- **89.** I. $x^2 + 5x + 6 = 0$ II. $y^2 + 7y + 12 = 0$ **90.** I. $x^2 + 20 = 9x$ II. $u^2 + 42 = 13u$ **91.** I. 2x + 3u = 14II. 4x + 2y = 16**92.** I. $x = \sqrt{625}$ II. $y = \sqrt{676}$ **93.** 1. $x^2 + 4x + 4 = 0$ II. $y^2 - 8y + 16 = 0$ Directions (94-98): What will come at the place of question mark (?) in the following number series ? 94. 3 1731 ? 3243 3459 3523 (1)2371(2)2731(3) 3731 (4) 3127 (5) None of these **95.** 10 18 34 ? 130 258 (1)32(2)60(3) 66 (4) 68 (5) None of these **96.** 4 10 33 136 ? 4116 (1)822(2)534(3) 685 (4) 745 (5)548**97.** 4000 800 ? 80 40 8 (1)140(2)100(3) 400 (4) 160 (5)200**98.** 3 4 16 75 364 ? (1)783(2)828(3) 1293 (4) 1945 (5) None of these **99.** The area of circle is seven times the numerical value of its circumference. What is the circumference of the circle ? (1)616 units (2) 132 units (3) 88 units (4) Cannot be determined (5) None of these **100.** The compound interest earned on a sum in 3 years at 15% per annum compounded annually is ₹ 6500.52. What is the
 - sum? (1)₹12480 (2)₹10500 (3)₹14800 (4)₹13620
 - (5) None of these

ENGLISH LANGUAGE

Directions (101-110) : Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

101. A plethora of cultural talent ______the spectators busy at a talent hunt programme where students from various colleges get together to_____their mettle in various contests.
(1) tried, show
(2) kept, prove
(3) caught, puzzle

(4) held, learn

(5) helped, mention

- 102. The _____ of Chinese plastic thread should be banned as it ______thousands of birds every year during the kite flying season.
 - (1) sale, cripples
 - (2) sell, kills
 - (3) sale, disturbs
 - (4) sell, disables
 - (5) sale, saves
- **103.** Harish _____ with me some basic techniques that one can _____ at home without even owning a drumset.
 - (1) made, shred
 - (2) imparted, try
 - (3) learned, balance
 - (4) fits, rechearses
 - (5) shared, practise
- **104.** In the present case, the facts clearly_____that the required reasonable degree of care and caution was not____by hospital in the treatment of the patient.
 - (1) reflect, compressed
 - (2) fix, advancement
 - (3) show, proceeded
 - (4) observe, considered
 - (5) indicate, taken
- **105.** Students from the Middle East and the African countries have _____been____contributors to the pool of foreign students in the university.

- (1) traditionally, major
- (2) conservatively, crucial
- (3) suprisingly, most
- (4) intutively, salient
- (5) annually, lucid
- - (1) ceased, functions
 - (2) enquired, facilities
 - (3) relied, opportunities
 - (4) shy, evidence
 - (5) asked, deity
- 107. It is ______ to drive in the evening and night when the ______ of accidents looms large due to non-functional streetlights.
 (1) juvenile, planning
 - (2) easy, risk
 - (3) instinctive, fame
 - (4) difficult, threat
 - (5) natural, feature
- 108. An overcast sky made Sunday less than _____for city residents, who going by weather experts have more in ____.
 (1) difficult, fate
 (2) perfect, store
 (3) holiday, sky
 - (4) dream, sharing
 - (5) steady, frame
- 109. Many teachers_____the lack of professional freedom as the _____for leaving the job. (1) cited, reason
 - (2) explained, force
 - (3) claimed, understanding

(4) argued, culprit

- (5) believe, ground
- **110.** Skeptics would not that the earth actually moves, let alone that it—around the sun.
 - (1) permit, orbits
 - (2) accept, revolves
 - (3) experience, circles
 - (4) assume, went
 - (5) challenge, spins

Directions (111 - 125): Read each sentence to find out whether there is any grammatical error or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is "No Error" the answer is '5'. (Ignore errors of punctuation if any.)

- HI. The couple's work in (1) / upgrading rural technicians (2)/ has set a benchmarking (3)/ for future generations. (4)/ No Error (5)
- 112. It has taking almost (1)/ a year for India (2)/ to let its pessimism (3)/ translate into fewer jobs. (4)/ No Error (5)
- 113. The city needs an airport (1)/ that can efficiently manage (2)/ a constantly flow of (3)/ passengers and flights. (4)/ No Error (5)
- 114. This group of (1)/rural achievers is very (2)/ different than the (3)/ ones in the past. (4)/ No Error (5)
- 115. The government has announced (1)/ plans to creating (2)/ one million new (3)/ training places. (4)/ No Error (5)
- 116. The argument assumes that (1)/ early detection of the disease (2) / will lead to an immediate drop in (3)/ the mortality rating from this disease. (4)/ No Error (5)
- 117. The two most important numbers (1)/ which the mandarins of an (2)/ economy have to watch (3)/ are inflation and unemployment. (4)/ No Error (5)
- **118.** Witnessed the young soldier's ability (1)/ to repeatedly hit bull's eye at (2)/ arms training, instructors pushed him (3)/ to participate in the Army marksmanship competition. (4)/No Error (5)
- **119.** It is all well known that (1)/ women are generally in favour of (2)/ light topics like jokes and expressions (3)/ that causing laughter all around. (4)/ No Error (5)
- **120.**The evening breeze (1)/ won't carrying the poetry (2)/ of peace beyond (3)/ the school building. (4)/ No Error (5)
- **121.** We are bring in the idea that (1)/ European rehabilitation focussed (2)/ on a multi-disciplinary approach (3)/ towards chronic pain. (4)/ No Error (5)

- **122.** If parents are able to (1)/ get their children into schools (2)/ that are far away, the (3)/ next challenge is transportation. (4)/ No Error (5)
- 123. The perception of others (1)/ particularly family members (2)/ changed when he (3)/ qualified on a government job. (4)/ No Error (5)
- 124. Every house should (1)/ have the device as it (2)/ protects people from a (3)/ common household disaster. (4)/ No Error (5)
- **125.** Automated baggage handling systems are (1)/ ensuring that on the time passengers (2)/ are out of the plane their (3)/ baggage is already waiting for them. (4)/ No Error (5)

Directions (126 - 140) : Read the following passage carefully and answer the questions given below it. Certain words have been printed in **bold** to help you locate them while answering some of the questions.

Indeed the western recession is really the beginning of good news for India! But to understand that we will have to move away for a while from the topic of western recession..... to the Japanese recession! For years the Japanese style of management has been admired. However, over the last decade or so, one **key** question has sprung up 'if Japanese management style is as wonderful as described then why has Japan been in a recession for more than a decade ?'

The answer to this question is very simple. Culture plays a very important part in shaping up economies. What succeeds in one culture fails in another. Japanese are basically non materialistic. And however rich they become, unlike others, they cannot just keep throwing and buying endlessly. And once they have everything they need; there is a saturation point. It was only when companies like Toyota realized that they cannot keep selling cars endlessly to their home market that they went really aggressive in the western markets -and the rest is history. Japanese companies grew bigger by catering to the world markets when their home markets shrunk.

And the markets have to shrink finally after attaining a level of affluence! And that's great for the world because earth needs sustainable development. It does not need monstrous consumers who keep consuming at the cost of the environment and the earth. There should be limits to growth so that consumers are not converted into material dustbins for the profit of a handful of corporations.

Owing to the materialistic culture elsewhere, it was possible to keep selling newer products to the consumers despite having existing ones which served equally well. They were lured through advertising and marketing techniques of 'dustbinisation' of the customer; and then finally, once they became ready customers, they were given loans and credits to help them buy more and more. When all the creditworthy people were given loans to a logical limit, they ceased to be a part of the market. Even this would have been understandable if it could work as an eye opener. Instead of taking the 'Right Step' as Toyota did, they preferred to take a 'shortcut'. Now banks went to the non creditworthy people and gave them loans. The people expectedly defaulted and the entire system collapsed.

Now like Toyota western companies will learn to find new markets. They will now lean towards India because of its common man! The billion plus population in the next 25 years will become, a consuming middle-class. Finally, the world's attention will shift to the developing world. Finally, there will be a real surge in income of these people and in the next fifty odd years, one can really hope to see an equal world in terms of material plenty, with poverty being almost nonexistent! And this will happen not by selling more cars to Americans and Europeans. It will happen by creating markets in India, China, Latin America and Africa, by giving their people purchasing power and by making products for them.

The recession has made us realize that it is not because of worse management techniques, but because of limits to growth. And they will realize that it is great for planet earth. After all, how many cars and houses must the rich own before calling it enough ? It's time for them to look at others as well. Many years back, to increase his own profits, Henry Ford had started paying his workers more, so that they could buy his cars. In similar fashion, now the developed world will pay the developing world people so that they can buy their cars and washing machines.

The recession will kick-start the process of making the entire world more **prosperous**, and lay the foundation of limits to growth in the west and the foundation of real globalization in the world - of the globalization of prosperity. And one of its first beneficiaries will be India.

- **126.** What does the author mean by the "Right Step" in the passage ?
 - (1) Giving loans to creditworthy people only
 - (2) Considering market growth along with environment protection.
 - (3) Restricting people to buy only such products which are needed by them.
 - (4) To start looking at newer avenues and markets.
 - (5) None of these
- 127. Although admired since years, why did the scepticism over the Japanese management style start since the last decade?
 - Japanese companies have been moving out of their home markets since the last decade.
 - (2)Japanese banks have provided loans indiscriminately to the creditworthy as well as non creditworthy people.
 - (3) Because Japanese markets have been going through a period of continuous recession since the last decade.

- (4) The unlimited growth of the Japanese markets has come at the cost of the western market.
- (5) None of these
- 128. Why does the author foresee the markets being created in the developing countries instead of America and Europe ?(1) All developing countries have materialistic culture.
 - (2) Developed countries are willing to make an effort to achieve globalization.
 - (3) American and European markets have had a large number of credit defaulters.
 - (4) Recession has not hit the markets of developing countries yet.
 - (5) None of these
- **129.** According to the author, what is the main cause of Japanese recession ?
 - (1) Only a handful of corporations earned profits and not the people in general.
 - (2) Non creditworthy people defaulted which led to a collapse of the entire system.
 - (3) Consumers were sold newer products which were similar in quality to the existing ones.
 - (4) Japanese do not purchase endlessly and thus when products had been sold to every customer, the markets slowed down.
 - (5) None of these
- **130.** How does the author foresee the future globalization as an analogy to Henry Ford's example ?
 - (A) Car companies would start selling cars in developing countries as well.
 - (B) By paying the developing world the developed world would increase its own profit, in turn bringing affluence to developing world as well.
 - (C) To earn profit, the companies in developing countries would move to foreign land.

- (1) Only A (2) Only B (2) Only B
- (3) Only C
- (4) Only A and C
- (5) None of these
- **131.** According to the passage, which of the following was **NOT** an effect of providing loans and credits to the customers ?
 - (A) The non creditworthy people defaulted.
 - (B) People bought new products which were not needed.
 - (C) Poverty became non-existent.
 - (1) Only A
 - (2) Only B
 - (3) Only A and B
 - (4) Only B and C
 - (5) Only C
- **132.** Why is recession the beginning of good news for India in the author's view ?
 - (A) India can provide an attractive market to the western companies.
 - (B) India has remained largely unaffected by recession owing to its huge population.
 - (C) Indians keep purchasing products despite owning equally good products.
 - (1) Only C (2) Only B
 - (3) Only A
 - (4) Only B and C
 - (5) None of these
- **133.** What does the author mean by 'Dustbinisation' of the customer ?
 - Convincing the customer to buy products he does not need.
 - (2) Denying the non creditworthy people of any loans.
 - (3) Denying more loans to people who have already taken loans to a logical limit.
 - (4) Moving from old customers at the home market to foreign markets.
 - (5) None of these
- **134.** Why according to the author is the current recession great for 'Planet Earth' ?

- (A) It will make people nonmaterialistic like the Japanese.
- (B) The unlimited market growth which caused hazards to the environment would be checked to a certain extent.
- (C) Banks will now provide loans only to the creditworthy people.

(D) Developing countries will also be benefited by shifted markets.

(1) Only A

(2) Only B and D

(3) Only A and B

- (4) Only B
- (5) None of these

Directions (135-137) :Choose the word which is **most similar** in meaning to the word printed in **bold** as used in the passage.

135. CATERING

(1)Considering	(2) Lending
(3) Supplying	(4) Working
(5) Indulging	

136. KEY

(1) Foundation	(2) Solution
(3) Requisite	(4) Difficult
(5) Important	

137. AGGRESSIVE

- (1) Violent
- (2) Determined
- (3) Demanding
- (4) Offensive
- (5) Brutish

Directions (138- 140) : Choose the word/phrase which is **most opposite** in meaning to the word printed in **bold** as used in the passage.,

138. PROSPEROUS

- (1) Distressed
 (2) Helpless (3) Worse
 (4) Worthless
 (5) Underprivileged
 139. CONSUMING
 - (1) Destroying
 (2) Exhausting
 (3) Greedy
 (4) Curtailing
 (5) Spending

140. SURGE

(1) Decrease

- (2) Deteriorating
- (3) Weakening
- (4) Atrophy (5) Crumble

Directions (141-150): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which best fits the blank appropriately. Find out the appropriate word in each case.

Twenty years (141) now, nearly 60% of the world's population will live in urban areas. The impact of urbanization might not all be positive on India as urban expansion is happening at a much (142) rate than infrastructure expansion.

Sustainability issues need to be (143) so that economic development is not at the (144) of public health. Some urban services that ought to be in (145) in a city like water, electricity, transport etc. need special consideration.

TERI has put together a detailed report that (146) sustainability in the provision of basic urban services in Indian cities.

(147) public transport is a major reason for the proliferation of private vehicles on the road. Respiratory illness in children living in urban areas is on the (148) with more cases of Asthma being (149) because of pollution. The future of cities of Indian dreams depends on (150) we can build better cities to-day.

141 .(1) till	(2) since	
(3) from	(4) after	
(5) on		
142.(1) faster	(2) slower	
(3) changed	(4) speed	
(5) quick		
143. (1) speculated	1	
(2) believed		
(3) imagined		
(4) considered		
(5) understand		
144. (1) payment	(2) rate	
(3) costs	(4) charge	
(5) expense		

145. (1)	abundance
-----------------	-----------

- (2)large
- (3) functional
- (4) vicinity
- (5) location
- 146 (1) bring (2) emphasizes(3) speculates (4) postulates(5) requests
- **147.** (1) Good
 - (2) Competent
 - (3) Absence
 - (4) Inadequate
 - (5) Sufficient
- 148 (1) multiplication
 - (2) expansion
 - (3) rise
 - (4) inflation
 - (5) grow
- 149 (1) produced (2) develop(3) composed (4) resulted(5) reported
- **150.** (1) if (2) whether (3) unless (4) provided (5) weather