AFCAT 1 2014 QUESTION PAPER

INSTRUCTIONS:

- 1. Total No. of Questions-100. Each Question is of three marks.
- 2. One mark will be deducted for every wrong answer.
- 3. Do not write or mark on the Question Paper.
- 4. Question Paper to be returned before leaving the Exam Hall.

DIRECTIONS (Qs. 1–4): *Read the following passage carefully and answer the questions given below it:*

And then Gandhi came. He was like a powerful current of fresh air that made us stretch ourselves and take deep breaths, like a beam of light that pierced the darkness and removed the scales from our eyes, like a whirlwind that upset many things but most of all the working of people's minds. He did not descend from the top; he seemed to emerge from the millions of India, speaking their language and incessantly drawing attention to them and their appalling condition. Get off the backs of these peasants and workers, he told us, all of you who live by their exploitation; get rid of the system that produces this poverty and misery.

- 1. Gandhi came like a powerful current of fresh air and
 - (a) awakened us to the plight of the masses in the grip of oppressors
 - (b) made us patriotic
 - (c) emboldened us to attack and destroy the oppressors
 - (d) praised our culture
 - The rise of Gandhi

2.

- (a) shocked people
- (b) made India powerful
- (c) made the condemnation of the exploiter final
- (d) made women feel secure
- 3. Gandhi fought the
 - (a) rich (b) oppressor
 - (c) apathetic masses (d) unjust system
- 4. The conspicuous role of Gandhi is that of a
 - (a) father (b) reformer
 - (c) teacher (d) liberator

DIRECTIONS (Qs. 5-10) : Select the most appropriate word from the options against each number :

Those living in the slums are 5 and tough because they are totally 6 to the vagaries and hardships of life. The rising sun 7 the day and the setting sun closes the day for them. It is like a drama where the curtain 8 up in the morning and comes down in the evening. They don't 9 hypertension and heart attacks because there is, after all 10 to worry about.

5.	(a)	Poor	(b) Sick	(c) Hardy	(d) Weak
6.	(a)	Depende	ent	(b) Independ	dent

(c) Exposed (d) Tried

7.	(a)	Heralds	(b) Herald
	(c)	Bring	(d) Brings
8.	(a)	Hangs	(b) Hand
	(c)	Goes	(d) Shines
9.	(a)	Know (b) Get	(c) Think (d) Have
10.	· /	Everything Somewhere	(b) Something(d) Nothing

DIRECTIONS (Qs. 11 – 12): Choose the word which is nearest in meaning to the given word :

11.	'TRANSGRESSOR'		
	(a) Passenger	(b)	Law-breaker
	(c) Protector	(d)	Comrade
12.	'EGREGIOUS'		
	(a) Common	(b)	Social

(c) Plain (d) Atrocious

DIRECTIONS (Qs. 13 – 15) : Choose the word which is nearly opposite in meaning to the given word:

13.	'PREDILECTION'		
	(a) Oblivion	(b)	Objectivity
	(c) Aversion	(d)	Defeat
14.	'CACOPHONOUS'		
	(a) Tamed	(b)	Harmonious
	(c) Domestic	(d)	Silent
15.	'CALUMNY'		
	(a) Apology	(b)	Eulogy
	(c) Enjoyment	(d)	Reservation

DIRECTIONS (Qs. 16–20): Choose the word that best defines the given phrase:

16.	'Able to use both hands alike'	
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(a)	Dexterous	(b)	Ambidextrous
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- (c) Skilful (d) Expert
- 17. 'A written account of the life of an individual'
 - (a) Autobiography (b) Epigraph
 - (c) Biography (d) Novel
- 18. 'The identification of a disease by its symptoms'
 - (a) Prescription (b) Prognosis
 - (c) Diagnosis (d) Biopsy
- 19. 'Prolonged inability to sleep'
 - (a) Amnesia (b) Utopia
 - (c) Nausea (d) Insomnia

TIME LIMIT : 2 HOURS

(a)	Verbose	(b)	Pedantic

(c) Ornate (d) Pompous

DIRECTIONS (Qs. 21–25): Choose the correctly spelt word:

- The school alumni gathering put us in a 21. mood.
 - (a) Remniscent (b) Reminisent
- (c) Reminiscent (d) Reminicent 'God is Dead' is a 22. statement.
 - (a) Blasphemus (b) Blaphemous
 - (c) Blasphemous (d) Blosphemos
- 23. The threat of an epidemic caused great alarm and
 - (b) Terpidation (a) Trepidation
 - (c) Trepidition (d) Trepidattion
- The din caused by the children howling is enough to _____ 24. the dead.
 - (a) Ressurect (b) Resurrect
 - (d) Resurecct (c) Resurect
- 25. Can you the car into that parking spot?
 - (a) Manuer (b) Manever
 - (d) Manuver (c) Manoeuvre

DIRECTIONS (Qs. 26–47): Choose most appropriate answer:

- Who was the Governor-General of India during the 'Sepoy 26. Mutiny'?
 - (a) Lord Dalhousie (b) Lord Harding
 - (c) Lord Canning (d) Lord Lytton.
- Which of the following statements is incorrect? 27.
 - (a) Goa attained full statehood in 1987
 - (b) Diu is an island in the Gulf of Khambhat
 - (c) Daman & Diu were separated from Goa by the 56th Amendment of the Constitution of India
 - (d) Dadar & Nagar Haveli were under French colonial rule till 1954.
- On which river is Washington DC situated? 28.
 - (a) Potomac (b) Irrawaddy
 - (d) Hudson (c) Mississippi
- When body is accelerated: 29.
 - (a) Its velocity never changes
 - (b) Its speed will always changes
 - (c) Its direction always changes
 - (d) Its speed may or may not change
- Which of the following is not an agency of UN? 30.
 - (a) World Bank
 - (b) International Atomic Energy Agency
 - (c) Universal Postal Union
 - (d) None of the above
- 31. Which kind of missile is BRAHMOS?
 - (a) Medium range ballistic missile
 - (b) Supersonic cruise missile
 - (c) Short range tactical missile
 - (d) Ultrasonic cruise missile
- Which of the following is not a unit of energy? 32.
 - (a) Calorie (b) Joule
 - (c) Electron volt (d) Watt

of India'?

- (b) Samudragupta (a) Ashoka (c) Chandragupta (d) Harshavardhana 34. Who is known as the 'Grand Old Man of India'? (a) Dadabhai Naoroji (b) Gopal Krishna Gokhale (c) Bal Gangadhar Tilak (d) A.O. Hume Which amongst the following has the power to regulate 35. the right of citizenship in India? (a) Union Cabinet (b) Parliament (c) Supreme Court (d) Law Commission 36. The Baglihar Hydroelectric power project in J & K is built across the river. (a) Beas (b) Chenab (c) Jhelum (d) Sutlei Which Indian sportsperson was appointed as 'Messenger 37. of Peace' in 2001 by the UN? (a) Prakash Padukone (b) Vishwanathan Anand (c) Sachin Tendulkar (d) VijavAmritraj 38. Indian Women's hockey team secured which of the following position in Asian Champions Trophy 2013? (a) First (b) Second (c) Third (d) Fourth 39 Which is the longest bone in the human body? (a) Fibula (b) Radius (c) Stapes (d) Femur A US team of scientists has found that the mechanism 40. responsible for the ageing process is located (a) inside the face (b) inside the skin (c) inside the brain (d) inside the heart 41. The outer most layer of the Sun is known as (a) Corona (b) Photosphere (c) Chromosphere (d) Granule 42 Indian Institute of Science, Bangalore was founded by (b) Jamsetji Tata (a) CV Raman (c) Vikram Sarabhai (d) None of these Which among the following is not a gallantry medal? 43. (a) Ashok Chakra (b) Arjuna Award (c) Param Vir Chakra (d) Shaurya Chakra 44 Which one of the following pairs of water bodies are connected by the Suez Canal? (a) Indian Ocean-Pacific Ocean (b) Mediterranean sea- Black Sea (c) Mediterranean Sea-Red Sea (d) Atlantic Ocean-Pacific Ocean 45. Kalhana's 'Rajatarangini' is a history of (a) Kashmir (b) Harsha's reign (c) Rajasthan (d) Chandragupta's reign 46. The Constitution of India was promulgated on January 26, 1950 because (a) This day was being celebrated as the Independence Day since 1929 (b) This was desired by the farmers of India (c) The British did not want to leave India earlier than this date
 - (d) It was an auspicious day

- 47. Which of the following is not correctly matched?
 - (a) Indonesia Jakarta (b) Maldives Male
 - (c) North Korea Seoul (d) Zimbabwe Harare

DIRECTIONS (Qs. 48-50): Complete the series

48.	A, B, D, G,?, P		
	(a) I	(b)	J
	(c) K	(d)	L
49.	Z, S, W, O, T, K, Q, G, ?, '	?	
	(a) N,D	(b)	N,C
	(c) O,C	(d)	O,D
50.	BCD, RQP, LMN, TS?		
	(a) U	(b)	V
	(c) R	(d)	Т

DIRECTIONS (Qs. 51): If A = C, B = D, C = E and so on, code the following:

51. 'STUDENT'

(a)	VWVFGPV	(b)	UUWFGPV
(c)	UVWFGPV	(d)	UVVFGPV

DIRECTIONS (Qs. 52) : If A = Z, B = Y and so on , code the following:

52. 'EDITOR'

53.

(a)	VWRGLI	(b)	VWRGVI
$\langle \rangle$		(1)	VAUDITI

(c) VWVGLI (d) VWRLLI

DIRECTIONS (Qs.53–55). Choose the most appropriate word:

'RUSTLE' is to 'LEAVES' as 'PATTER' is to					
(a)	Snow	(b)	Wind		
(c)	Rain	(d)	Storm		

54. 'INDISCREET' is to 'IMPRUDENT' as 'INDISPOSED' is to

(a)	Concerned	(b)	Reluctant
	~	6.45	

(c) Crucial(d) Clear55. 'ACCIDENT' is to 'CAREFULNESS' as 'DISEASE' is to

(a)	Sanitation	(b)	Treatment

(c) Medicine (d) Doctor

DIRECTIONS (Qs.56–58). Each of the following questions has four statements. Three are logically correct. Some of which may look factually absurd. Ignore this absurdity and look to the logical corrections. Choose the statement which is wrong or doubtful:

- 56. (a) Birds fly in the air. Trees are birds. Therefore, trees fly in the air.
 - (b) Some boys steal. All who steal are naughty. All naughty are honest. Therefore, some boys are honest
 - (c) All girls like dance. Some girls are Indian. All Indians are artists. Therefore, some artists like dance.
 - (d) All liars are not thieves. All thieves are criminals. Therefore, all liars are criminals.
- 57. (a) Ramesh is tall. Ramesh is a boy. Therefore, boys are tall.
 - (b) All who can fly are animals. Some birds can fly. Therefore, some birds are animals.

- (c) Men live in houses. Houses grow on trees. Trees float in water. Therefore, men float in water.
- (d) All living things are mobile. Some non-living things are mobile. Therefore, some mobile are living and some non-living.
- 58. (a) All books can read. Some pencils are books. All pencils are clever. Therefore, all clever cannot read.
 - (b) Some who fail are stupid. Some criminals are stupid. Therefore, all criminals fail.
 - (c) Some liar are thieves. All thieves are criminals. Therefore, some liars are criminals.
 - (d) All that is given is black. Trees are green. Therefore, trees are black.

DIRECTIONS (Qs.59–60) : Consider the statement and assumptions that follow. Which of these assumptions is/are implicit in the statement:

59. **Statement:** "You won't get sweets at any cost. I will not let you eat things that are not good for your teeth" — a mother tells her child

Assumption:

- (i) The mother cares for her child.
- (ii) Sweets are not good for her child.
- (iii) The mother has the authority to decide what her child is to eat.
- (a) (i) & (ii) are implicit (b) (ii) & (iii) are implicit
- (c) (i) & (iii) are implicit (d) All are implicit
- 60. **Statement:** "Clearly, the judiciary cannot provide all answers. But it seems the public, weary of an inactive Executive, is turning to the Supreme Court as a last resort"—an article. **Assumption :**
 - (i) The Supreme Court is above the Executive.
 - (ii) The Supreme Court is more active than the Executive.
 - (iii) The Executive does not have sufficient powers.
 - (a) (i) & (ii) are implicit (b) (ii) & (iii) are implicit
 - (c) (i) & (iii) are implicit (d) Only (ii) is implicit

DIRECTIONS (Qs. 61 to 62) : *Choose the word which is least like the other words in the group.*

- 61. (a) Tsangpo (b) Hazaribagh
 - (c) Kanha (d) Bandipur
- 62. (a) Wheat (b) Rice
 - (c) Mustard (d) Gram

DIRECTIONS (Qs. 63 to 67) : The following questions consist of two words that have a certain relationship to each other, followed by four alternatives. Select the best alternative that has same relationship as the original pair of words

- 63. Crèche : Infants
 - (a) School : Pupils (b) Deck : Sailors

(c) Cottage : Guests

- (d) Aircraft: Crew
- 64. Pesticide : Plant
 - (a) Injection : Disease (b) Vaccination : Body
 - (c) Medicine : Cure (d) Teacher : Student
- 65. Stare : Glance
 - (a) Gulp: Sip (b) Confide : tell
 - (c) Hunt: Stalk (d) Step: Walk

- Ecstasy : Pleasure 66.
 - (a) Hatred : Affection (b) Rage : Anger
 - (c) Joy: Grief

67.

- (d) Mumble : Speak
- Necromancy: Ghosts
 - (a) Romance: Stories (b) Magic : Amulets
 - (c) Alchemy: Gold (d) Sorcery: Spirit

DIRECTIONS (Qs.68–70). There is certain relationship between two given words on one side of : : and one word is given on another side of : : while another word is to be found from the given alternatives, having the same relation with this word as the given pair has. Select the best alternatives/ relationship.

- 68. Firm : Flabby : : Piquant : ?
 - (a) Salty (b) Pleasant
 - (c) Bland (d) Smell
- 69. Funk : Vitamins : : Curie : ?
 - (a) Uranium (b) Radioactivity
 - (d) Radium (c) Photography
- Contamination : Food : : Infection : ? 70.
 - (a) Diseases (b) Body
 - (c) Germs (d) Microbes

DIRECTIONS (Qs.71–85). *Choose the most appropriate answer.*

- An article costs ₹ 50 presently. The rate of inflation is 300%. 71. What will be cost of this article after two years?
 - (a) ₹200 (b) ₹600
 - (c) ₹800 (d) ₹1000
- 72. A dishonest shopkeeper professes to sell his groceries at his cost price, but uses a false weight of 900 grams for each kilogram. Find his gain percentage.
 - (a) 91/9% (b) 100/9%
 - (c) 100/11% (d) 95/9%
- 73. A man purchased a bullock and a cart for ₹1800. He sold the bullock at a profit of 20% and the cart at a profit of 30%. His total profit was 155/6%. Find the cost price of bullock.
 - (a) ₹650 (b) ₹750
 - (c) ₹900 (d) ₹800
- 74. There were 35 students in a hostel. If the number of students be increased by 7, the expenditure on food increases by ₹42 per day while the average expenditure of students is reduced by ₹1. What was the initial expenditure on food per day?
 - (a) ₹432 (b) ₹442
 - (c) ₹420 (d) ₹400
- There were 24 students in a class. One of them, who was 18 75. years old, left the class and his place was filled up by a new comer. If the average of the class was thereby lowered by 1 month, the age of new comer is
 - (a) 14 years (b) 15 years
 - (d) 17 years (c) 16 years
- Find two natural numbers whose sum is 85 and the least 76 common multiple is 102.
 - (a) 30 and 55 (b) 17 and 68
 - (c) 35 and 55 (d) 51 and 34

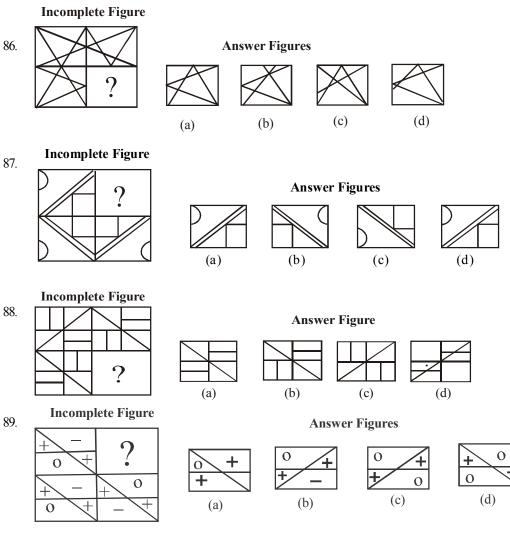
- In a fort there was sufficient food for 200 soldiers for 31 77. days. After 27 days, 120 soldiers left the fort. For how many extra days will the rest of the food last for the remaining soldiers?
 - (a) 12 days (b) 10 days (c) 8 days (d) 6 days
- 10 is added to a certain number, the sum is multiplied by 7, 78. the product is divided by 5 and 5 is subtracted from the quotient. The remainder left is half of 88. What is the number?
 - (a) 21 (b) 20
 - (c) 25 (d) 30
- 79. 19 persons went to a hotel for a combined dinner party. 13 of them spent $\mathbf{\overline{\xi}}$ 79 each on their dinner and the rest spent $\mathbf{\overline{\xi}}$ 4 more than the average expenditure of all the 19. What was the total money spent by them?

(b) 1534

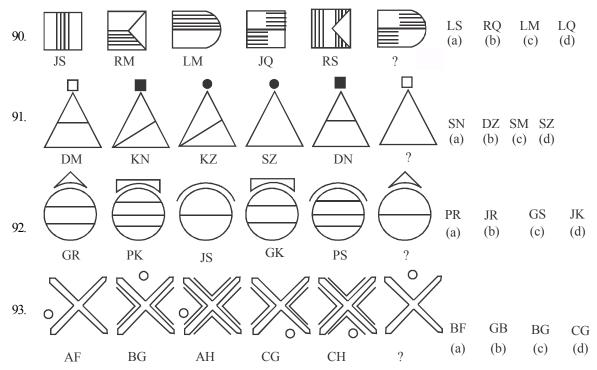
- (a) 1628.4
- (c) 1492 (d) None of these
- 80. Two typists of varying skills can do a typing job in 6 minutes if they work together. If the first typist typed alone for 4 minutes and then the second typist typed alone for 6 minutes, they would be left with 1/5 of the whole work. How many minutes would it take the slower typist to complete the typing job working alone?
 - (a) 10 minutes
 - (b) 15 minutes (d) 20 minutes (c) 12 minutes
- 81 A bag contains 25 paise, 50 paise and 1 ₹ coins. There are 220 coins in all and the total amount in the bag is ₹ 160. If there are thrice as many 1 $\overline{\mathbf{x}}$ coins as there are 25 paise coins, then what is the number of 50 paise coins?
 - (a) 60 (b) 40
 - (c) 120 (d) 80
- 82 The sum of two numbers is equal to thrice their difference. If the smaller of the numbers is 10 find the other number.
 - (a) 15 (b) 30
 - (c) 40 (d) None of these.
- If a person repaid ₹22500 after 10 years of borrowing a loan, 83. at 10% per annum simple interest find out what amount did he take as a loan?
 - (a) 11.225 (b) 11,250
 - (d) 7,500 (c) 10,000
- 84. A sum of money invested at simple interest triples itself in 8 years. How many times will it become in 20 years time?
 - (a) 8 times (b) 7 times
 - (c) 6 times (d) 9 times.

85.	0:1:6		$69 \times 69 \times 69 - 65 \times 65 \times 65$				
	Sim	piiry:	$69 \times 69 + 69 \times 65 + 65$	×65			
	(a)	1	(b)	4			
	(c)	0.216	(d)	0.164			

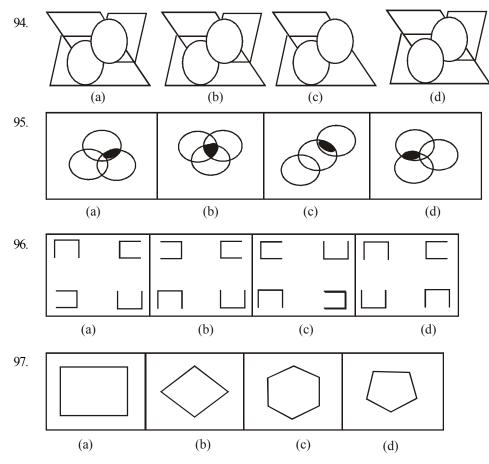
DIRECTIONS (Q86-89): In these tests you will find an Incomplete Figure and four Answer Figures. You have to select one diagram from the Answer Figures which fits into the blank column in Incomplete Figure in order to complete it:



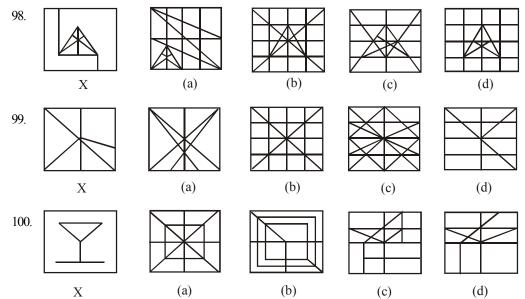
DIRECTIONS (Qs.90-93) : In these tests find which code matches the shape or pattern given at the end of each questions.



DIRECTIONS (Qs. 94 - 97): In these tests find the odd figure out:



DIRECTIONS (Q.98-100) : In these tests Figure X is Hidden in the option figures. Find the correct option.



(d)

AFCAT 1 2014 QUESTION PAPER

ANSWER KEY									
1. (a)	2. (b)	3. (c)	4. (d)	5. (c)	6. (c)	7. (d)	8. (c)	9. (d)	10.(d)
11.(b)	12.(d)	13.(c)	14.(d)	15.(b)	16.(b)	17.(c)	18.(c)	19.(d)	20.(b)
21.(c)	22.(c)	23.(b)	24.(b)	25.(c)	26.(c)	27.(d)	28.(a)	29.(b)	30.(b)
31.(b)	32.(d)	33.(b)	34.(a)	35.(b)	36.(b)	37.(d)	38.(b)	39.(d)	40.(c)
41.(b)	42.(b)	43.(b)	44.(c)	45.(a)	46.(a)	47.(c)	48.(c)	49.(b)	50.(c)
51.(c)	52.(a)	53.(c)	54.(b)	55.(a)	56.(d)	57.(a)	58.(b)	59.(d)	60.(d)
61.(a)	62.(b)	63.(d)	64.(b)	65.(a)	66.(b)	67.(d)	68.(c)	69.(d)	70.(b)
71.(c)	72.(b)	73.(b)	74.(c)	75.(c)	76.(d)	77.(b)	78.(c)	79.(d)	80.(b)
81.(a)	82.(d)	83.(b)	84.(c)	85.(b)	86.(a)	87.(b)	88.(c)	89.(d)	90.(d)
91.(c)	92.(b)	93.(a)	94.(c)	95.(b)	96.(d)	97.(d)	98.(d)	99.(c)	100.(a)

17.

18.

- 1. The author states how Gandhi showed the mirror to (a) the masses on how the cruel system is deteriorating the country and urged them to stand up for themselves.
- 2. (b) The rise of Gandhi empowered the people which thus made the country strong.
- 3. (c) Gandhi fought the unjust system that was exploiting the peasants and workers.
- 4. (d) As seen in the paragraph, Gandhi is seen as a liberator. A liberator is a person who liberates a person or place from imprisonment or oppression.
- Hardy. In the sentence, hardy is used along with the 5. (c) word tough to describe the people living in slums.
- 6. (c) Exposed. In the sentence, the author tells how slum people are subject to uncertainties and hardships of life.
- 7. (d) Brings. Using the third person singular present form of bringinstead of infinitive form.
- 8. goes. In the sentence, comes is used with evening. (c) And goes is the opposite of come which will thus come along morning.
- 9. have. It is the most appropriate word from the given (d) options.
- nothing. The sentence begins with don't, which means 10. (d) negation.
- 11. (b) transgressor is a person who breaks the law i.e. a law breaker.
- 12. (d) Egregious means outstandingly bad and atrocious means outrageous.
- Predilection means preference toward something 13. (c) whereas aversion means opposition.
- 14. (d) Cacophonous means harsh sounding, whereas quiet is calm and noiseless.
- 15. Calumny is the making of false statements that damage (b) another's reputation whereas eulogy means praise and acclamation.
- Ambidextrousmeans both hands. The ambidextrous 16. (b) person can perform anaction with either hand having equal dexterity in the action. Writing is themost striking of these actions.

- (c) A written account of the life of an individual by himself is called a autobiography. And when it is written by other person, then it is called biography.
- (c) Diagnosis refers to both the process of attempting to determine or identify a possible disease and to the opinion reached by this process.
- 19. (d) Insomnia, or sleeplessness, is a sleep disorder in which there is an inability to fall asleep or to stay asleep as long as desired.
- 20. Pedantic mean overly concerned with minute details or (b) formalisms, especially in teaching.
- 21. Reminiscent (c)
- Blasphemous 22. (c)
- 23. (b) trepidation
- 24. (b) resurrect
- 25. (c) manoeuvre. 26.
 - A major cause of resentment that arose ten months (c) prior to the outbreak of the Rebellion was the General Service Enlistment Act of 25 July 1856. As noted above, men of the Bengal Army had been exempted from overseas service. Specifically they were enlisted only for service in territories to which they could march. Governor-General Lord Dalhousie saw this as an anomaly, since all sepoys of the Madras and Bombay Armies and the six "General Service" battalions of the Bengal Army had accepted an obligation to serve overseas if required. As signed into effect by Lord Canning, Dalhousie's successor as Governor-General, the Act required only new recruits to the Bengal Army to accept a commitment for general service. However, serving high-caste sepoys were fearful that it would be eventually extended to them, as well as preventing sons following fathers into an Army with a strong tradition of family service.
- 27. (d) To keep the British at bay and to enlist their support against the Moghuls, the Marathas, who had founded their own empire/kingdom made friends with the Portuguese and signed with them a treaty in 1779. Under this, the Maratha-Peshwa agreed that the Portuguese

would be allowed to collect revenues from Dadra and Nagar Haveli which consisted of 72 villages (then known as parganas, now referred to as district places). It was annexed by India from Portugal on 2 August 1954. The people of the territory established free administration of Dadra and Nagar Haveli, which was finally merged into the Union of India in 1961.

- 28. (a) The Potomac River is located along the mid-Atlantic coast of the United States and flows into the Chesapeake Bay. The river (main stem and North Branch) is approximately 405 miles (652 km) long, with a drainage area of about 14,700 square miles (38,000 km²). The river forms part of the borders between Maryland and Washington, D.C., on the left descending bank and West Virginia and Virginia on the river's right descending bank.
- 30. (b) The World Bank is a United Nations international financial institution that provides loans to developing countries for capital programs. The World Bank is a component of the World Bank Group, and a member of the United Nations Development Group.

The International Atomic Energy Agency (IAEA) is an international organization that seeks to promote the peaceful use of nuclear energy, and to inhibit its use for any military purpose, including nuclear weapons. The IAEA was established as an autonomous organization on 29 July 1957. Though established independently of the United Nations through its own international treaty, the IAEA Statute, the IAEA reports to both the United Nations General Assembly and Security Council.

The Universal Postal Union is a specialized agency of the United Nations that coordinates postal policies among member nations, in addition to the worldwide postal system.

38.

- 31. (b) BrahMos is a supersonic cruise missile that can be launched from submarines, ships, aircraft or land. It is a joint venture between Republic of India's Defence Research and Development Organisation (DRDO) and Russian Federation's NPO Mashinostroeyenia who have together formed BrahMos Aerospace Private Limited. It is the world's fastest cruise missile in operation. The missile travels at speeds of Mach 2.8 to 3.0. The land-launched and ship-launched versions are already in service, with the air and submarine-launched versions currently in the testing phase.
- 32. (d) The watt is a derived unit of power in the International System of Units, named after the Scottish engineer James Watt. The unit defined as one joule per second, measures the rate of energy conversion or transfer.
- 33. (b) Samudragupta, ruler of the Gupta Empire (c. 335 c. 375 CE), and successor to Chandragupta I, is considered to be one of the greatest military geniuses in Indian history. He was the third ruler of the Gupta Dynasty, who ushered in the Golden Age of India. He was perhaps the greatest king of Gupta dynasty. He was a

benevolent ruler, a great warrior and a patron of arts. His name appears in the Javanese text `Tantrikamandaka'.

- 34. (a) Dadabhai Naoroji (4 September 1825 30 June 1917), known as the Grand Old Man of India, was a Parsi intellectual, educator, cotton trader, and an early Indian political and social leader. He was a Member of Parliament (MP) in the United Kingdom House of Commons between 1892 and 1895, and the first Asian to be a British MP. Naoroji is also credited with the founding of the Indian National Congress, along with A.O. Hume and Dinshaw Edulji Wacha. His book Poverty and UnBritish Rule in India brought attention to the draining of India's wealth into Britain.
- 35. (b) Nothing in the foregoing provisions of this Part shall derogate from the power of Parliament to make any provision with respect to the acquisition and termination of citizenship and all other matters relating to citizenship.
- 36. (b) Baglihar Dam, also known as Baglihar Hydroelectric Power Project, is a run-of-the-river power project on the Chenab River in the southern Doda district of the Indian state of Jammu and Kashmir. The project is estimated to cost USD \$1 billion. The first phase of the Baglihar Dam was completed in 2004. With the second phase completed on 10 October 2008, Prime Minister Manmohan Singh of India dedicated the 900-MW Baglihar hydroelectric power project to the nation.
- 37. (d) On 9 February 2001 Vijay Amritraj was appointed UN Messenger of Peace. He has been a committed advocate to people in need, devoting his time to raising awareness on the issues of drugs and HIV/AIDS and in raising funds to fight the spread of AIDS worldwide.
 - (b) Indian women's hockey team had to be content with a silver medal in third Asian Champions Trophy after losing to hosts Japan by a solitary goal in the summit clash of the event at Kakamigahara, Japan.
- 39. (d) The head of the femur articulates with the acetabulum in the pelvic bone forming the hip joint, while the distal part of the femur articulates with the tibia and patella forming the knee joint. By most measures the femur is the strongest bone in the body. The femur is also the longest bone in the body.
- 40. (c) The US team of scientists found the mechanism in the hypothalamus- which is located deep inside the brainand showed that it is responsible for the ageing process. Scientists carried out a series of experiments to find that they could extend the lives of mice by a fifth, without the problems such as animals suffering from muscle weakness, bone loss or memory problems associated with old age.
- 41. (b) The visible surface of the Sun, the photosphere, is the layer below which the Sun becomes opaque to visible light. Above the photosphere visible sunlight is free to propagate into space, and its energy escapes the Sun entirely.

- 42. (b) Indian Institute of Science (IISc) is a public university for scientific research and higher education located in Bengaluru (formerly Bangalore), India. Established in 1899 with active support from Jamshetji Tata it is also locally known as the "Tata Institute".[3] It acquired the status of a Deemed University in 1958. IISc is widely regarded as India's finest institution in its field, and has made significant contribution to advanced computing, space, and nuclear technologies.
- 43. (b) The Arjuna Awards were instituted in 1961 by the government of India to recognize outstanding achievement in National sports. The award carries a cash prize of ? 500,000, a bronze statuette of Arjuna and a scroll.
- 44. (c) The Suez Canal is an artificial sea-level waterway in Egypt, connecting the Mediterranean Sea and the Red Sea.
- 45. (a) Rajatarangini is a metrical historical chronicle of northwestern Indian subcontinent, particularly the kings of Kashmir, written in Sanskrit by Kashmiri Brahman Kalhana in 12th century CE. The work generally records the heritage of Kashmir, but 120 verses of Rajatarangini describe the misrule prevailing in Kashmir during the reign of King Kalash, son of King Ananta Deva of Kashmir. Although the earlier books are inaccurate in their chronology, they still provide an invaluable source of information about early Kashmir and its neighbors in the north western parts of the Indian subcontinent, and are widely referenced by later historians and ethnographers.
- 46. (a) This day was being celebrated as the Independence Day since 1929
- 47. (c) Seoul is the capital of South Korea. Pyongyang is the capital of North Korea.

52. (a)
$$E$$
 D I T O R
 $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
V W R G L I

- 53. (c) Rustle is sound of leaves and Patter is the sound of rain.
- 54. (b) The words in each pair are synonyms of each other.
- 55. (a) Lack of carefulness causes accident similarly lack of sanitation causes disease.

- 61. (a) All expect Tsangpo are national parks.
- 62. (b) All except rice are rabi crops.
- 63. (d)
- 64. (b) Plant is given pesticide for cure and body is given vaccination.
- 65. (a) First is of higher intensity than the second.
- 66. (b) First is more intense form of second.
- 67. (d) Necromancy deals with ghosts. Similarly sorcery deals with spirits.
- 68. (c) Words in each pair are antonym to each other.
- 69. (d) Funk discovered vitamins and curie discoverd radium.
- 70. (b) Food is contained by germs and body is infected by germs.

71. (c) Cost of article =
$$₹50$$

Inflation = 300%

After 2 years cost =
$$50\left(1 + \frac{300}{100}\right)^2 = 50 \times 16 = ₹800$$

72. (b) Gain %=
$$\frac{1000 - 900}{900} \times 100 = \frac{100}{900} \times 100 = \frac{100}{9}$$
%

73. (b) Let CP of bullock =
$$\mathbf{\xi} \mathbf{x}$$

$$SP = \frac{x \times 120}{100}$$
CP of cart = (1800 - x)
P=30%
$$SP = \frac{(1800 - x) \times 130}{100}$$
Total SP = $\frac{1800 \times \left(100 + \frac{155}{6}\right)}{100} = ₹ 226500$

$$\therefore \quad \frac{120}{100} + \frac{(1800 - x) \times 130}{100} = 226500$$

$$\therefore \qquad x = 750$$

Reset sequence property Hence, cost price of bullock = ₹ 750

(c) Let expenditure per day = x

74.

77.

$$\therefore \qquad \frac{x}{35} = \frac{x+42}{42} + 1$$
$$\therefore \qquad x = 420$$

Hence, the initial expenditure on food per day =₹420

75. (c) Age of new comer =
$$18 - 24 \times \frac{1}{12} = 16$$
 years

- 76. (d) By using option (d) is correct answer in which 51 + 34 = 85and LCM of 51 & 34 is 102.
 - (b) Let rest of the food last for the x days.

$$\therefore \quad 200 \times 4 = (200 - 120) \times x \\ 200 \times 4 = 80 \times x$$

$$x = \frac{800}{80} = 10 \text{ days}$$

78. (c) Let the number be = x

$$\therefore \frac{(x+10) \times 7}{5} - 5 = \frac{88}{2}$$

$$7x + 70 - 25 = 220$$

$$7x = 220 - 55$$

$$7x = 175$$

$$x = 25$$

$$\therefore Number is 25.$$
79. (d) Let average of all persons = x

$$\therefore (13 \times 79) + 6(x + 4) = 19 \times x$$

$$13 \times 79 + 6x + 24 = 19x$$

$$13 \times 79 + 24 = 13x$$

$$x = \frac{13 \times 79 + 24}{13} = 80.25$$
Total money spent = 1536
80. (b) Let first complete the job in = x minutes
Second complete the job in = y minutes

$$\therefore \frac{1}{x} + \frac{1}{y} = \frac{1}{6}$$
...(1)
and $\frac{4}{x} + \frac{6}{y} = 1 - \frac{1}{5} = \frac{4}{5}$
...(2)
By(1) and (2)

$$x = 10, y = 15$$
Hence slower typist complete the jobs in 15 minutes.
81. (a) Let 25 paise coins = x

$$1 \overline{\epsilon} : 50 P : 25 P$$

$$3x : 220 - 4x : x Ratio in number of coins$$

$$3x : \frac{220 - 4x}{2} : \frac{x}{4} Ratio in amount$$

$$\therefore 3x + 110 - 2x + \frac{x}{4} = 160$$

$$x + 110 + \frac{x}{4} = 160$$

$$x + 110 + \frac{x}{4} = 160$$

$$x + 10 + \frac{x}{4} = 160$$

$$x = 40$$

$$\therefore 50 paise coins = 220 - 40yx = 220 - 160 = 60$$

82. (d) Let largest no. = xx + 10 = 3(x - 10)*.*.. 10 + 30 = 3x - x40 = 2xx = 20*:*.. other number = 20(b) Let $P = \mathcal{E} x$ 83. $\mathrm{SI} = \frac{x \times 10 \times 10}{100} = x$ A = P + SI22500 = x + x2x = 22500x=11250 He took 11,250 as a lone. 84. (c) Let P = xA=3xSI = 2xT = 8 years $R = \frac{2x \times 100^{25}}{x \times 8_4} = 25\%$ Now SI = $\frac{x \times 25 \times 20}{100} = 5x$ A=5x+x=6xIn 6 years is becomes 6 times *.*.. $69 \times 69 \times 69 - 65 \times 65 \times 65$ 85. (b) $\overline{69 \times 69 + 69 \times 65 + 65 \times 65}$ Using $\frac{a^3 - b^3}{a^2 + ab + b^2} = a - b$ 69 - 65 = 4*.*.. – J 90. (d) - S = JS 91. (c) D ► M = DM

95. (b) In this figure shaded regios covers all the three circles and in rest figures only two circles.