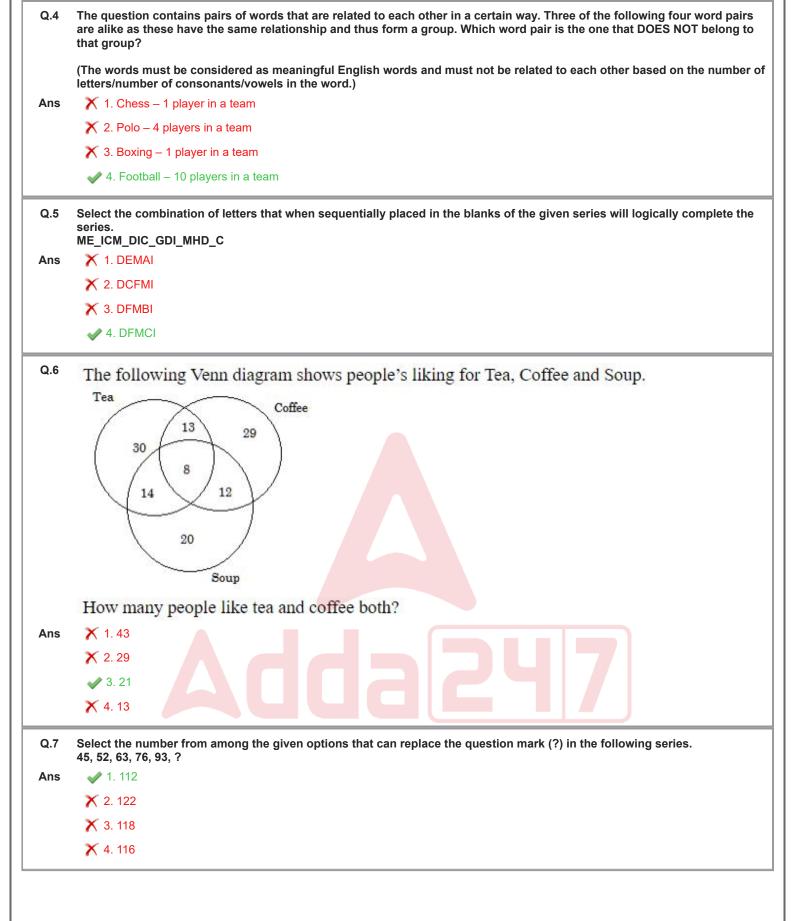


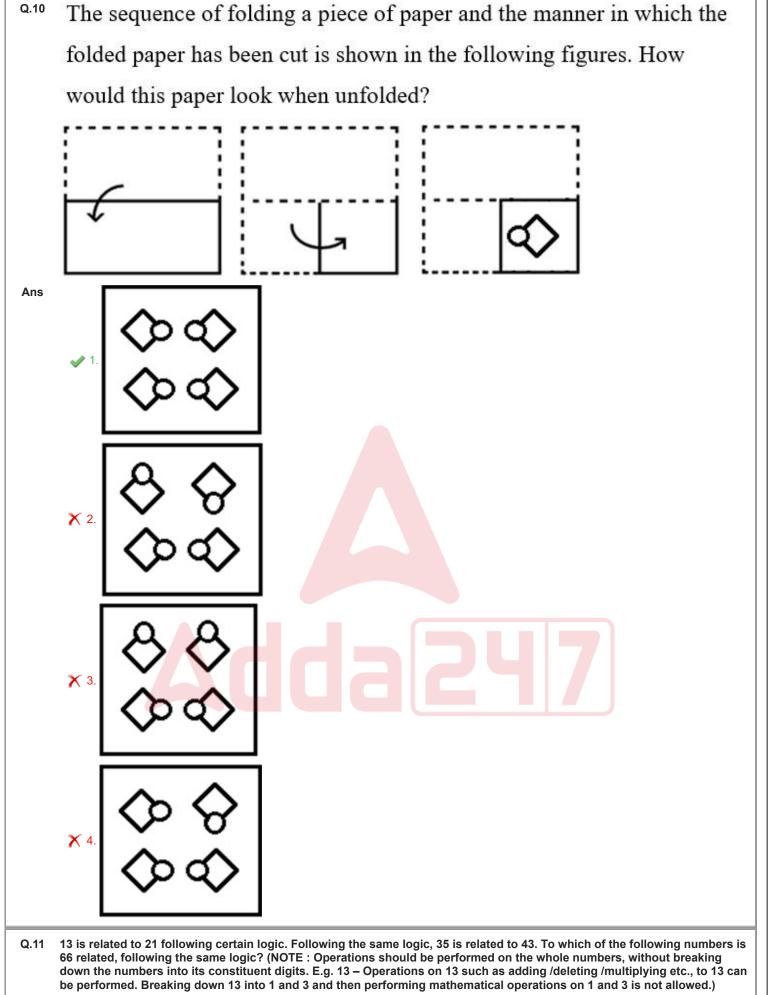
Combined Graduate Level Examination 2024 Tier I

Exam Date	23/09/2024
Exam Time	4:00 PM - 5:00 PM
Subject	Combined Graduate Level Examination Tier I

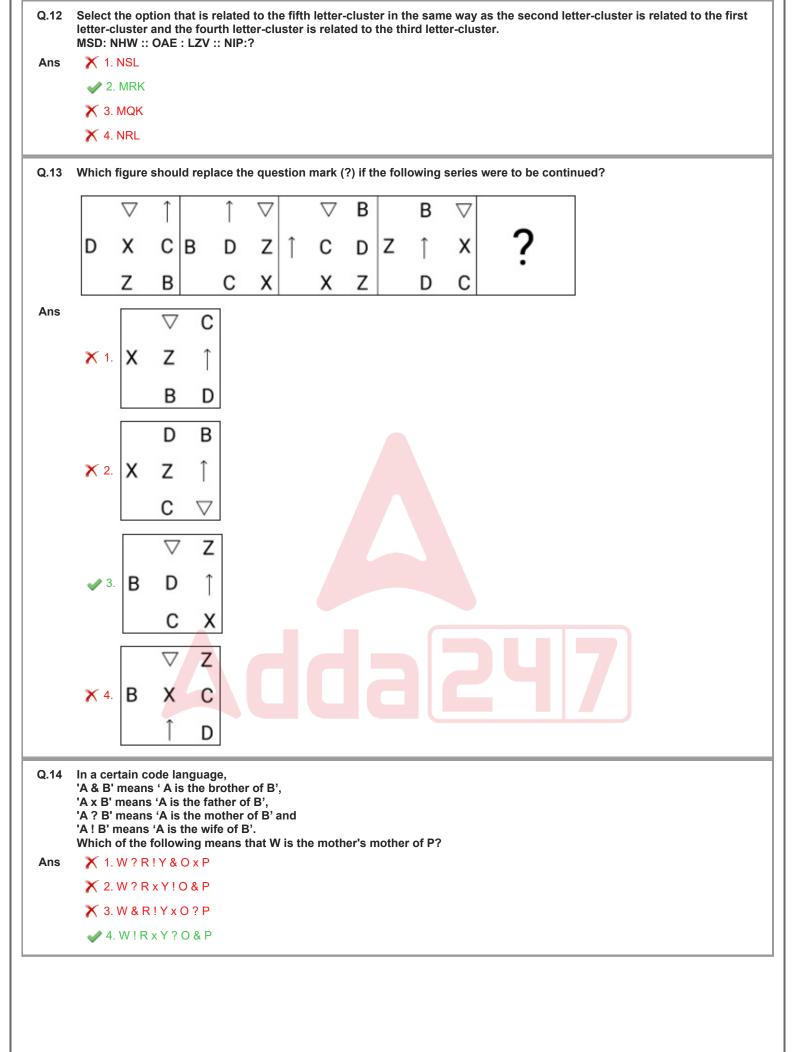
ection	General Intelligence and Reasoning
Q.1	In a certain code language, 'WJSL' is coded as '25-12-21-14' and 'DUOH' is coded as '6-23-17-10'. What is the code for 'PFK in the given language?
Ans	X 1. 20-10-14-21
	× 2. 20-9-12-20
	🗙 3. 19-9-12-19
	✓ 4. 18-8-13-20
Q.2	Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.
	R a d 6 v @
Ans	Rad6v@+~
	R a d 6 v @ . ₂ X
	X 3. (0) ∧ ∂ b a Я
	R a b 6 v 🕲 4 X
Q.3	How many rectangles are there in the given figure?
Ans	✓ 1. 9
	 ★ 2.6 ★ 2.4
	 X 3.4 X 4.8

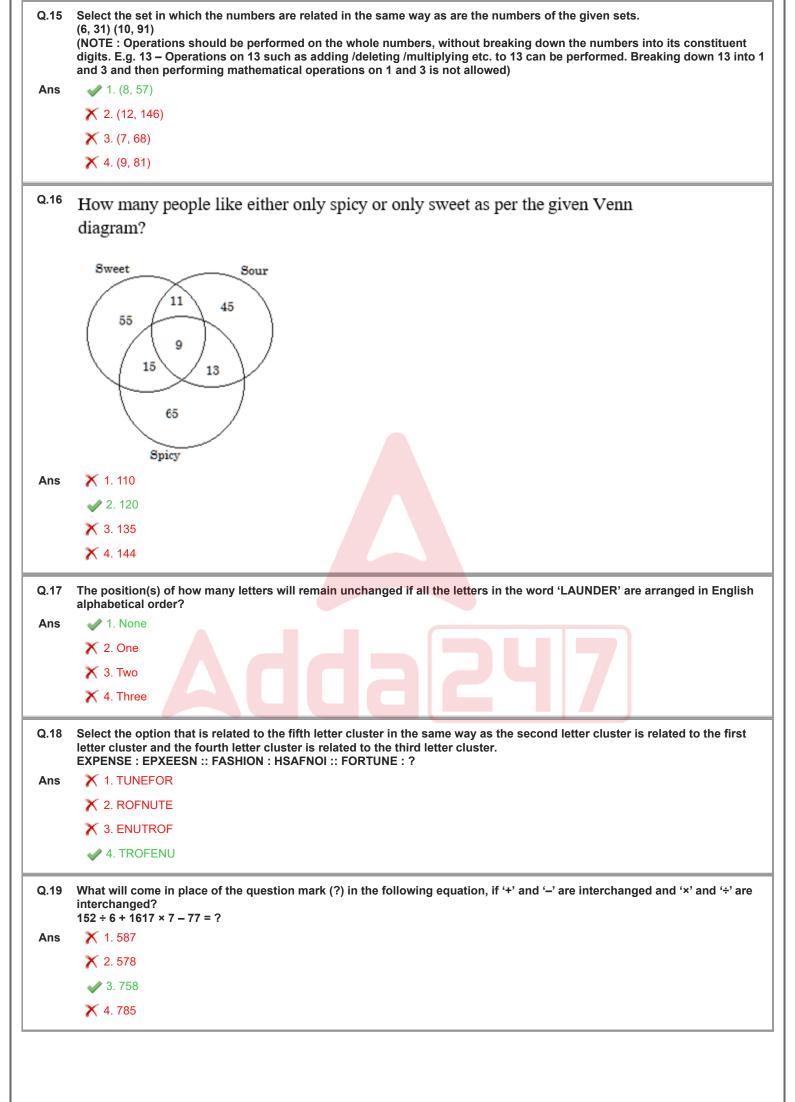


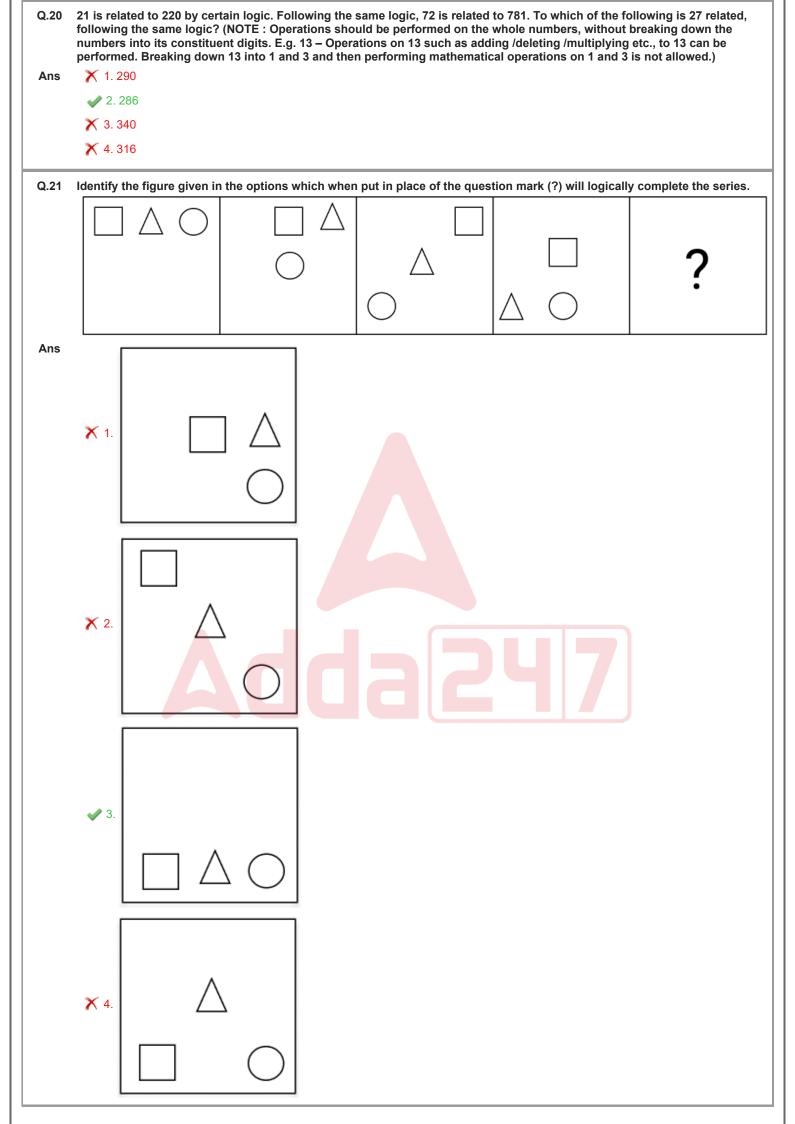
Q.8	Select the correct mirror image of the given figure when the mirror is placed at MN. M
	Hf2a6r3
	H f 2 q 6 r 3
	Ň
Ans	×1 €18p2fH
	¥12q6r3.2
	Hf2pel3 .6 🗙
	×4. ε19pf2 Η
Q.9	Three of the following number-pairs are alike in some manner and hence form a group. Which number-pair does not belong
	to that group? (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
Ans	X 1. 17 − 306
	X 2. 21 – 462
	✓ 3. 14 – 196
	X 4. 12 − 156



- Ans 🛛 📉 1. 71
 - X 2.72
 - **v** 3. 74
 - 🗙 4. 73







Q.22	In a certain code language, 'cat dog monkey' is coded as '55 66 88'; 'camel cat donkey' is coded as '66 99 33' and 'dog goat tiger' is coded as '88 11 22'. How is 'monkey' coded in that language?
Ans	🗙 1. 11
	X 2.66
	3. 55
	X 4.88
Q.23	Select the option that represents the letters that, when sequentially placed from left to right in the blanks below, will complete the letter series. _YRWIY_XI_R_IYRZ
Ans	X 1. XRYY
	X 2. IRZY
	V 3. IRYY
	X 4. IYYX
Q.24	Six letters O, Z, F, T, R and M are written on different faces of a dice. Two positions of this dice are shown in the figures below. Find the letter on the face opposite to Z.
	ZFZR
Ans	🗙 1. Т
	X 2. F
	🗙 3. R
	✓ 4. M
Q.25	Which two numbers (not digits) should be interchanged to make the given equation correct? 6 × 3 + 8 ÷ 2 + 21 + 5 × 4 – 14 ÷ 7 = 53
Ans	X 1.8 and 4
	X 2. 3 and 5
	X 3. 2 and 4
	✓ 4. 21 and 14
Castion	
	: General Awareness
Q.1 Ans	Which famous experiment was done by Michael Faraday in 1831?
Alls	\mathbf{X} 2. Discovery of law of elasticity
	 ✓ 3. Discovery of electromagnetic induction
	X 4. Discovery of natural radioactivity
Q.2	The book 'Poverty and Un-British Rule in India' was written by
Ans	X 1. MN Roy
	 2. Dadabhai Naoroji
	X 3. Bipin Chandra Pal
	🗙 4. Lala Lajpat Rai
Q.3	Who reconciled Dalton's atomic hypothesis with Gay-Lussac's results on the combination of volumes in 1811?
Ans	🗙 1. Robert Boyle
	🛷 2. Amadeo Avogadro
	X 3. Fred Hoyle
	🗙 4. Jacques Charles

Q.4	Who was the chief coordinator for the G20 summit hosted by India?
Ans	🗙 1. S Jaishankar
	🗙 2. Vijay Gokhale
	🗙 3. Vinay Kwatra
	✔ 4. Harsh Vardhan Shringla
Q.5	The number of ministers, including the Chief Minister, in a state shall NOT be less than
Ans	X 1. 11
	X 2. 10
	X 3. 13
	✔ 4.12
Q.6	Who among the following founded the Pala dynasty in 8 th Century CE?
Ans	🗙 1. Dharmapala
	X 2. Ramapala
	X 3. Devapala
	✔ 4. Gopala
Q.7	Directive principles of State Policy were added to the Indian Constitution by the 42nd Constitutional Amendment Act of 1976.
Ans	X 1. Two
	X 2. Three
	X 3. Five
	✓ 4. Four
Q.8	Who published the logistic equation model of population growth in 1838?
Ans	X 1. Howard Thomas Odum
	X 2. Alfred Russel Wallace
	✓ 3. Pierre François Verhulst
	X 4. George Evelyn Hutchinson
Q.9	The ICAR – Sugarcane Breeding Institute is located at:
Ans	X 1. Vellore
	✓ 2. Coimbatore
	X 3. Tirunelveli
	X 4. Cuddalore
Q.10	Who assumed charge as the new Vice Chief of the Indian Navy on 31 July 2021?
Ans	X 1. Karambir Singh
	X 2. Ravneet Singh
	✓ 3. SN Ghormade
	X 4. Dinesh K Tripathi
Q.11	Which Act was passed by the British Parliament in the year 1773 AD to regulate the activities of the East India Company?
Ans	X 1. Pitt's India Act
	X 2. Indian Slavery Act
	X 3. Age of Consent Act
	✓ 4. Regulating Act

Q.12	Match the following items.	
	List I	List II
	i. Kasturba Gandhi Balika Vidyalaya Scheme	a. 1994
	ii. Mid-Day Meal Scheme	b. 2004
	iii. The National Accreditation Assessment Council	c. 1945
	iv. All India Council for Technical Education	d. 1995
Ans	✓ 1. i (b), ii (d), iii (a), iv (c)	
Alla	 X 2. i (d), ii (a), iii (b), iv (c) 	
	 X 3. i (b), ii (c), iii (d), iv (a) 	
	 ✗ 4. i (c), ii (d), iii (b), iv (a) 	
Q.13	Where was the first meeting of the Employment Working Gro	up of G20 conducted?
Ans	X 1. Jaipur	
	🛹 2. Jodhpur	
	🗙 3. Lucknow	
	X 4. Kolkata	
Q.14	As per the Census of India 2011, the increase in literacy rates Census was:	for males and females,respectively, as compared to 2001
Ans	X 1. 3.88% and 13.79%	
	X 2. 5.88% and 12.79%	
	✓ 3. 6.88% and 11.79%	
	X 4. 4.88% and 10.79%	
Q.15	A. 4.88% and 10.79%What is the salinity of the Dead Sea (per litre of water)?	
Q.15 Ans		
	What is the salinity of the Dead Sea (per litre of water)?	
	What is the salinity of the Dead Sea (per litre of water)?	247
	 What is the salinity of the Dead Sea (per litre of water)? ★ 1. 440 grams ★ 2. 240 grams 	247
	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1. 440 grams ▲ 2. 240 grams ▲ 3. 340 grams ▲ 4. 390 grams Papanasam Ramayya Sivan was an Indian composer of which	BHZ h music style?
Ans	What is the salinity of the Dead Sea (per litre of water)?	BHZ h music style?
Ans Q.16	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1.440 grams ▲ 2.240 grams ▲ 3.340 grams ▲ 4.390 grams ▲ 4.390 grams ▲ 1. Qawwali ▲ 2. Carnatic music 	h music style?
Ans Q.16	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1. 440 grams ▲ 2. 240 grams ▲ 3. 340 grams ▲ 390 grams Papanasam Ramayya Sivan was an Indian composer of whice ▲ 1. Qawwali ▲ 2. Carnatic music ▲ 3. Bhajan 	h music style?
Ans Q.16	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1.440 grams ▲ 2.240 grams ▲ 3.340 grams ▲ 4.390 grams ▲ 4.390 grams ▲ 1. Qawwali ▲ 2. Carnatic music 	h music style?
Ans Q.16 Ans Q.17	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1.440 grams ▲ 2.240 grams ▲ 3.340 grams ▲ 3.90 grams ▲ 4.390 grams Papanasam Ramayya Sivan was an Indian composer of whice ▲ 1. Qawwali ▲ 2. Carnatic music ▲ 3. Bhajan ▲ 4. Folk music 	
Ans Q.16 Ans	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1. 440 grams ▲ 2. 240 grams ▲ 3. 340 grams ▲ 3. 340 grams ▲ 4. 390 grams Papanasam Ramayya Sivan was an Indian composer of which of the following is the first Indian woman Grandmaster ▲ 1. Harika Dronavalli	
Ans Q.16 Ans Q.17	 What is the salinity of the Dead Sea (per litre of water)? 1. 440 grams 2. 240 grams 3. 340 grams 4. 390 grams 4. 390 grams 2. Carnatic music 3. Bhajan 4. Folk music Which of the following is the first Indian woman Grandmaster 1. Harika Dronavalli 2. S Vijayalakshmi 	
Ans Q.16 Ans Q.17	 What is the salinity of the Dead Sea (per litre of water)? ▲ 1.440 grams ④ 2.240 grams ④ 3.340 grams ▲ 390 grams ▲ 4.390 grams Papanasam Ramayya Sivan was an Indian composer of whice ▲ 1. Qawwali ④ 2. Carnatic music ▲ 3. Bhajan ▲ 4. Folk music Which of the following is the first Indian woman Grandmaster ▲ 1. Harika Dronavalli ④ 2. S Vijayalakshmi ▲ 3. Tania Sachdev 	
Ans Q.16 Ans Q.17	 What is the salinity of the Dead Sea (per litre of water)? 1. 440 grams 2. 240 grams 3. 340 grams 4. 390 grams 4. 390 grams 2. Carnatic music 3. Bhajan 4. Folk music Which of the following is the first Indian woman Grandmaster 1. Harika Dronavalli 2. S Vijayalakshmi 	
Ans Q.16 Ans Q.17 Ans Q.18	 What is the salinity of the Dead Sea (per litre of water)? 1. 440 grams 2. 240 grams 3. 340 grams 4. 390 grams Papanasam Ramayya Sivan was an Indian composer of whice 1. Qawwali 2. Carnatic music 3. Bhajan 4. Folk music Which of the following is the first Indian woman Grandmaster 1. Harika Dronavalli 2. S Vijayalakshmi 3. Tania Sachdev 4. R Vaishali Which of the following is NOT a major climate control of a planet.	r in Chess?
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Q.19	Who among the following is known as 'Captain Cool' in Indian Cricket?
Ans	🗙 1. Virat Kohli
	✔ 2. Mahendra Singh Dhoni
	🗙 3. Kapil Dev
	🗙 4. Sachin Tendulkar
Q.20	In which of the following states is the Chu-Faat dance performed?
Ans	🗙 1. Haryana
	X 2. Uttarakhand
	🗙 3. West Bengal
	🖋 4. Sikkim
Q.21	Digestion of food is an important function of the animal body. In animals like lions, cows, humans, etc., the process involves use of various organs starting from the mouth and ending with the anus. The longest part of this canal is known as the
Ans	X 1. stomach
	X 2. large intestine
	🗙 3. oesophagus
	✓ 4. small intestine
Q.22	The famous santoor player Pandit Shivkumar Sharma received the in the year 1986.
Ans	🗙 1. Maharashtra Gurav Puraskar
	2. Sangeet Natak Akademi Award
	X 3. Sanskriti Award
	X 4. Kalidas Samman
Q.23	Which of the following is a festival primarily celebrated in the state of Odisha?
Ans	X 1. Baishagu
	X 2. Chhath
	✓ 3. Raja Parba
	X 4. Me-Dam-Me-Phi
Q.24	Which of the following is a difference between self-help groups (SHGs) and microfinance institutions (MFIs) in India?
Ans	 X 1. SHGs are non-profit organisations, while MFIs are for-profit organisations. X 2. SHGs provide only credit, while MFIs provide a range of financial services.
	3. SHGs are typically small, community-based organisations, while MFIs are larger and more formal institutions.
	X 4. SHGs rely on government subsidies for funding, while MFIs rely on commercial sources of funding.
Q.25	The Aryans lived in the land known as 'Sapta Sindhu' (Land of the Seven Rivers). Which of the following was NOT a part of it?
Ans	🗙 1. Indus
	✔ 2. Shipra
	🗙 3. Ravi
	🗙 4. Jhelum
Section	: Quantitative Aptitude

Q.1	The ratio of the ages of A and B, 3 years ago, was 5 : 7. The ratio of their ages, 13 years from now, will be 9 : 11. If the present age of C is 11 years less than that of B, then the present age of C, in years, is:
Ans	X 1.23
	X 2. 36
	🗙 3. 31
	✓ 4. 20
Q.2	Let $3t - \frac{1}{3t} = 3$, then which of the following expressions has the value equal to 12?
Ans	\times 1. 9 $t^2 + \frac{1}{9t^2} + 2$
	$ \times 2. 9t^2 + \frac{1}{9t^2} - 2 $
	$\checkmark 3. 9t^2 + \frac{1}{9t^2} + 1$
	\times 4. 9 $t^2 + \frac{1}{9t^2}$
Q.3	Find the area of a rectangle whose length is 52m and breadth is 9m.
Ans	$\sim 1.468 \text{m}^2$
	× 2. 253m ²
	× ^{3.} 625m ²
	× 4. 552m ²

Q.4 The following table shows the number of students admitted in to a university for higher education from 2010 to 2013.

Year	Number of Students	
2.544		
2010	450	
2011	540	
2012	370	
2013	680	
		1

What is the average number of students admitted in to the university from 2010 to 2013?

Ans 🛛 🗙 1. 495

🗙 2. 499

- 🖋 3. 510
- 🗙 4. 522

Q.5	bar graph. Stud								
	700						650		
	600	550							
	ø 500		150			500			
	d b		450	400					
	000 No. of electric-bulbs			400	375				
	lect								
	e 300								
	<u>.</u> 200								
	100							_	
								_	
	0	July	August	September	October	November	Decemb	or	
		July	August	-	nths	November	Deceme		
	What is the per			production of	electric bulbs	in October as	compared	to the produ	uction in July
Ans	(Correct up to t 1. 30.28%	wo uecimai pia	aces.)						
115	-								
	2. 31.82%								
	🗙 3. 29.82%								
	X 4. 32.28%	s more than th	the average e average a	e age of six of t lge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
	In a team of sev team is 36 year member of the	s more than th	the average e average a	e age of six of t age of all the se	he members i	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans	In a team of set team is 36 year member of the 1.90 2.84 3.80	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans Q.7	In a team of sev team is 36 year member of the 1.90 2.84 3.80 4.78	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans Q.7	In a team of sev team is 36 year member of the 1.90 2.84 3.80 4.78 The value 1.1	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans Q.7	In a team of sev team is 36 year member of the	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans Q.7	In a team of sev team is 36 year member of the	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of s) of the seve
Ans Q.7	In a team of sev team is 36 year member of the	s more than th team.	e average a	ge of all the se	he members even members	is 42 years whi s taken togethe	le the age er. Find the	of the seven age (in year	th member of 's) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc	e average a $\sin^4 \theta$ at θ $\cos^2 \theta$	$0 = 45^{\circ}$ is:	even members	s taken togethe	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1.90 \checkmark 2.84 \thickapprox 3.80 \bigstar 4.78 The value \bigstar 1.1 \checkmark 2.0 \bigstar 3.3 \bigstar 4.2 The sale of two	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc	e average a $\sin^4 \theta$ at θ $\cos^2 \theta$	$0 = 45^{\circ}$ is: B2 (in lakhs) m	even members	s taken togethe	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1.90 \checkmark 2.84 \bigstar 3.80 \bigstar 4.78 The value \bigstar 1.1 \checkmark 2.0 \bigstar 3.3 \bigstar 4.2 The sale of two the table below	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc	e average a $\frac{\sin^4 \theta}{\cos^2 \theta} \text{ at } \theta$	ge of all the se	even members	s taken togethe	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1. 90 \checkmark 2. 84 \thickapprox 3. 80 \bigstar 4. 78 The value \bigstar 1. 1 \checkmark 2. 0 \thickapprox 3. 3 \bigstar 4. 2 The sale of two the table below	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1	e average a $\frac{\sin^4\theta}{\cos^2\theta} \text{ at } \theta$ eles B1 and B2	$0 = 45^{\circ}$ is: B2 (in lakhs) m	even members	s taken togethe	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1.90 \checkmark 2.84 \bigstar 3.80 \bigstar 4.78 The value \checkmark 1.1 \checkmark 2.0 \bigstar 3.3 \thickapprox 4.2 The sale of two the table below Year 2001	s more than the team. of $\frac{\sin^2 \theta - 2s}{2\cos^4 \theta + c}$ kinds of bicyc B1 95	e average a $\frac{\sin^4\theta}{\cos^2\theta} \text{ at } \theta$ cos ² θ at θ cles B1 and B2 184	ege of all the set = 45° is: B2 (in lakhs) m	even members	s taken togethe	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1. 90 \checkmark 2. 84 \thickapprox 3. 80 \bigstar 4. 78 The value \bigstar 1. 1 \checkmark 2. 0 \thickapprox 3. 3 \bigstar 4. 2 The sale of two the table below Year 2001 2002 2003	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1 95 130 150	e average a $sin^4\theta$ at θ $cos^2\theta$ at θ eles B1 and B2 184 200 216	$b = 45^{\circ} \text{ is:}$ $B2 \text{ (in lakhs) m}$	nanufactured	by a company	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans Q.8	In a team of sev team is 36 year member of the \checkmark 1. 90 \checkmark 2. 84 \thickapprox 3. 80 \bigstar 4. 78 The value \checkmark 1. 1 \checkmark 2. 0 \thickapprox 3. 3 \bigstar 4. 2 The sale of two the table below Year 2001 2002 2003 From 2001 to 20	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1 95 130 150	e average a $sin^4\theta$ at θ $cos^2\theta$ at θ eles B1 and B2 184 200 216	$b = 45^{\circ} \text{ is:}$ $B2 \text{ (in lakhs) m}$	nanufactured	by a company	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans Q.8	In a team of sev team is 36 year member of the \checkmark 1.90 \checkmark 2.84 \thickapprox 3.80 \bigstar 4.78 The value \bigstar 1.1 \checkmark 2.0 \thickapprox 3.3 \bigstar 4.2 The sale of two the table below $\boxed{\frac{Y ear}{2001}}$ 2002 2003 From 2001 to 20 \bigstar 1.70.6%	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1 95 130 150	e average a $sin^4\theta$ at θ $cos^2\theta$ at θ eles B1 and B2 184 200 216	$b = 45^{\circ} \text{ is:}$ $B2 \text{ (in lakhs) m}$	nanufactured	by a company	er. Find the	age (in year	rs) of the seve
Ans Q.7 Ans	In a team of sev team is 36 year member of the \checkmark 1. 90 \checkmark 2. 84 \thickapprox 3. 80 \bigstar 4. 78 The value \checkmark 1. 1 \checkmark 2. 0 \thickapprox 3. 3 \bigstar 4. 2 The sale of two the table below Year 2001 2002 2003 From 2001 to 20	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1 95 130 150	e average a $sin^4\theta$ at θ $cos^2\theta$ at θ eles B1 and B2 184 200 216	$b = 45^{\circ} \text{ is:}$ $B2 \text{ (in lakhs) m}$	nanufactured	by a company	er. Find the	age (in year	rs) of the seve
Q.6 Ans Q.7 Ans Q.8	In a team of sev team is 36 year member of the \checkmark 1. 90 \checkmark 2. 84 \thickapprox 3. 80 \bigstar 4. 78 The value \checkmark 1. 1 \checkmark 2. 0 \thickapprox 3. 3 \bigstar 4. 2 The sale of two the table below $\boxed{\frac{Y ear}{2001}}$ 2002 2003 From 2001 to 20 \thickapprox 1. 70.6%	s more than the team. of $\frac{\sin^2\theta - 2s}{2\cos^4\theta + c}$ kinds of bicyc B1 95 130 150	e average a $sin^4\theta$ at θ $cos^2\theta$ at θ eles B1 and B2 184 200 216	$b = 45^{\circ} \text{ is:}$ $B2 \text{ (in lakhs) m}$	nanufactured	by a company	er. Find the	age (in year	rs) of the seve

Ans	verage score of the class?
	X 1.58.8
	2.61.8
	✓ 3. 60.8
	X 4. 59.8
Q.10 Th	he length of the tangent drawn from a point 10 cm away from the centre of a circle with radius 4 cm, is:
Ans	× 1. 3√14
2	× 2. 3√21
	✓ 3. 2√21
2	× 4. 2√14
	an employee's income is ₹72,000, the amount he spends is 40% higher than his savings. Therefore, his savings (in ₹) is:
	1. 30000
	2.34000
	× 3. 32000
	× 4. 28000
in: Ans	customer pays ₹975 in instalments. The payment is done each month ₹5 less than the previous month. If the first stalment is ₹100, how much time will be taken to pay the entire amount? 1. 14 months 2. 15 months
	X 3. 27 months
	X 4. 26 months
Q . Find the	e gain percentage, given that Anubha sold her scooter for ₹31524 gaining $\frac{1}{6}$ th of the selling price.
1 3 A ★ 1.5% s 2.20 ★ 3.30	

```
Q.15 The following table represents the total number of students in different classes and the respective number of students who are vegetarian, in a school. Study the table carefully and answer the question that follows.
```

Class	Total number of students	Number of vegetarian students
XII	150	105
XI	165	100
Х	125	80
IX	140	90

What is the percentage of non-vegetarian students in class XII?

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🗙 1. 40%
Ans
        V 2. 30%
        🗙 3. 35%
        🗙 4. 25%
Q.16
       If 3x + 2y = 10 and 2xy = 7, then find the value of 3x - 2y (if 3x - 2y > 0).
        v 1.4
Ans
        X 2. 10
        🗙 3. 8
       X 4.6
Q.17
       If each side of an equilateral triangle is 37\sqrt{3} cm, then its altitude
       (in cm) is equal to
       X 1. 37.5
Ans
        🗙 2. 18.5
        🗙 3. 60.5
        4. 55.5
      In \triangle PQR, if 4 \angle P = 5 \angle Q = 20 \angle R, then the value of \angle Q is:
Q.18
Ans
        🖌 1. 72°
        🗙 2. 36°
        🗙 3. 90°
        🗙 4. 45°
Q.19
       For what value of t is the value of \sin^2(t), half of the value of \tan(t)?
       🗙 1. 60°
Ans
        🕜 2. 45°
        🗙 3. 30°
        🗙 4. 22.5°
```

Q.20	If tanA = $\frac{1}{\sqrt{10}}$, A is an acute angle, then the value of sinA + cosecA is:
Ans	$\sqrt{10}$ $\times 1. \frac{11}{\sqrt{10}}$
	\times 2. $\frac{1}{\sqrt{10}}$
	$\checkmark 3. \frac{12}{\sqrt{11}}$
	\times 4. $\frac{10}{\sqrt{11}}$
Q.21	Simplify the following expression $0.07 \times 0.28 \div 0.04 + 0.64 - 1.64 \div 0.04$
Ans	× 1.38.56 ✓ 239.87
	× 4.36.78
Q.22	Two pipes A and B can fill a tank in 20 and 30 hours, respectively. Both pipes are opened to fill the tank, but when the tank is one-third full, a leak develops through which one-fourth of the water supplied by both pipes goes out. Find the total time (in hours) taken to fill the tank.
Ans	✓ $1.14\frac{2}{3}$
	× 2.14
	$\times 3.11\frac{2}{5}$
	$\times 4.12\frac{1}{3}$
Q.23	A boat covers a distance of 55 km downstream in 5 hours while it takes 11 hours to cover the same distance upstream. What is the speed of the boat?
Ans	✓ 1. 8 km/h ★ 2. 9 km/h
	X 3. 11 km/h
	🗙 4. 7 km/h
Q.24 Ans	The single discount equivalent to a series discount of 60%, 70% and 80%.
7/15	× 2.70%
	✗ 3.85%
	X 4. 95.5%
Q.25	The number 4,29,714 is divisible by:
Ans	 X 1. 3 and 5 X 2. 6 and 5
	X 3. 4 and 6
	✓ 4. 3 and 6
Section	: English Comprehension

Q.1	Select the most appropriate meaning of the underlined idiom in the following sentence. Sejal visits the nearby temple <u>off and on</u> .
Ans	✓ 1. Periodically
	X 2. Constantly
	X 3. Continuously
	X 4. Regularly
Q.2	Parts of a sentence are given below in jumbled order. Select the option that arranges the parts in the correct sequence to form a meaningful sentence. (P) unlock their potential (Q) empowers individuals to
	(O) and shape their future (R) the power of education
Ans	X 1. QROP
	X 2. OPRQ
	V 3. RQPO
	X 4. RPOQ
Q.3	The following sentence has been divided into four segments. Identify the segment that contains an error. Mr. Suman / asked me / to pack / my luggages.
Ans	X 1. asked me
	✓ 2. my luggages.
	X 3. to pack
	🗙 4. Mr. Suman
Q.4	Select the option that can be used as a one-word substitute for the given group of words.
	A place to park aeroplanes
Ans	X 1. Hanger
	X 2. Depot
	X 3. Shed
	V 4. Hangar
Q.5	Select the option that expresses the following sentence in passive voice.
	The baker baked the cake.
Ans	✓ 1. The cake was baked by the baker
	X 2. The cake had been baked by the baker.
	leph 3. The baker has been baking the cake.
	🗙 4. The cake has been baked by the baker.
Q.6	Select the most appropriate ANTONYM of the underlined word in the following sentence. The teammates made several jibes at the opponent team members during the interview.
Ans	X 1. Consolation
	X 2. Mockery
	X 3. Inspiration
	✓ 4. Contradict
Q.7	Select the most appropriate option to substitute the underlined segment in the given sentence.
Q.1	Athens was suffering under the rule of <u>a powerful small group</u> that had no concern for the people's welfare.
Ans	X 1. a democracy
	✓ 2. an oligarchy
	X 3. a monarchy
	X 4. a missionary

often fail to remember someone's name. 1. accuriately 2. accuratially 3. acusatively 4. accurately
 ✓ 2. accuratially ✓ 3. acusatively
X 3. acusatively
4 accurately
elect the most appropriate option that can rectify the incorrectly spelt word in the following sentence. Ioubt that these lifts can acommodate 100 people.
X 1. acomodate
X 2. accommodatte
X 3. accomodate
✓ 4. accommodate
elect the most appropriate synonym of the given word. ssipate
X 1. Glorious
X 2. Malicious
X 3. Haste
✓ 4. Spend
elect the sentence that is expressed in passive voice.
 1. I prefer tea to coffee. 2. Objidance constituing the set of a se
 Children are participating in sand-art competition. Chaldren are participating in sand-art competition.
X 3. She sketches beautifully.
✓ 4. The consignment was delivered yesterday.
elect the most appropriate meaning of the underlined idiom. In year's budget is unlikely to pass as law since the president's proposed budgets typically face a jaundiced eye but this The has gotten even more scepticism.
X 1. Jealousy
X 2. Confidence
✓ 3. Resentment
X 4. Good will
elect the most appropriate synonym of the given word.
odge
✓ 1. Avoid
X 2. Force
X 3. Boarding
X 4. Amount
elect the most appropriate ANTONYM of the underlined word in the given sentence. For behaviour was so <u>ostentatious</u> that it attracted the attention of everyone in the room.
1. Attractive
✓ 2. Restrained
X 3. Gentle
X 4. Repulsive

Q.15	Select the most appropriate ANTONYM of the underlined word. Her remarks were <u>relevant</u> to the discussion.
Ans	✓ 1. Inappropriate
	X 2. Suitable
	X 3. Introductory
	X 4. Conclusive
Q.16	Select the option with the correct use of future tense.
Ans	$ig \chi$ 1. By next December, I will have been completed six years in this home.
	🗙 2. By next December, I will be completed six years in this home.
	🗙 3. By next December, I will have complete six years in this home.
	4. By next December, I will have completed six years in this home.
Q.17	Select the most appropriate option that can substitute the underlined words in the given sentence. Ranjith failed in all his exams <u>as he had been addicted of</u> social media.
Ans	🗙 1. as he had been addicted at
	🗙 2. as he had been addicted on
	🗙 3. as he had been addicted in
	✓ 4. as he had been addicted to
Q.18	Select the most appropriate ANTONYM of the given word.
Ans	Lethargic 1. Active
7	× 2. Languid
	X 3. Moderate
	× 4. Angry
Q.19	Select the option that can be used as a one-w <mark>ord substitute for the giv</mark> en group of words. The evening time when the sun has just set <mark>and it is almost dark.</mark>
Q.19 Ans	
	The evening time when the sun has just set and it is almost dark.
	The evening time when the sun has just set and it is almost dark. 1. Dusk
	 The evening time when the sun has just set and it is almost dark. 1. Dusk 2. Night
	 The evening time when the sun has just set and it is almost dark. ✓ 1. Dusk ✓ 2. Night ✓ 3. Dawn ✓ 4. Day break Select the most appropriate option to substitute the underlined segment in the given sentence.
Ans	 The evening time when the sun has just set and it is almost dark. 1. Dusk 2. Night 3. Dawn 4. Day break
Ans Q.20	The evening time when the sun has just set and it is almost dark. ✓ 1. Dusk ✓ 2. Night ✓ 3. Dawn ✓ 4. Day break Select the most appropriate option to substitute the underlined segment in the given sentence. The cynical investors believed in every word the analysts said.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20	The evening time when the sun has just set and it is almost dark.
Ans Q.20 Ans Q.21	The evening time when the sun has just set and it is almost dark.
Ans Q.20 Ans	The evening time when the sun has just set and it is almost dark.
Ans Q.20 Ans Q.21	The evening time when the sun has just set and it is almost dark.
Ans Q.20 Ans Q.21	The evening time when the sun has just set and it is almost dark.

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The Human Development Index (HDI) is a summary (1) ______ of average accomplishment in important areas of human development, (2) ______ living a long and healthy life, being informed and having a good quality of living. The HDI is the geometric mean of the normalised (3) ______ for each dimension. The health component is (4) ______ by life expectancy at birth, while the education dimension is measured by the average number of years of schooling for individuals aged 25 and above, as well as the (5) ______ number of years of schooling for school-age children.

SubQuestion No : 22

Q.22 Select the most appropriate answer for blank number 2.

- Ans 💦 X 1. segregating
 - X 2. exaggerating
 - 3. including
 - 🗙 4. manifesting

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The Human Development Index (HDI) is a summary (1) ______ of average accomplishment in important areas of human development, (2) ______ living a long and healthy life, being informed and having a good quality of living. The HDI is the geometric mean of the normalised (3) ______ for each dimension. The health component is (4) ______ by life expectancy at birth, while the education dimension is measured by the average number of years of schooling for individuals aged 25 and above, as well as the (5) ______ number of years of schooling for school-age children.

SubQuestion No : 23

Q.23 Select the most appropriate answer for blank number 3.

- Ans X 1. features
 - X 2. contents
 - ✓ 3. indices
 - 🗙 4. glimpses

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The Human Development Index (HDI) is a summary (1) ______ of average accomplishment in important areas of human development, (2) ______ living a long and healthy life, being informed and having a good quality of living. The HDI is the geometric mean of the normalised (3) ______ for each dimension. The health component is (4) ______ by life expectancy at birth, while the education dimension is measured by the average number of years of schooling for individuals aged 25 and above, as well as the (5) ______ number of years of schooling for school-age children.

SubQuestion No : 24

- Q.24 Select the most appropriate answer for blank number 4.
- Ans X 1. levitated
 - X 2. escaped
 - 🗙 3. triggered
 - 4. measured

Comprehension:

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

The Human Development Index (HDI) is a summary (1) ______ of average accomplishment in important areas of human development, (2) ______ living a long and healthy life, being informed and having a good quality of living. The HDI is the geometric mean of the normalised (3) ______ for each dimension. The health component is (4) ______ by life expectancy at birth, while the education dimension is measured by the average number of years of schooling for individuals aged 25 and above, as well as the (5) ______ number of years of schooling for school-age children.

SubQuestion No: 25

Q.25 Select the most appropriate answer for blank number 5.

Ans X 1. accompanied

- X 2. hypnotised
- ✓ 3. predicted
- X 4. neglected