

IBPS CLERK MAINS GRAND TEST – ICM180110
ANSWER KEY

1.(3)	21.(3)	41.(3)	61.(4)	81.(4)	101.(5)	121.(1)	141.(3)	161.(3)	181.(3)
2.(2)	22.(3)	42.(4)	62.(5)	82.(2)	102.(2)	122.(3)	142.(2)	162.(3)	182.(4)
3.(3)	23.(2)	43.(4)	63.(3)	83.(3)	103.(4)	123.(1)	143.(5)	163.(1)	183.(1)
4.(3)	24.(5)	44.(5)	64.(2)	84.(5)	104.(5)	124.(4)	144.(1)	164.(2)	184.(2)
5.(1)	25.(1)	45.(3)	65.(1)	85.(2)	105.(1)	125.(4)	145.(4)	165.(5)	185.(5)
6.(3)	26.(4)	46.(4)	66.(3)	86.(1)	106.(3)	126.(2)	146.(2)	166.(3)	186.(1)
7.(1)	27.(3)	47.(1)	67.(5)	87.(3)	107.(2)	127.(3)	147.(2)	167.(1)	187.(4)
8.(2)	28.(4)	48.(4)	68.(2)	88.(1)	108.(3)	128.(2)	148.(1)	168.(2)	188.(5)
9.(2)	29.(2)	49.(3)	69.(4)	89.(5)	109.(5)	129.(3)	149.(2)	169.(1)	189.(3)
10.(3)	30.(1)	50.(2)	70.(3)	90.(1)	110.(4)	130.(4)	150.(1)	170.(5)	190.(2)
11.(2)	31.(3)	51.(4)	71.(4)	91.(3)	111.(1)	131.(3)	151.(2)	171.(4)	
12.(3)	32.(3)	52.(3)	72.(3)	92.(3)	112.(1)	132.(1)	152.(4)	172.(2)	
13.(1)	33.(4)	53.(5)	73.(4)	93.(2)	113.(1)	133.(4)	153.(2)	173.(4)	
14.(1)	34.(4)	54.(3)	74.(1)	94.(5)	114.(3)	134.(2)	154.(4)	174.(4)	
15.(4)	35.(3)	55.(2)	75.(2)	95.(2)	115.(2)	135.(2)	155.(1)	175.(1)	
16.(1)	36.(1)	56.(4)	76.(5)	96.(1)	116.(2)	136.(5)	156.(1)	176.(2)	
17.(1)	37.(3)	57.(1)	77.(3)	97.(2)	117.(3)	137.(4)	157.(1)	177.(4)	
18.(5)	38.(5)	58.(3)	78.(4)	98.(1)	118.(4)	138.(1)	158.(3)	178.(4)	
19.(3)	39.(4)	59.(5)	79.(1)	99.(5)	119.(5)	139.(3)	159.(1)	179.(3)	
20.(3)	40.(2)	60.(2)	80.(2)	100.(2)	120.(5)	140.(5)	160.(1)	180.(2)	

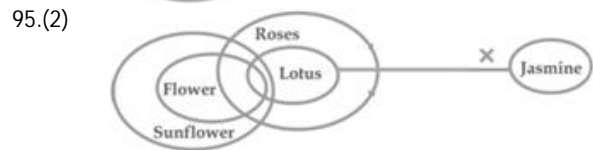
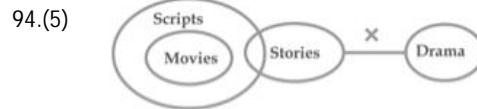
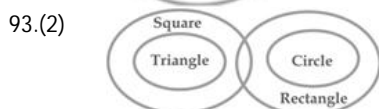
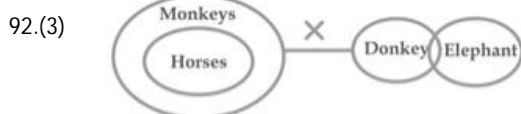
HINTS & SOLUTIONS

- 51.(4) It is given in second paragraph that "A Burglar's Guide to the City", it's not the gang's spoils or fate he's interested in but their methods' from this we can easily conclude that (d) is the most appropriate option.
- 52.(3) It is given in the first paragraph that 'opened their vault to discover..... deposit boxes encircling a fresh, 500-square-inch tear in the floor' and '.....goods and more impressively, they were never caught.' Hence, (c) is the correct option.
- 53.(5) Although it is explicitly given in the third paragraph that 'A Burglar's Guide to the City is filled with other colorful exploits' but author doesn't describe any of them. Hence, (e) is the correct option.
- 54.(3) The tone of the author of the above passage is 'analytic'
- 55.(2) In the first paragraph, it is given that '.....The gang tried their luck twice more over the next year, also tunneling from below, but both times, they were scared off...'. Hence, (ii) is not true. Hence (b) is the correct option.
- 56.(4) The entire passage describes the various aspects of the book 'A Burglar's Guide to the City'. Hence, (d) is the correct option.
- 57.(1) 'Memoir' means 'a historical account or biography written from personal knowledge.'. Hence 'Account' is the word which is most similar in meaning to it.
- 58.(3) 'Subterranean' means 'existing, occurring, or done under the earth's surface.'. Hence 'Underground' is the word which is most similar in meaning to it.
- 59.(5) 'Explicitly' means 'clearly and exactly'. Hence 'Ambiguously' is the word which is most opposite in meaning to it.
- 60.(2) 'Bestrewn' means 'to lie covering a surface, or to cover a surface with things that are far apart and in no particular arrangement'. Hence 'Uncovered' is the word which is most opposite in meaning to it.
- 61.(4) 62.(5)
- 63.(3) 64.(2) 65.(1)
- 66-70. Correct sequence to form a meaningful paragraph is HADEGFCB
- 66.(3) 67.(5)
- 68.(2) 69.(4) 70.(3)

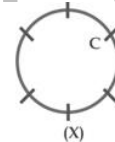
Grand Test – ICM 180110



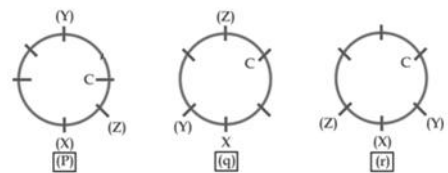
- 71.(4) It is given in the first paragraph of the passage that “ for the vast majority, being able to cast a vote freely is an affirmation of their status as equal citizens of the country” Hence (d) is the correct option. Rest of the options are included in this option.
- 72.(3) It is given in the first paragraph that : The gap between women and men voters has also steadily reduced and in some States female voters outnumbered males” but no reason for this has been given. Hence (i) is not true. ‘...NOTA (None of the Above) button introduced only recently’ suggests that (ii) is also not true. Hence, (c) is the correct option.
- 73.(4) “research has shown that historically high percentages in voting do not provide any indication of results” suggests that (d) is the correct option.
- 74.(1) “Some institutional factors... contributed to the rise in voter turnouts that we areawareness drives undertaken by the Election Commission” in fifth paragraph suggests that (a) is the correct option.
- 75.(2) “Why India loves to vote” is the suitable title for the passage.
- 76.(5)
- 77.(3) Here, the subject is ‘base’ of ‘federal budget, deficit, and government employee’ which is singular. So, verb used should also be singular. So, change ‘are’ to is.
- 78.(4) Add ‘on’ before ‘their’ as ‘depend’ is followed by the preposition ‘on’.
- 79.(1) ‘Grilling over an open fire’ is correct usage.110. (c); Replace ‘they’ with ‘it’. Since, here the subject is ‘The deepest ocean blue’ which is singular.
- 80.(2) Use ‘bombings’ in place of ‘bombing’, since, bombing has been used in plural sense.
- 81.(4) ‘whenever’ which means ‘every or any time’ is the correct answer.
- 82.(2) Since, the author is seeking the reason for the so called ‘frenzy in the market’. Hence, ‘why’ is the correct answer.
- 83.(3) ‘To know ropes ‘ means ‘to trick or entice into some activity’. Hence ropes is the correct answer.
- 84.(5) ‘waging’ is the most appropriate option.
- 85.(2) ‘draw on’ means ‘utilizing the supply of something available to us’. Hence, (b) is the correct option.
- 86.(1) ‘difficult’ is the most appropriate option.
- 87.(3) ‘to siphon off’ means ‘to move money from one bank account to another, especially illegally or dishonestly.’ Hence, siphoned is the correct option.
- 88.(1) ‘underlying’ is the most appropriate option.
- 89.(5) ‘in collusion with’ means ‘a secret understanding between two or more persons to gain something illegally’ Hence, ‘collusion’ is the correct option.
- 90.(1) ‘to assert’ means ‘to claim’. Hence, assert is the correct option.



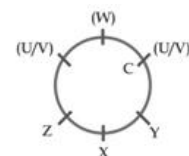
- 94.(5)
- 95.(2)
- 96.(1) 97.(2)
- 98.(1) Clearly, the amount of compensation must have been decided keeping in mind the monetary position of the Government. So, I is implicit. However, nothing can be said about the frequency of railway accidents in future. So, II is not implicit.
- 99.(5) The customer’s eagerness to get the bills makes I implicit. Besides, the customer has written to the editor to bring the malfunctioning of the department to public notice. So, II is also implicit.
- 100.(2) Such a warning is usually given to the workers to threaten them that they would lose their job if they didn’t mend their ways. So, only II is implicit.
- 101.(5) Clearly, the statement encourages one to go to court to get his Provident Fund from his employer. This implies that the issue comes under the jurisdiction of courts and that it is the right of the employee to claim his Provident Fund. So, ‘both I and II are implicit.
- 102.(2) The statement expresses concern over the issue as to when our country would be able to curb terrorism completely. This means that efforts are on and it is quite possible to put an end to terrorist activities although it could longer. So, only II is implicit.
- 103-107. From the condition (i) given in the question.



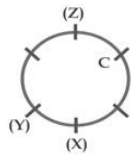
From the condition (iv) given in the question there are 3 possible arrangements.



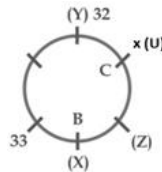
First take the (r) arrangement of this question ,from the (viii) condition, U not seated near to V so W sits between U and V



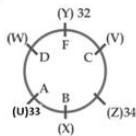
From the (vii) condition, F is immediate left of W which can’t be possible because of C.
 ⇒ So, this arrangement is not possible.
 ⇒ Second, take the (q) arrangement
 From the (iii) condition, B sits opposite to the caption of team Y.



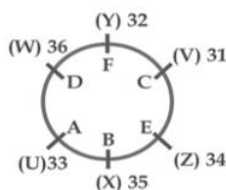
But it can't be possible because there is C who sits opposite to the captain of team Y.
 This arrangement is not possible.
 At last take the (P) arrangement because (r) and (q) arrangement does not follow. So (P) arrangement follows in this question.
 From the (iv), (iii) and (ii) conditions, the figure which can be possible is given below



From (viii) and (vii) conditions, Captain of team U and W sits between captain of team (X) and (Y).
 {F sits immediate left of captain of team W.
 Captain of team U sits immediate right of D.
 F doesn't sit near to A.
 If Captain of team W sits near to B then F sits immediate left of it.
 Then A's position ⇒ can't be defined
 So, F sits immediate right to C and D sits immediate right of F

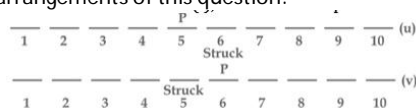


⇒ A sits left to the B because from the condition (ii) A is not the captain of team Z
 ⇒ From the (vi) and (i) condition
 age of B ⇒ 35 years
 age of C = 31 years
 age of D ⇒ 36 years



- 103.(4)
- 104.(5)
- 105.(1)
- 106.(3)
- 107.(2)
- 108-112.

A	G	D	C	B	F	E
2 nd	7 th	3 rd	5 th	4 th	6 th	1 st
(41)	(27)	(36)	(32)	(35)	(28)	(46)
- 108.(3)
- 109.(5)
- 110.(4)
- 111.(1)
- 112.(1)
- 113.(1)
- 114.(3)
- 115.(2)
- 116-120. From the condition (i), there are two possible arrangements of this question.



⇒ First take the (u) arrangement, from the condition (iii) and (vi)

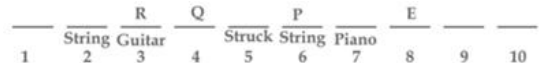


⇒ From the Condition (iv) and condition (viii)



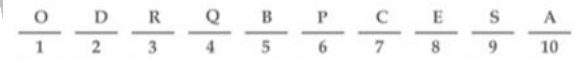
From (iii) condition, the person of string can be sit only at right of R, because two string players can't sit together.
 Then the player of piano sits right of E but according to condition, player of string, second to left of Q which can't be possible – because of P.

So, this arrangement can't be possible
 Second, take the (v) arrangement, from the condition, (iii), (vi), (iv) and (viii).



⇒ The player of string sits left to R and then the player of Piano ⇒ sits at left of E

The player of string ⇒ can't be sit right of R because of this condition (viii) does not follow.
 ⇒ From the condition (v), (ii) and (vii)-



Struck String Guitar Drum Struck String Piano Drum Trumpet Flute
 ⇒ C sits left of E and S at right of E because C can be the person of Piano/trumpet and only this place of C can be possible.
 ⇒ OD sits at end of Row and O ⇒ player of struck
 ⇒ A sits at right end, so B sits left to P.
 ⇒ Q ⇒ player of Drum ⇒ Between string players
 ⇒ S ⇒ Player of Trumpet ⇒ not near to the Piano player
 ⇒ E ⇒ Player of Drum

- 116.(2)
- 117.(3)
- 118.(4)
- 119.(5)
- 120.(5)
- 121-125.

First write the conditions, which are given in the question.

Boys	Bank	Married To
A	× (PNB) × (BOI)	(IDBI)
-	BOI	S/T
D	× (IOB) × (CANARA BANK)	(OBC)
C	(× PNB) × (CANARA BANK)	R

Girls	Bank	Married To
S	BOB/ IDBI	× (PNB)
-	UBI	E
P	CBI	-
R	-	× (PNB)- C
Q	-	IOB

P works in UBI/CBI
 ⇒ P works in CBI because E ⇒ × (married) ⇒ P
 Who works in UBI married to ⇒ E
 ⇒ It is given that D - × (IOB)
 D - Married to the girl from (OBC)
 The girl from OBC = Q/T
 But Q ⇒ Married ⇒ person from (IOB)

So

T ⇒ OBC	D ⇒ Married to T (i)
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Q ⇒ UBI ⇒ Married to E (IOB)

⇒ E is from IOB so from the given table we can see that when E ⇒ IOB
 C ⇒ BOM

Boys	Bank	Married	Girl	Bank	Married
A	IOB/BOM/ Canara	(IDBI)S	S	BOB/IDBI	X (PNB)
B/D	BOI	T/P	Q	UBI	E (IOB)
D/B	BOI/PNB/ BOM	T/P	P	CBI	
C	BOI/IOB/BOM	R	R	BOB/ IDBI	C
E	IOB	Q (UBI)	T	OBC	D

⇒ From the table ⇒ B/D ⇒ BOI / PNB
 A ⇒ Married to the girl from IDBI

and R ⇒ Married to C so.

A ⇒ married ⇒ S (IDBI)

R ⇒ From BOB

⇒ The person from BOI is married ⇒ S/T and S is already married to A so.

BOI ⇒ Married ⇒ T ⇒ means the person from BOI is D. From the equation (i)

D ⇒ BOI ⇒ married to ⇒ T

B ⇒ PNB ⇒ married to ⇒ P

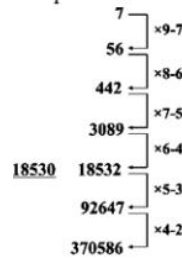
Boys	Bank	Married to	Girl	Bank	Married to
A	Canara	S	P	CBI	B
B	PNB	P	Q	UBI	E
C	BOM	R	R	BOB	C
D	BOI	T	S	IDBI	A
E	IOB	Q	T	OBC	D

- 121.(1) 122.(3)
 123.(1) 124.(4) 125.(4)
 126.(2) 127.(3) 128.(2)

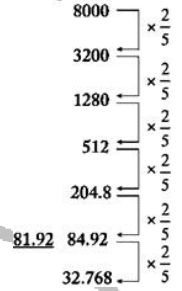
129-133. Input: 40 of must attend 30 60 80 regular school 70 students 20 class 50
 Step I :students 40 of must attend 30 60 regular school 70 20 class 50 80
 Step II :school students 40 of must attend 30 60 regular 20 class 50 80 70
 Step III :regular school students 40 of must attend 30 20 class 50 80 70 60
 Step IV :of Regular school students 40 must attend 30 20 class 80 70 60 50
 Step V :must of regular school students attend 30 20 class 80 70 60 50 40
 Step VI :class must of regular school students attend 20 80 70 60 50 40 30
 Step VII :attend class must of regular school students 80 70 60 50 40 30 20

- 129.(3) 130.(4)
 131.(3) 132.(1)
 134.(2) A hike in fees is no means to make the students more serious in studies. So, argument I is vague. However, with the increase in fees, poor meritorious students would not be able to afford post-graduate studies. So, argument II holds.
 135.(2) Oil, being an essential commodity, our country must keep it in reserve. So, argument I is vague, while argument II holds as it provides a substantial reason for the same.
 136.(5) Clearly, if there were less candidates, the voters would find it easy to make a choice. So, argument I holds. Also, every person satisfying the conditions laid down by the Constitution must be given an opportunity and should not be denied the same just to cut down the number of candidates. So, argument II also holds strong.
 137.(4) The age of a person is no criterion for judging his mental capabilities and administrative qualities. So, none of the arguments holds strong.
 138.(1) Clearly, health of the citizens is an issue of major concern for the Government. So, a product like drugs, must be first studied and tested in the Indian context before giving licence for its sale. So, only argument I holds strong.
 139.(3) 140.(5)

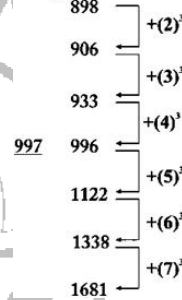
141.(3) The pattern of series is-



142.(2) The pattern of series is



143.(5) The pattern of series is as-



144.(1) The pattern of series is As-
 $4 \times 11 + 11 \times (1)^2 = 44 + 11 = 55$
 $55 \times 9 + 9 \times (3)^2 = 495 + 81 = 576$
 $576 \times 7 + 7 \times (5)^2 = 4032 + 175 = 4207$
 $4207 \times 5 + 5 \times (7)^2 = 21035 + 245 = 21280$
 $21280 \times 3 + 3 \times (9)^2 = 63840 + 243 = 64083$
 $64083 \times 1 + 1 \times (11)^2 = 64083 + 121 = 64204$
 So, wrong number = 4209

145.(4) The pattern of series is as -

$3 \times 1.5 + 1.5 = 6$
 $6 \times 2.0 + 4.0 = 16$
 $16 \times 2.5 + 7.5 = 47.5$
 $47.5 \times 3.0 + 12.0 = 154.5$
 $154.5 \times 3.5 + 17.50 = 558.25 \neq 558.5$
 $558.25 \times 4 + 24.00 = 2257$
 So, wrong number = 558.5

146.(2) Average export from Haryana
 $(30\% \text{ of } 250) + (65\% \text{ of } 245)$
 $= \frac{75 + 159.25}{4} + (60\% \text{ of } 262.62) + (62\% \text{ of } 312.24)$
 $= \frac{585.4108}{4} = 146.3527 \approx 146 \text{ million}$

147.(2) Total export from UP = $(40\% \text{ of } 295.96) + (55\% \text{ of } 180.24) + (52\% \text{ of } 185.25) + (38\% \text{ of } 175.22) = 380.4296 \approx 380$
 Total production from UP = $295.96 + 180.24 + 185.25 + 175.22 = 836.67 \approx 836$
 Required percentage = $\frac{380}{836} \times 100 = 45.45 \approx 45\%$

Grand Test – ICM 180110



- 148.(1) Export from Haryana in 2010 and 2011 together=234.325
Production of Punjab in 2012 and 2013 together=404.52

$$\text{Required percentage} = \frac{234.325}{404.52} \times 100 = 57.93\%$$

- 149.(2) Average production in Haryana = $\frac{1070.11}{4} = 267.5275$

$$\text{Average production in Punjab} = \frac{764.05}{4} = 191.0125$$

$$\text{Difference} = 267.5275 - 191.0125 = 76.515$$

$$\text{Half of the difference} = 38.2575$$

- 150.(1) Export from UP in 2010=40% of 295.96=118.384

$$\text{In 2011} = 55\% \text{ of } 180.24 = 99.132$$

$$\text{In 2012} = 52\% \text{ of } 185.25 = 96.33$$

$$\text{In 2013} = 38\% \text{ of } 175.22 = 66.58$$

- 151.(2) Required difference

$$= \left(\frac{53.97 - 21.97}{21.97} \times 10 - \left(\frac{64.13 - 27.16}{27.16} \times 100 \right) \right)$$

$$= \left(\frac{32}{21.97} \times 100 \right) - \frac{36.97}{27.16} \times 100$$

$$\approx 146 - 136$$

$$\approx 10\%$$

- 152.(4) Percentage increase in the literacy rate of male in

$$1961 = 48.74\%$$

$$1971 = 13.76\%$$

$$1981 = 22.67\%$$

$$1991 = 13.74\%$$

$$2001 = 17.35\%$$

$$\therefore \text{Required year} = 1961$$

- 153.(2) Percentage increase in the literacy rate of female

$$\text{In } 1961 = 73.25\%$$

$$\text{In } 1971 = 43.12\%$$

$$\text{In } 1981 = 35.45\%$$

$$\text{In } 1991 = 32.02\%$$

$$\text{In } 2001 = 37.36\%$$

- 154.(4) Since, the number of males are not specified, we can not get the required value.

- 155.(1) Required ratio

$$= \left(\frac{56.38 - 40.4}{40.4} \times 100 \right) : 39.55$$

$$= 39.55 : 39.55$$

$$= 1 : 1$$

- 156.(1) $4M + 6W = (2M + 9W) \times 8$

$$2M = 3W$$

$$\text{Let 1 man efficiency} = 3$$

$$\text{Let 1 woman efficiency} = 2$$

$$\text{Total work} = \{(4 \times 3) + (6 \times 2)\} \times 8 = 192$$

$$\therefore \text{Required no of days} = \frac{192}{18 \times 2}$$

$$= 5 \frac{1}{3} \text{ days}$$

- 157.(1) $M = \frac{1}{60}$

$$W = \frac{1}{120}$$

$$\therefore \text{Required no of days} = \frac{1}{\frac{1}{60} + \frac{1}{120}}$$

$$= \frac{1}{\frac{1}{10} + \frac{1}{10}}$$

$$= \frac{1}{\frac{2}{10}}$$

$$= \frac{10}{2} = 5 \text{ days}$$

- 158.(3)

C.P.

S.P.

$$100x$$

$$114x$$

$$(100x - 117)$$

$$(114x - 117)$$

$$\frac{123}{100}(100x - 117) = 114x - 117$$

$$12300x - 123 \times 117 = 11400x - 117 \times 100$$

$$900x = 14391 - 11700$$

$$x = 2.99$$

$$\therefore \text{Required price} = 299 \text{ Rs.}$$

- 159.(1) Let total unit = 50

$$20 \times \frac{1}{4} + 30 \times \frac{x}{100} = 9.5$$

$$\frac{3x}{10} = 4.5$$

$$x = 15\%$$

- 160.(1) In 1000 ml of mixture,

$$\text{Alcohol} = 700 \text{ ml}$$

$$\text{Water} = 300 \text{ ml}$$

Let x ml of alcohol is mixed.

According to question

$$\frac{300}{1000+x} \times 100 = 15$$

$$1000 + x = 2000 \Rightarrow x = 1000 \text{ ml}$$

- 161-165. Total number of students = 2500

$$\text{Number of girls} = \frac{3}{5} \times 2500 = 1500$$

$$\text{Number of boys} = \frac{2}{5} \times 2500 = 1000$$

$$\text{Number of boys playing cricket only} = \frac{20}{100} \times 1000 = 200$$

$$\text{Number of girls playing table tennis, badminton and carrom only} = \frac{25}{100} \times 1500 = 375$$

$$\text{Number of boys playing football only} = \frac{26.8}{100} \times 1000 = 268$$

$$\text{Number of girls playing cricket only} = \frac{17.5}{100} \times 200 = 350$$

$$\text{Number of boys playing hockey, table-tennis and carrom only} = \frac{25.7}{100} \times 1000 = 257$$

$$\text{Number of boys playing chess only} = 1000 - (200 + 268 + 257) = 1000 - 725 = 275$$

$$\text{Number of girls playing chess only} = \frac{12}{11} \times 275 = 300$$

$$\text{Number of girls playing badminton only} = \frac{1}{4} \times 1500 = 375$$

$$\text{Number of girls playing football and hockey only} = 1500 - (375 + 350 + 375 + 300) = 1500 - 1400 = 100$$

It can be tabulated as follows

Games	Number of boys	Number of girls
Cricket	200	350
Football	268	-
Chess	275	300
Badminton	-	375
Football + Hockey	-	100
Table tennis, badminton, carrom	-	375
Hockey, table-tennis, carrom	257	-
Total	1000	1500

- 161.(3) From the above table, number of students playing more than one game = $100 + 375 + 257 = 732$

- 162.(3) Total number of students playing hockey = $100 + 257 = 357$

Therefore, required percentage

$$= \frac{357}{2500} \times 100\% = 14.28\%$$

- 163.(1) Total number of boys playing chess = 275

$$\text{Total number of girls playing badminton} = 375 + 375 = 750$$

$$\therefore \text{Required ratio} = 275 : 750 = 11 : 30$$

Grand Test – ICM 180110



- 164.(2) Total number of students playing football, cricket and table-tennis = $200+350+268+100+375+257=1550$
- 165.(5) Number of students playing carom = $375 + 257 = 632$.
- 166.(3) $x = 7, y = 8$
Therefore, $x < y$.
- 167.(1) $x = \frac{-7}{2}, -5; y = -6, \frac{-13}{2}$;
Therefore, $x > y$.
- 168.(2) $x = 4, 1.8; y = -1.5, 1.8$
Therefore $x \geq y$.
- 169.(1) $x = 3, 4.7; y = 1.5, 2.5$
Therefore, $x > y$.
- 170.(5) $x = 11, y = 11$
Therefore, $x = y$.
- 171.(4) Let initial expenditures an rice, fish and oil be Rs. $12x$, Rs. $17x$ and $3x$ respectively.
Total expenditure = $12x + 17x + 3x = \text{Rs. } 32x$
After increase
Expenditure an rice = $\frac{120}{100} \times 12x = \text{Rs. } 14.4x$
Expenditure an fish = $\frac{130}{100} \times 17x = \text{Rs. } 22.1x$
Expenditure an oil = $\frac{150}{100} \times 3x = 4.5x$
Total expenditure = $14.4x + 22.1x + 4.5x = 41x$
Increase = $9x$
Percentage Increase = $\frac{9x}{32x} \times 100 = 28\frac{1}{8}\%$
- 172.(2) Req. Probability = $\frac{2c_1+1c_1}{12c_1} = \frac{3}{12} = \frac{1}{4}$
- 173.(4) Let A's capital = $3x$
B's capital = $5x$
Ratio of their profit = $(4 \times 3x) : (T \times 5x)$
 $\therefore \frac{12x}{5Tx} = \frac{4}{5}$
 $3 = T$
 \therefore Required time = 3 months
- 174.(4) Let no. of students in class A, B and C be x, y and z
 $\therefore A = 83x$
 $B = 76y$
 $C = 85z$
Now, $A + B = 79x + 79y$
 $B + C = 81(y + z) = 81y + 81z$
 $\therefore 83x + 76y = 79x + 79y$
 $4x = 3y$
 $\frac{x}{y} = \frac{3}{4}$
And, $76y + 85z = 81y + 81z$
 $5y = 4z$
 $\frac{y}{z} = \frac{4}{5}$
 $\therefore x : y : z = 3 : 4 : 5$
 \therefore Required average = $\frac{83 \times 3 + 76 \times 4 + 85 \times 5}{12}$
 $= \frac{249 + 304 + 425}{12}$
 $= \frac{978}{12}$
 $= 81.5$
- 175.(1) Let Required money = x
 $\therefore \frac{x \times 8 \times 4}{100} + \frac{x \times 6 \times 10}{100} + \frac{x \times 5 \times 12}{100} = 12160$
 $\frac{x}{100} (32 + 60 + 60) = 12160$
 $x = \frac{12160 \times 100}{152} = 8000 \text{ Rs.}$
- 176.(2) Total production by company A
 $= \frac{15}{100} \times 25 = 3.75 \text{ crores}$
 $= 3.75 \text{ crores}$
Total production by Company C
 $= \frac{22}{100} \times 25 = 5.5 \text{ crores}$
Cost of production of item I by Company A
 $= \frac{2}{5} \times 3.75 = 1.5 \text{ crores}$
Cost of production of item I by Company C
 $= \frac{4}{5} \times 5.5 = 4.4 \text{ crores}$
 \therefore Required total cost = $1.5 + 4.4 = 5.9 \text{ crores}$
- 177.(4) Required profit earned
 $= \frac{25}{100} \times \frac{5}{8} \times \frac{8}{100} \times 25 = 0.3125 \text{ crores}$
 $= 31.25 \text{ lakhs}$
- 178.(4) Required % = $\frac{\frac{5}{100} \times \frac{1}{5} \times 25}{\frac{8}{100} \times \frac{5}{8} \times 25} \times 100$
 $= \frac{0.25}{1.25} \times 100 = 20\%$
- 179.(3) Required Ratio = $\frac{\frac{15}{100} \times \frac{2}{5} \times 25}{\frac{100}{8} \times \frac{3}{8} \times 25}$
 $= \frac{30}{500} \times \frac{800}{24}$
 $= \frac{5 \times 8}{5 \times 4}$
 $= 2 : 1$
- 180.(2) Required total profit
 $= \left(\frac{32}{100} \times \frac{3}{5} \times \frac{11}{100} \times 25 \right) + \left(\frac{20}{100} \times \frac{3}{5} \times \frac{15}{100} \times 25 \right)$
 $= 0.528 + 0.45$
 $= 0.978 \text{ crores}$
 $= 97.8 \text{ lakhs}$
- 181.(3) Average = $\frac{1}{6} \times [5 + 10 + 25 + 20 + 25 + 15] \times 1000$
 $= \frac{100000}{6} = 16666\frac{2}{3}$
- 182.(4) Req. % = $\frac{55}{60} \times 100 = 91.67$
- 183.(1) Req. % = $\frac{10}{55} \times 100 = 18\% \text{ (approx.)}$
- 184.(2) Req. Ratio = $15 : 10 = 3 : 2$
- 185.(5) Required no. of people = $(25 + 15) \times 1000 = 40000$
- 186.(1) $? = \sqrt{1250 \times 450} = 5 \times 10 \times 15 = 750$
 $? \times \frac{460}{100} = \frac{65 \times 75}{100} + \frac{35 \times 25}{100}$
 $? = \frac{4875 + 875}{460} = \frac{5750}{460} = 12.5$
- 187.(4) $? = 53 - 30 = 23$.
- 188.(5) $? = \left(\frac{63}{5} - \frac{27}{5} \right) \times \frac{70}{353}$
 $= \frac{36}{5} \times \frac{70}{353} = \frac{504}{353} = 1\frac{151}{353}$
- 189.(3) $? = \frac{1805}{19} + 65 - 200$
- 190.(2) $= 95 + 65 - 200 = 160 - 200 = -40$