A weak rupee translates into a lower GDP number
d) Private corporate sector debt has decreased over the years
72. What is/are the reasons of the author being apprehensive about India's improvement in economic growth in FY 15?
a) The recent Iraq crisis may lead to reduction in trade deficit in the current financial year
b) The possibility of sub-normal monsoon
c) High inflation and low manufacturing growth
d) All of the above
73. Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in the passage.
Contained
a) Neglected
b) Accommodated
c) Controlled
d) Excluded
74. Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in the passage. Reckoned
a) Nullified
b) Abandoned
c) Started
d) Considered
e) None of these
75. Choose the word/group of words which is most similar in meaning to the word/group of words printed in bold as used in the passage.
Envisaged
a) Anticipated
b) Amazed
c) Doubted
d) Discarded
76. Choose the word/group of words which is most opposite in meaning of th e word/group of words printed in bold as used in the passage.
Proceeds
a) Profit
b) Outgo
c) Income
d) Interests
77. Choose the word/group of words which is most opposite in meaning of th e word/group of words printed in bold as used in the passage.
Squeeze
a) Congestion
b) Crunch
c) Restraint
d) Release

Directions (Q. 78-87) Read each sentence to find out whether 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 of punctuating, if any).
78. He has a reputation (1) / for acquiring bankrupt companies (2) / restructuring them and sells (3) / them off for profit. (4) No error (5)
79. The lack of no funds (1) / has resulted in several (2) / delays in launching our (3) / new product in India. (4) No error (5)
80. The only option is (1) / for the bank to (2) / modernize its operations (3) / at all their branches. (4) No error (5)
81. The company recently opened (1) / its $1^{\text {st }}$ branch in Bangalore (2) / and will expand its operations (3) / to other states sooner. (4) No error (5)
82. The Government has introduced (1) / a new law who forces (2) / farmers to sell their produce (3) only to licensed dealers. (4) No error (5)
83. If we have to be (1) / competitive we must be (2) / ready to face (3) / various technical challenge. (4) No error (5)
84. According to the consultant (1) / a more detail analysis of (2) / customer needs (3) and product pricing is required. (4) No error (5)
85. Over the next 5 years (1) / the Government needs to invest (2) / at less 350 billion dollars (3) in rural infrastructure. (4) No error (5)
86. The ongoing merger among (1) / the two companies will (2) / have an adverse (3) / impact on consumers. (4) No error (5)
87.It is evident that (1) / the banking sector has underwent (2) / tremendous changes during (3) / the past two decades. (4) No error (5)

Directions ( $\mathbf{Q} .88-92$ ) In each of the following sentences there are two blank spaces. Below each 5 pair of 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.
88. A company can $\qquad$ the potential of its employees $\qquad$ various training programmes.
a) emphasise, for
b) exploit, from
c) enhance, through
d) appraise, by
e) identify, under
89. The objective of the survey is to $\qquad$ the impact of the rising rupee on a
$\qquad$ engineering sector.
a) attribute, profitable
b) establish, tensed
c) intensify, volatile
d) substantiate, reinforced
e) ascertain, thriving
90.Research shows that an organisation's $\qquad$ to cater to the customer's changing needs will $\qquad$ its success.
a) intent, realise
b) ability, determine
c) capacity, lead
d) desire, insure
e) flexibility, acquire
91.The country's economic growth has been achieved $\qquad$ exports and
$\qquad$ large amounts of foreign direct investments.
a) on, boosting
b) despite, estimating
c) mostly, soliciting
d) via, attracting
e) Substantial, opposing
92.In many rural areas hospitals are $\qquad$ equipped because of the $\qquad$ of funds from the Government.
a) well, dearth
b) faulty, lacking
c) optimally, disparity
d) inadeuately, scarcity
e) ill, surplus

Directions (Q. 93-100) In the following passage there are blanks each of which has been numbered. These numbers are printed below the passage and against each 5 words have been suggested, one of which fills the blank appropriately. Find out the appropriate word in each case.

Traditional bank architecture is based on bank branches. These branches ensure the physical (23) of a customer's savings. A customer may go there to deposit and withdraw money, (24) loans and (25) in other financial transactions. In the past two decades banking architecture has changed - the Automated Teller Machine has been a big (26) and credit and debit cards have created new financial spaces. (27) the bank branch has remained the bedrock of 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 (28) cell phones as the new architecture of virtual banks. This has the potential to make branches (29). Cell phone banking looks especially relevant for India since it can penetrate the countryside cheaply and (30).
93.a) Confidentiality
b) Guarantee
c) knowledge
d) security
e) presence

| 94.a) Disburse | b) Sanction | c) Negotiate |
| ---: | :--- | ---: |
| d) Advance | e) Credit |  |

95.a) Enable
b) Engage
c) Pursue
d) Interact
e) Operate

| 96.a) Luxury | b) Innovation | c) Drawback |
| ---: | :--- | :--- |
| d) Hurdle | e) Consequence |  |

97.a) Yet
b) Until
c) Despite
d) Although
e) Even
98.a) Engineer
b) Assess
c) View
d) Realise
e) Display
99.a) Retreat
b) Expired
d) Obsolete
e) Extant
100. a) Indiscriminately
$\begin{array}{lll}\text { d) Occasionally } & \text { e) Cffectively Compulsorily } & \text { c) Moderately }\end{array}$

## Answers:

1. $?+(15 \times 14)=(12 \times 19)+(13 \times 8)$
$?+120=228+104$
$?=332 \quad 210=122$
2. $?=\sqrt{65 \times 1255+54}$

$$
?=\sqrt{780 \quad 50+54}
$$

$$
?=\sqrt{784}=28
$$

3. $\frac{15}{100} \times 524 \frac{2}{100} \times 985+?=\frac{20}{100} \times 423$
$78.6 \quad 19.7+?=84.6$
$?=84.6 \quad 58.9=25.7$
4. $?=152 \times 8+(228+19)^{2}$
$?=152 \times 8+144$
$?=1216+144=1360$
5. $?=\sqrt{1521}+\sqrt{225}$
$?=39+15=54$
6. $\begin{aligned} & ?=38.734+8.638 \quad 5.19 \\ & ?=47.372 \quad 5.19=42.182\end{aligned}$
7. $7^{8.9} \div(343)^{1.7} \times(49)^{4.8}=7$ ?
$7^{8.9} \div 7^{5.1} \times 9^{9.6}=7^{7}$
$7^{8.9} \quad 5.1 \div 9.6=7$ ?
By exponent comparison
$?=13.4$
8. $?=\sqrt[3]{512} \div \sqrt[4]{16} \div \sqrt{576}$
? $=8 \div 2+24$
$?=4+24=28$
9. $?=(42 \times 3.2) \div(16 \times 1.5)$
$?=\frac{134.4}{24}=5.6$
$\begin{aligned} 10 . ? & =199+5^{3} \div 4 \times 4^{2} \\ ? & =199+31.25 \times 16\end{aligned}$

$$
?=199+500=699
$$

11.Since $1 \%=3.6^{\circ}$

Central angle for sales tax $=35 \%=35 \times 3.6^{\circ}=126^{\circ}$
12 .Since $14 \%=21$ Lakhs
Total income $=100 \%=\frac{21}{14} \times 100=150$ Lakhs
13. Let the expenditure on Agriculture $=$ Rs.xCrore,

Then $\frac{6.25}{x}=\frac{25 \%}{4 \%}$
X = 1 Crore
14. Let the total expenditure $=x$, the total income $=y$

$$
\begin{aligned}
& \frac{18 \% \text { of } y}{8 \% \text { of } x}=3.5 \\
& \frac{x}{y}=\frac{18}{28}=\frac{9}{14}
\end{aligned}
$$

$$
\text { So, } x \text { is } \frac{5}{14} \times 100 \% \text { loss than } y \text { i.e. } 36 \%
$$

15. Required ratio $=\frac{60+4}{100-(60+4)}=\frac{64}{36}=\frac{16}{9}$
16. Required percentage mark $=\frac{120}{90+110+100+120+60} \times 100$

$$
\frac{120}{480} \times 100=25 \%
$$

17. New marks of T in physics $=\frac{114}{100} \times 50=57$
$\therefore$ T's new percentage $=\frac{57}{140} \times 100 \approx 41$
18. Marks obtained by T in both subjects together is more than the marks obtained by R in Physics.
19. Required ratio $=130+90: 50+60$
= 220: 110 $2: 1$
20. Required ratio $=110+120: 130+80$
$=230: 210 \quad 23: 21$
21. Required rate of a bracelet $=$ Rs. $\left[160 \times \frac{115}{100}\right]$
$=$ Rs. 184
22.Let the Kajal's monthly income be Rs.x and the common ratio be y
$\therefore$ Amount spent on grocery, clothes and education $=4 y+2 y+5 y$
According to the question,
$11 y=\frac{55 x}{100}$
And $2 \mathrm{y}=5540$
$\mathrm{y}=2770$
By putting the value of $y$ inn equation (i), we get,
$11 \times 2770=\frac{55 x}{100}$
$\mathrm{x}=\frac{11 \times 2770 \times 100}{55}$
$\mathrm{x}=$ Rs. 55400
22. Let the two numbedrs are $x$ and $y$ respectively.

According to the question,
$\frac{35 x}{100}=2 \times \frac{75 y}{100}$
$\frac{x}{y}=\frac{2 \times 75}{35}=\frac{30}{7}$
$\therefore$ required ratio $=30: 7$
24. Let the common ratio be $x$
$\therefore$ length of the rectangular field $=7 \times \mathrm{m}$
Breadth of the rectangular field $=2 \times \mathrm{m}$
According to the question,
$7 \mathrm{x} \times 2 \mathrm{x}=3584$
$x=16$
$\therefore$ required perimeter $=2(7 \times 16+2 \times 16)$
$=2(112+32)$
$=2 \times 144=288 \mathrm{~m}$
25.Required number of girls $=610 \times \frac{80}{100} \times \frac{175}{100}=854$
26. Let the maximum marks of the test be $x$.

According to the question,
$\frac{76 x}{100} \quad 350=296$
$\frac{76 x}{100}=296+350$
$\mathrm{x}=\frac{646 \times 100}{76}=850$
27.Let the original marks awarded to the student be x .

According to the question,
x $\frac{40 x}{100}=96$
$\frac{60 x}{100}=96$
$\mathrm{x}=160$
$\therefore$ required difference $=160 \quad 96=64$
28. Number of selected candidates $=855 \times \frac{20}{100}=171655$
29. Sum of five numbers $=61 \times 5=305$

Sum of first and third number $=69 \times 2=138$
And sum of second and fourth number $=69 \times 2=138$
$\therefore$ fifth number $=305 \quad 138 \quad 138=29$
30.Let the common ratio be x
$\therefore$ the percentages of father's, mother's and daughter's are $7 \mathrm{x}, 6 \mathrm{x}, 2 \mathrm{x}$ respectively.

According to the question
$6 x \quad 2 x-24$
$4 \mathrm{x}=24$
$x=6$
$\therefore$ father's present age $=7 \times 6=42$ years
31. Required combined average $=\frac{19 \times 74+38 \times 63}{19+38}$

$$
\frac{1406+2394}{57}=\frac{3800}{57}=67 \mathrm{kgs} .
$$

$32.32 \%$ of $750<98 \%$ of 250

$$
\frac{32}{100} \times 750<\frac{98}{100} \quad \times 250
$$

$$
240<245
$$

33. Mother's overall percentage $=\frac{42+51+58+35+48}{5 \times 60} \times 100$

$$
=\frac{234}{300} \times 100=78 \%
$$

34. Fare of one chile $=\frac{114}{6}=$ Rs. 19
$\therefore$ fare for 4 adults and 5 children $=$ Rs. $(114 \times 4+19 \times 5)$
$=$ Rs. 551
35. Speed of truck $=\frac{368}{8}=46 \mathrm{kmph}$
$\therefore$ required time $=\frac{368+16}{46+18}=\frac{384}{64}=6$ hours
36.Option E
37.Option C
38.Option B
39.Option E
40.Option A
41.Option D
42.Option D
43.Option E
44.Option A
45.Option B
46.Option E
47.Option A
48.Option C
49.Option E

Code of 'thou' $=8$ or 9 and 'good' $=5$ but the code of 'no' is not known.

## 50.Option B

51.Option B

According to data $50-80 \%$ of all people able to return to work, however this may not be possible if they have previously been involved in heavy physical work. Mostly means at least half of the people.

## 52.Option A

## 53.Option E

Here "above the age of 50 " is nowhere in given passage

## 54.Option D

Here, the word 'definitely' makes this sentence probably false

## 55.Option A

56.Option E
I. Jason > (Peter and Joseph)
II. Joseph > Kevin

So, from both statements, Jason is oldest among all.
So, data in both statements I and II together are necessary to answer the question.

> 57.Option D
> I. $\quad$ I happy today $=$ ke ne que
> $\quad$ Today happy day $=$ kejoi ne

From (i) and (ii), the code of 'happy' = ke or ne
II. I play = que pa

So, from both statements, the code of happy cannot exactly determined. So, the data even in both statements I and II together are not sufficient to answer the question.
58.Option A
59.Option B

Colour of white snow is 'white'.
From II 'white' is called 'orange'
So, the white snow is 'orange'
So, data in statement II alone are sufficient to answer the question.
60.Option E

P is wife of Doctor
Q is male Lecturer
R is male Lawyer
S is male Doctor
T is female and wife of V
U is female
V is male Scientist
61.Option D
62.Option A
63.Option B
64.Option C
65.Option C
66.Option C
67.Option D
68.Option A
69.Option D

Input: next 57 problem 8214 trend 02 purchase growth 41
Step I: growth next 57 problem 8214 trend 02 purchase 41
Step II: growth 02 next 57 problem 8214 turned purchase 41
Step III: growth 02 next 1457 problem 82 trend purchase 41
Step IV: growth 02 next 14 problem 5782 trend purchase 41
Step V: growth 02 next 14 problem 415782 trend purchase
Step VI: growth 02 next 14 problem 41 purchase 5782 trend
Step VII: growth 02 next 14 problem 41 purchase 57 trend 82
70.Option C
71.Option D
72.Option D
73.Option C
74.Option D
75.Option A 76.Option B 77.Option D 78.Option C 79.Option A 80.Option D 81.Option D
82.Option B
83.Option D
84.Option B 85.Option C 86.Option A 87.Option B 88.Option C
89.Option C
90.Option B
91.Option D
92.Option D
93. Option D
94.Option B
95.Option E
96.Option A
97.Option A
98.Option C
99. Option D
100. Option B

