

MANAGERIAL APTITUDE

Marks : 60

Note: In each question below are given two statements followed by four conclusions numbered I, II, III and IV. You have to take the two given statements to be true even they seem to be at variance from commonly known facts. Read all conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

1. Statements

Some caps are tanks. Some tanks are bulbs.

Conclusions:

- | | | | |
|---------------------------|---------------------------|--|----------------------|
| (I) Some tanks are caps. | (II) Some bulbs are tanks | (III) Some caps are bulbs. | (IV) No bulb is cap. |
| (a) Only I and III follow | (b) Only II and IV follow | (c) Only I, II and either III or IV follow | (d) None of these |

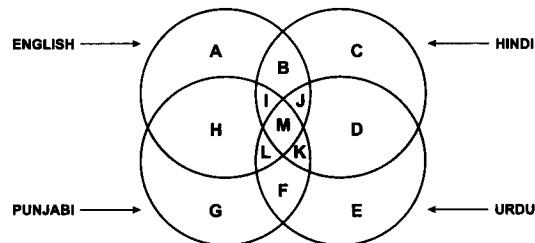
2. Statements:

No boat is shop. All shops are guns.

Conclusions:

- | | | | |
|--------------------------------|---------------------|---------------------------|--------------------------|
| (I) All boats are guns | (II) No boat is gun | (III) Some guns are shops | (IV) All guns are shops. |
| (a) only either I or II follow | (b) only I follows | (c) Only II follows | (d) None of these |

Note: The diagram shown below represents four types of literates which know English, Hindi, Punjabi, and Urdu. If we are given values for A, B, C, D such as $A = 40$; $B = 2A$; $C = A/2$ and $D = 2A$. Based on above information solve three questions which follow:



- 3 People who can read and write Hindi, Urdu and Punjabi are represented by
 (a) A (b) D (c) K (d) E
- 4 People who do not know English and Hindi but are familiar with Urdu and Punjabi both are represented by
 (a) F (b) G (c) E (d) K
- 5 How many people can read and write only one language except Punjabi?
 (a) 120 (b) 140 (c) 100 (d) 160
- 6 In the positions of the first and the sixth letters in the word **DISTRIBUTE** are interchanged, similarly the positions of the second and the seventh, the third and the eighth and so on, which of the following letters will be the fifth from left after interchanging the positions?
 (a) I (b) E (c) S (d) T

Note: Choose the choice which gives more relevant.

- 7 Why the merger of the companies A and B did not take place?
 I. The chief executive officer of the company A expired before signing the document.
 II. The company A got a better offer from another company C.
 III. The infrastructure of company A cannot produce the product of company.
 IV. The market value of the products of company A dropped suddenly.
 (a) All (b) only II, III and IV (c) Only I, II, and IV (d) Only II and III
- 8 The word **TENDER** has been coded in four different ways (A, B, C, D). Find out which pattern/rule is used in coding it, if **MELLOW** is coded as **TLSSVD**.
 (a) UFOEFS (b) ALUKLY (c) REDNET (d) SDMCDQ
- 9 If **MOHAN** is coded as 56237, and **UMA** is coded as 853, how can **HANUMAN** be coded?
 (a) 2758373 (b) 2378537 (c) 2852337 (d) 7783532

Note: Supply the right letters/ figures in place of the question marks in the following questions.

- 10 **X U S P N K I ?**
 (a) J (b) K (c) M (d) F

- 11 A D E H I L ? ?
 (a) MP (b) MN (c) MO (d) MQ
- Note: Choose the correct Number at ?
- 12 2, 7, 14, 23, ?, 47
 (a) 30 (b) 34 (c) 39 (d) 44
- 13 1, 3, 7, 15, 31, ?
 (a) 38 (b) 49 (c) 63 (d) 42
- 14 A is sister of B. C is brother of D. D is sister of A. How is B related to D?
 (a) Brother (b) Brother or Sister (c) Sister (d) Data inadequate
- 15 What should come in place of the question mark (?) in the following letter series
 AC FH KM PR ??
 (a) VW (b) UX (c) UW (d) TV
- 16 A is richer than B. C is richer than A. D is richer than C. E is the richest of all. If they are made to sit in the above degree of richness who will be in the middle position (central position)?
 (a) A (b) B (c) C (d) D
- 17 An electronic device makes a beep after every 60 sec. Another device makes a beep after every 62 sec. They beeped together at 10 a.m. The time when they will next make a beep together at the earliest is
 (a) 10.30 a.m. (b) 10.31 a.m. (c) 10.59 a.m. (d) 11.00 a.m.
- 18 Four different electronic devices make a beep after every 30 minutes, 1 hour, 1 hour 30 minutes, and 1 hour 45 minutes respectively. All the devices beeped together at 12 noon. They will again beep together at
 (a) 12 midnight (b) 3 a.m. (c) 6 a.m. (d) 9 a.m.
- 19 The value of $\left\{\frac{5}{7} \text{ of } 1\frac{6}{13}\right\} \div \left\{2\frac{5}{7} \times 3\frac{1}{4}\right\}$ is
 (a) $\frac{20}{169}$ (b) 1 (c) $\frac{5}{4}$ (d) $1\frac{119}{180}$
- 20 $3.\overline{87} - 2.\overline{59} = ?$
 (a) 1.20 (b) $1.\overline{2}$ (c) $1.\overline{27}$ (d) $1.\overline{28}$
- 21 A certain number of tennis balls were purchased for Rs.450. Five more balls could have been purchased in the same amount if each ball was cheaper by Rs.15. The number of balls purchased was
 (a) 10 (b) 15 (c) 20 (d) 25
- 22 $\frac{\sqrt{24} + \sqrt{216}}{\sqrt{96}} = ?$
 (a) $2\sqrt{6}$ (b) 2 (c) $6\sqrt{2}$ (d) $\frac{2}{\sqrt{6}}$
- 23 If $\sqrt{3^n} = 729$ then the value of n is
 (a) 6 (b) 8 (c) 10 (d) 12
- 24 $\sqrt[3]{\sqrt{.000064}} = ?$
 (a) 0.02 (b) 0.2 (c) 2 (d) None
- 25 If $a = \frac{\sqrt{5}+1}{\sqrt{5}-1}$ and $b = \frac{\sqrt{5}-1}{\sqrt{5}+1}$, the value of $\left\{\frac{a^2+ab+b^2}{a^2-ab+b^2}\right\}$
 (a) $\frac{3}{4}$ (b) $\frac{4}{3}$ (c) $\frac{3}{5}$ (d) $\frac{5}{3}$

- 26 A family consists of grandparents, parents and three grandchildren. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grand children is 6 years. What is the average age of the family?
- (a) $28\frac{4}{7}$ years (b) $31\frac{5}{7}$ years (c) $32\frac{1}{7}$ years (d) None of these
- 27 The average age of x boys and y girls is 'p' years. If the average age of the boys is 'r' years, find the average age of girls.
- (a) $p + \frac{x(p-r)}{y}$ years (b) $p + \frac{x(r-p)}{y}$ years (c) $p - \frac{x(p-r)}{y}$ years (d) $p - \frac{x(r-p)}{y}$ years
- 28 If Rs. 782 be divided into three parts, proportional to $\frac{1}{2} : \frac{2}{3} : \frac{3}{4}$, then the first part is
- (a) Rs. 182 (b) Rs. 190 (c) Rs. 196 (d) Rs. 204
- 29 Seats for Mathematics, Physics and Biology in a school are in the ratio 5:7:8. There is a proposal to increase these seats by 140%, 150% and 175% respectively. What will be the ratio of increased seats?
- (a) 2:3:4 (b) 6:7:8 (c) 6:8:9 (d) None of these
- 30 15 litres of a mixture contains 20% alcohol and the rest water. If 3 litres of water be mixed in it, the percentage of alcohol in the new mixture will be
- (a) 15 (b) $16\frac{2}{3}$ (c) 17 (d) $18\frac{1}{2}$
- 31 Two equal glasses are respectively $\frac{1}{3}$ rd and $\frac{1}{4}$ th full of milk. They are then filled with water and the contents mixed in a tumbler. The ratio of milk and water in the tumbler is
- (a) 7:5 (b) 7:17 (c) 9:21 (d) 11:23
- 32 Kamal has some apples. He sold 40% more than he ate. If he sold 70 apples, how many did he eat?
- (a) 50 (b) 90 (c) 18 (d) 42
- 33 What percent decrease in salaries would exactly cancel out the 20 percent increase?
- (a) $16\frac{2}{3}$ (b) 18 (c) 20 (d) $33\frac{1}{3}$
- 34 A motor car starts with the speed of 70 km/hr with its speed increasing every two hours by 10 kmph. In how many hours will it cover 345 kms?
- (a) $2\frac{1}{4}$ hrs (b) 4 hrs 5 min (c) $4\frac{1}{2}$ hrs (d) Cannot be determined
- 35 A man covers a certain distance on scooter. Had he moved 3 kmph faster, he would have taken 40 minutes less. If he had moved 2 kmph slower, he would have taken 40 minutes more. The distance (in km) is
- (a) 20 (b) 36 (c) 37.5 (d) 40
- 36 A is twice as fast as B and B is thrice as fast as C is. The journey covered by C in 54 minutes will be covered by B in
- (a) 18 min (b) 27 min (c) 38 min (d) 9 min
- 37 A man rows 750 m in 675 seconds against the stream and returns in $7\frac{1}{2}$ minutes. His rowing speed in still water is
- (a) 3 km/hr (b) 4 km/hr (c) 5 km/hr (d) 6 km/hr

- 38 A and B can do a piece of work in 45 days and 40 days respectively. They began to do the work together but A leaves after some days and then B completed the remaining work in 23 days. The number of days after which A left the work was
 (a) 6 (b) 8 (c) 9 (d) 12
- 39 A piece of work can be done by 6 men and 5 women in 6 days or 3 men and 4 women in 10 days. It can be done by 9 men and 15 women in
 (a) 1 day (b) 2 days (c) 3 days (d) 4 days
- 40 The automobiles generally utilize batteries having voltage of
 (a) 3V (b) 6V (c) 12V (d) 24V
- 41 The acid used in automobile battery is
 (a) H_2SO_4 (b) HCl (c) HNO_3 (d) Hydrofluoric acid
- 42 Absorption system normally uses the following refrigerant
 (a) ammonia (b) Freon-22 (c) CO_2 (d) SO_2
- 43 A graphical device used to determine the break-even point and profit potential under varying conditions of output and costs, is known as
 (a) Gantt chart (b) flow chart (c) break-even chart (d) PERT chart
- 44 What does symbol imply in work study
 (a) operation (b) inspection (c) transport (d) permanent storage
- 45 Work study is done with the help of
 (a) Process chart (b) Material handling (c) Stop watch (d) All of the above
- 46 Gantt chart provides information about the
 (a) Material handling (b) Proper utilization of manpower
 (c) Production schedule (d) Efficient working of machine
- 47 ABC analysis deals with
 (a) Analysis of process chart (b) Flow of material (c) Ordering schedule of job (d) Controlling inventory costs money
- 48 The most important objective behind plant layout is
 (a) overall simplification, safety of integration (b) economy in space
 (c) maximum travel time in plant (d) to provide conveniently located shops
- 49 Frederick W. Taylor introduced a system of working known as
 (a) line organization (b) line and staff organization
 (c) functional organization (d) effective organization
- 50 Merit Rating is the method of determining worth of
 (a) a job (b) an individual employee
 (c) a particular division in workshop (d) machine
- 51 Routing is essential in the following type of industry
 (a) assembly industry (b) process industry (c) job order industry (d) mass production industry
- 52 PERT and CPM are
 (a) aids to the decision maker (b) decision making techniques
 (c) charts which increase aesthetic appearance of rooms (d) aids to determine cost implications of project
- 53 Present value of money is equal to
 (a) $\frac{FV}{(1+r)^n}$ (b) $FV(1+r)^n$ (c) $FV(1-r)^n$ (d) $\frac{FV}{(1-r)^n}$
 Where FV = future value of money after n years; r = opportunity cost of money.
- 54 Depreciation of machines, according to income tax regulations is calculated on the basis of following method
 (a) straight line (b) sinking fund (c) machine hour (d) declining balance

- 55 Salvaging means
 (a) writing off the assets (b) adjusting losses against assets
 (c) mortgaging property (d) disposing off property which is no longer useful in present situation
- 56 For effective utilization of manpower it is essential to understand the need of a man to satisfy them. The need of a person is
 (a) job satisfaction (b) make both ends meet
 (c) job security (d) all of the above
- 57 If x is real then the minimum value of $\frac{x^2 - x + 1}{x^2 + x + 1}$
 (a) $1/3$ (b) 3 (c) $1/2$ (d) 1
- 58 The roots of the equation $x^3 - 3x - 2 = 0$ are
 (a) -1, -1, -2 (b) -1, 1, -2 (c) -1, 2, -3 (d) -1, -1, -2
- 59 If the sides of a ΔABC are 6, 8, 10 units then the radius of its circum circle is
 (a) 4 (b) 3 (c) 6 (d) 5
- 60 When two dice are thrown, the probability of getting 10 or 11 is
 (a) $\frac{7}{36}$ (b) $\frac{5}{36}$ (c) $\frac{5}{18}$ (d) $\frac{7}{18}$

ENGINEERING APTITUDE

Marks : 40

- 61 Which of the following variables controls the physical properties of a perfect gas
 (a) Boyle's law (b) Charles's law (c) Gay-Lussac law (d) All of the above
- 62 Specific heat of air at constant pressure is equal to
 (a) 0.17 (b) 0.21 (c) 0.24 (d) 1.0
- 63 According to Avogadro's Hypothesis
 (a) the molecular weights of all the perfect gases occupy the same volume under same conditions of pressure and temperature
 (b) the sum of partial pressure of mixture of two gases is sum of the two
 (c) product of the gas constant and the molecular weight of an ideal gas is constant
 (d) gases have two values of specific heat
- 64 Which of the following quantities is not the property of the system
 (a) pressure (b) temperature (c) specific volume (d) heat
- 65 Which of the following parameters is constant for a mole for most of the gases at a given temperature and pressure
 (a) enthalpy (b) volume (c) mass (d) entropy
- 66 The term N.T.P. stands for
 (a) nominal temperature and pressure (b) natural temperature and pressure
 (c) normal temperature and pressure (d) normal thermodynamic practice
- 67 On volume basis, air contains following parts of oxygen
 (a) 21 (b) 23 (c) 25 (d) 77
- 68 If a gas vapour is allowed to expand through a very minute aperture, then such a process is known as
 (a) throttling (b) hyperbolic expansion
 (c) adiabatic expansion (d) parabolic expansion
- 69 For a thermodynamic process to be reversible, the temperature difference between hot body and working substance should be
 (a) zero (b) minimum (c) maximum (d) infinity

- 70 For reversible adiabatic process, change in entropy is
 (a) maximum (b) minimum (c) zero (d) unpredictable
- 71 First law of thermodynamics furnishes the relationship between
 (a) heat and work (b) heat, work and properties of the system
 (c) various properties of the system (d) heat and internal energy
- 72 Measurement of temperature is based on
 (a) thermodynamic properties (b) zeroth law of thermodynamics
 (c) first law of thermodynamics (d) second law of thermodynamics
- 73 Calorie is a measure of
 (a) specific heat (b) quantity of heat (c) thermal capacity (d) Entropy
- 74 According to Clausius statement of second law of thermodynamics
 (a) heat can't be transferred from low temperature source to high temperature source.
 (b) heat can be transferred from low temperature to high temperature source.
 (c) heat can be transferred from low temperature to high temperature source by using refrigeration cycle.
 (d) Heat can't be transferred from low temperature to high temperature source without the aid of external energy.
- 75 The air standard efficiency (where r = Compression ratio and γ = ratio of specific heats) of an Otto cycle is equal to
 (a) $-\frac{1}{\gamma+1}$ (b) $r^{\gamma-1} - 1$ (c) $1 - r^{\gamma-1}$ (d) $1 - \frac{1}{r^{\gamma-1}}$
- 76 A diesel engine theoretically operates on
 (a) constant pressure cycle (b) constant volume cycle
 (c) constant temperature cycle (d) constant entropy cycle
- 77 All diesel cycles except slow speed engines use following cycle
 (a) Diesel (b) Otto (c) Joule (d) Mixed dual
- 78 In a diesel engine, the fuel is ignited by
 (a) spark
 (b) injected fuel
 (c) heat resulting from compressing air that is supplied for combustion
 (d) ignitor
- 79 Indicated power of a 4-stroke engine is equal to (Where p = mean effective pressure; L = stroke; A = Area of piston; and N = rpm of engine.)
 (a) $pLAN$ (b) $2pLAN$ (c) $pLAN/2$ (d) $4pLAN$
- 80 All heat engines utilize
 (a) low heat value of oil (b) high heat value of oil
 (c) net calorific value of oil (d) calorific value of fuel
- 81 The thermal efficiency of a diesel cycle having fixed compression ratio, with increase in cut-off ratio will
 (a) increase
 (b) decrease
 (c) be independent
 (d) may increase or decrease depending on other factors
- 82 Which of the following is not an internal combustion engine
 (a) 2-stroke petrol engine (b) 4-stroke petrol engine
 (c) diesel engine (d) steam turbine
- 83 Pick up the false statement
 (a) thermal efficiency of diesel engine is about 34%
 (b) theoretically correct mixture of air and petrol is approximately 15 : 1
 (c) high speed compression engines operate on dual combustion cycle
 (d) S.I. engines are quality-governed engines.

- 84 If one cylinder of a diesel engine receives more fuel than the others, then for that cylinder the
 (a) exhaust will be smoky
 (b) piston rings would stick into piston grooves
 (c) exhaust temperature will be high
 (d) scavenging occurs
- 85 Most high speed compression engines operate on
 (a) diesel cycle
 (b) otto cycle
 (c) dual combustion cycle
 (d) special type of air cycle
- 86 Pick up the false statement
 (a) I.C. engines have higher efficiency than steam engines
 (b) heavy oil engines run on diesel cycle
 (c) gas engine works on otto cycle
 (d) injection of fuel by external means is not required in mixed cycle
- 87 The compression ratio of motor cars is
 (a) 5 (b) 7 (c) 10 (d) 13
- 88 Pick up the correct statement
 BHP (Brake Horse Power) + FHP (Frictional horse power) = IHP (indicated Horse Power)
 (a) $IHP = BHP - FHP$ (b) $IHP + BHP + FHP = 0$ (c) $FHP = BHP - IHP$ (d) $FHP -$
- 89 When an engine is idling, it requires
 (a) no fuel in the air
 (b) lean fuel air mixture
 (c) rich fuel air mixture
 (d) fuel corresponding to no load condition
- 90 Tolerances are specified
 (a) to obtain desired fits
 (b) because it is not possible to manufacture a size exactly
 (c) to obtain high accuracy
 (d) to have proper allowance
- 91 Sensitivity and range of measuring instrument have
 (a) direct relationship
 (b) linear relationship
 (c) inverse relationship
 (d) unpredictable relationship
- 92 Which of the following instruments is most accurate
 (a) vertical caliper
 (b) manometric screw gauge
 (c) optical projector
 (d) slip gauges
- 93 A surface gauge is used for
 (a) leveling the surface plate
 (b) checking the surface finish
 (c) finding the depth of the surface
 (d) laying out the work accurately
- 94 The purpose of ratchet screw in micrometer screw gauge is
 (a) to lock a dimension
 (b) to impart blow motion
 (c) to maintain sufficient and uniform measuring pressure
 (d) to take care of wear of screw threads
- 95 A sine bar is specified by
 (a) its total length
 (b) the centre distance between the two rollers
 (c) the size of the rollers
 (d) the distance between rollers and upper surface
- 96 Material handling in automobile industry is done by
 (a) overhead crane (b) trolley (c) belt conveyor (d) all of the above
- 97 Inventory management consists of
 (a) effective running of stores
 (b) state of merchandise methods of storing and maintenance etc.,
 (c) stock control system
 (d) all of the above

- 98 Malleability of a material can be defined as
 (a) ability to undergo large permanent deformations in compression
 (b) ability to recover its original form
 (c) ability to undergo large permanent deformations in tension
 (d) all of the above
- 99 Pure iron is the structure of
 (a) ferrite (b) anstenite (c) ferrite and cementite (d) ferrite and pearlite
- 100 Solder is an alloy consisting of
 (a) tin, antimony, copper (b) tin and copper (c) tin and lead (d) lead and zinc

REASONING

Marks : 40

- 101 In a certain code TOGETHER is written as RQEGRJCT. In the same code, PAROLE will be written as
 (a) RCPQJK (b) RCTQNG (c) NCPQJG (d) NCQPJG
- 102 (A) Gopal is shorter than Ashok but taller than Kuhav; (B) Navin is shorter than Kuhav; (C) Jayesh is taller than Navin (D) Ashok is taller than Jayesh. Who among them is the tallest?
 (a) Gopal (b) Ashok (c) Jayesh (d) Navin
- 103 Which of the following will come in place of the question mark (?) in the following sequence.
 WRF, MFH, AHY, ___?
 (a) 6LX (b) HTG (c) SYL (d) HYL
- 104 'Command' is related to 'Order' in the same way as 'Confusion' is related to
 (a) Discipline (b) Clarity (c) Chaos (d) Problem
- 105 In a certain code PEAK is written as '3512' and DINE is written as '6895'. How is KIND written in that code?
 (a) 2396 (b) 2986 (c) 2896 (d) 2596
- 106 The positions of the first and the fifth digits in the number 93264187 are interchanged. Similarly the positions of the second and the sixth digits are interchanged and so on. Which of the following will be the third digit from the right end after the rearrangement?
 (a) 8 (b) 3 (c) 2 (d) 6
- 107 Pointing to Meena, Swarup says "She is the daughter of my grandfather's only child." How is Meena related to Swarup?
 (a) Cousin (b) Sister (c) Aunt (d) Data inadequate

Note: Choose the alternative which depicts the similar relationship as in the question statement.

- 108 Winter is to Snow as
 (a) Summer : Heat (b) Mansoon : Rain (c) Autumn : Trees (d) Field : Grass
- 109 Five persons are standing in a line. One of the two persons at the extreme end is professor and the other a businessman. An advocate is standing to right of a student. An author is to the left of the businessman. The student is standing between the professor and the advocate. Counting from the left, the advocate is at which place?
 (a) 1st (b) 2nd (c) 3rd (d) 4th

Note: In each question the numbers follow a particular logical order. Identify the number from among the given alternatives which should fill the Blank space in the series.

- 110 16, 24, 34, 46, _____
 (a) 58 (b) 60 (c) 62 (d) 64
- 111 4, 12, 36, 108, _____
 (a) 304 (b) 144 (c) 216 (d) 324

Note: From the given alternatives, find the word which can be formed from the letters used in the given word.

- 112 ARISTOCRATIC
 (a) CREATION (b) STATIC (c) SECRET (d) ARREST
- 113 Santosh was travelling in a railway compartment. There he met a man and five women. Each woman had a child in her arms. How many were there in the compartment?
 (a) 9 (b) 10 (c) 11 (d) 12

- 114 Arun started from point A and walked 10 km East to point B then turned to North and walked 3 km to point C and then turned West and walked 12 km to point D, then again turned South and walked 3 km to point E. In which direction is he from his starting point?
 (a) East (b) South (c) West (d) North

Note: In these questions, select the related letters / word / number from the given alternatives.

- 115 Architect : Building :: Sculptor : ?
 (a) Museum (b) Stone (c) Chisel (d) Statue
- 116 A Z B Y : C X D W :: E V F U : ?
 (a) G T H S (b) G H T S (c) G S T H (d) T G S H
- 117 Select the missing number from the give responses.

| | | |
|----|----|-----|
| 1 | 4 | ? |
| 4 | 2 | 5 |
| 2 | 2 | 3 |
| 49 | 64 | 169 |

- (a) 3 (b) 6 (c) 5 (d) 4
- 118 In a row of boys Ganesh is twelfth from left and Rajan is fifteenth from right. When they interchange their positions Rajan becomes twentieth from right. How many boys are there in the row?
 (a) 30 (b) 29 (c) 32 (d) 31
- 119 Which of the following items would be the correct response in a given trend?

| | | |
|-----|-----|-----|
| 51 | 63 | 29 |
| 26 | 14 | 48 |
| 5 | 8 | ? |
| 410 | 680 | 588 |

- (a) 9 (b) 6 (c) 5 (d) 7
- 120 Two towns A & B are 60 km apart. A school has to be built to serve 150 students of A, 50 students of town B. If the total distance to be travelled by all the 200 students is to be as small as possible, then where is the school to be built?
 (a) In town B (b) 45 Km from town B (c) In town A (d) 45 km from town A
- 121 Arrange the following words in a meaningful order
 (1) Gold (2) Iron (3) Sand (4) Platinum (5) Diamond
 (a) 32154 (b) 24351 (c) 54321 (d) 45132
- 122 'Ice' is related to 'Coolness' in the same way as 'Earth' is related to
 (a) Weight (b) Gravitation (c) Forest (d) Ocean
- 123 'Artist' is related to 'Painting' in the same way as 'Symphony' is related to
 (a) Poet (b) Novelist (c) Composer (d) Essayist
- 124 Which number will complete the following series?
 6, 11, 21, 36, 56, ?
 (a) 51 (b) 91 (c) 42 (d) 81
- 125 The word TENDER has been coded in four different ways (A, B, C, D). Find out which pattern/rule is used in coding it, if MELLOW is coded as TLSSVD.
 (a) UFOEFS (b) ALUKLY (c) REDNET (d) SDMCDQ
- 126 If MATHEMATICS = 1 2 3 4 5 1 2 3 6 7 8, then MAHATHMA = ?
 (a) 12423412 (b) 12345123 (c) 12345678 (d) 12425341
- 127 Day after tomorrow is Pooja. The same day next week falls Diwali. Today is Monday. What will be day after Diwali?
 (a) Sunday (b) Thursday (c) Wednesday (d) Friday

128. If '+' means '÷'; 'x' means '-'; '÷' means '+' and '-' means 'x', then $16 \div 8 \times 6 - 2 + 12 = ?$
 (a) 2 (b) 4 (c) 3 (d) 0
129. Arrange the following words in the sequence in which they occur in the dictionary
 1. Select 2. Seldom 3. Send 4. Selfish 5. Seller
 (a) 2,1,5,4,3 (b) 2,1,4,5,3 (c) 2,5,4,1,3 (d) 1,2,4,5,3
130. 'North Pole' is related to 'Magnet', in the same way as _____ is related to 'Battery'.
 (a) Cell (b) Power (c) Terminal (d) Energy
131. Find the missing number in the following series. 6, 12, 21, ?, 48
 (a) 38 (b) 40 (c) 45 (d) 33
132. Which one is different from the rest three?
 (a) Cycle (b) Scooter (c) Car (d) Tanga
133. Which one is different from the rest three?
 (a) Herb (b) Flower (c) Tree (d) Shrub
134. Which one is different from the rest three?
 (a) Sweet – Sour (b) Pointed – Blunt (c) Long – High (d) Hard - Soft
- Note: Supply the right figures in place of the question marks in the following questions.
135. 2, 7, 14, 23, ?, 47
 (a) 30 (b) 34 (c) 39 (d) 44
136. 1, 3, 7, 15, 31, ?
 (a) 38 (b) 49 (c) 63 (d) 42
137. Find the Odd man out
 (a) Father (b) Mother (c) Sister (d) Mother-in-law
- Note: Select the pair that express the relationship most similar
138. Editor : Magazine
 (a) Novel : writer (b) Poem : Poet (c) Chair : Carpenter (d) Director : Film
139. Music : Harmonium
 (a) Novel : Writer (b) Words : Word Processor (c) Author : Book (d) Water : Tank
140. Good : Excellent
 (a) Bad : immoral (b) Blue print : Architect (c) Caution : careless (d) Jealousy : Respect

GENERAL ENGLISH

Marks : 30

Note: Correct the following sentences, if necessary

141. Because of his mastery in this field, his suggestions are wide accepted.
 (A) are widely accepted (B) are side acceptance
 (C) have widely accepted (D) have been wide accepted
142. One of the men gave first aid to Hitesh who is injured in a road accident.
 (A) who had injured (B) who was injured
 (C) which was injured (D) as he was to injure
143. The various practices and norms for bank's transactions are laid down by the Reserve Bank of India.
 (A) are laid up (B) are led down
 (C) are lead up (D) have been laid down
144. Why did you not spoken to me earlier?
 (A) did you not spoke (B) you did not speak
 (C) did you not speak (D) were you not spoken
145. May I know who did accompany you to the bus station?
 (A) whom did accompany you (B) whom you accompanying
 (C) whom did you accompany (D) who accompanied you

Note: Pick out the most effective pair of words from the given pair of words (A), (B), (C) and (D) to make the sentence/s meaningfully complete.

146 Statistics is an tool for researchers that them to make inferences of generalizations about population from their observations of the characteristics of samples.

- (A) outstanding..... proposes (B) invaluable proceeds
(C) indispensable enables (D) important Proclaims

147 In each of these questions, two sentences are given. These two sentences are to be combined into a single sentence without changing their meaning. Three probable starters of the combined sentence are given as (1), (2) and (3). Any one or more or none of them may be correct. Find out the correct starter(s) and accordingly select your answer from among the given five answer choices. It is very cold here. You must carry warm clothes with you. 1. since you must 2. as it is very 3. if it is very

- (A) only (1) (B) only (2) (C) only (3) (d) (1) and (3) only

Note: Choose the one which best expresses the meaning of the given word.

148 TENTATIVE

- (A) provisional (B) final (C) current (D) unreliable

149 SORDID

- (A) splendid (B) harmful (C) dangerous (D) dirty

Note: Look at the italicized part of each sentence. Below each sentence are given three possible substitutions for the italicized part. If one of the alternatives (A), (B) or (C) is better than the italicized part, indicate your response accordingly against the corresponding letter (A), (B) or (C). If none of the substitutions improves the sentence, indicate (D) as your response. Thus a 'no improvement' response will be signified by the letter (D)

150 Other countries have eradicated this disease ten years ago.

- (A) eradicated (B) had eradicated (C) did eradicate (D) No improvement

151 We were not the wiser for all his effort to explain the case to us.

- (A) none (B) neither (C) nevertheless (D) No improvement

152 During his long discourse, he did not touch that point.

- (A) touch upon (B) touch on (C) touch of (D) No improvement

153 He has not and can never be in the good books of his employer because he lacks honesty.

- (A) has not and cannot be (B) has not and can never be
(C) has not been and can never be (D) No improvement

Note: Choose the opposite word.

154 CHURLISH

- (A) helpful (B) happy (C) polite (D) accommodating

Note: Choose the correct word from the following in place of *italic* word.

155 This new magazine is known for its *comprehensive* coverage of news.

- (A) casual (B) inadequate (C) indifferent (D) superficial

156 His critics found in his *overt* statements some hidden designs.

- (A) converse (B) pervert (C) covert (D) contrived

157 He *died* with heart disease.

- (A) died from (B) died of (C) was dead from (D) no improvement

158 He was a bachelor and bachelors get very lonely. *Isn't it?*

- (A) Do they? (B) Are they not? (C) Don't they? (D) no improvement

Note: Fill up the blanks with appropriate answer.

159 This brand of television is quite inferior _____ that one.

- (A) with (B) to (C) over (D) than

160 The traveller slept under the _____ shade of the banyan tree.

- (A) dark (B) cool (C) cold (D) cooling

161 Being guilty, my daughter was afraid to _____ me in the eye.

- (A) look (B) confront (C) encounter (D) meet

162 No matter what _____ come our way, we should not lose our temper.

- (A) temptation (B) persons (C) distractions (D) provocations

Note: In the following questions, a sentence has been given in active / passive voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in passive / active voice.

- 163 Somebody told me that there had been an explosion in the Town Hall.
(A) I was told by somebody that there had been an explosion in the Town Hall.
(B) I was informed that there was an explosion in the Town Hall.
(C) I was told about the explosion in the Town Hall.
(D) I was told by somebody about the explosion in the Town Hall.
- 164 Rain disrupted the last day's play between India and Sri Lanka.
(A) The last day's play between India and Sri Lanka were disrupted by the rain.
(B) The last day's play between India and Sri Lanka was disrupted by the rain.
(C) India and Sri Lanka's play of the last day was disrupted by the rain.
(D) The last day's play of India and Sri Lanka was disrupted by the rain.

Note: In the following questions, a sentence is given in direct speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in indirect speech.

- 165 He said, "What a beautiful scene!"
(A) He said, that what a beautiful scene.
(B) He wondered that it was a beautiful scene.
(C) He exclaimed that it was a very beautiful scene.
(D) He exclaimed what a beautiful scene.
- 166 He said to them, "Don't make noise."
(A) He told them not to make noise.
(B) He asked them not to make a noise.
(C) He told them that don't make a noise.
(D) He told them not to make a noise.

Note: Read the following passage and answer the questions on the passage.

It is very easy and harmless for a healthy person to make a gift of his blood. There is an average of five to eight litres of blood in a healthy man. Giving away a small quantity of this will not do him any harm. The human body is a remarkable machine whatever blood has been taken from it is soon replaced by new blood, provided the blood loss is small.

- 167 From the passage, which of the following statements best reflects the attitude of the author?
(A) The author is skeptical about the wisdom of donating blood.
(B) The author is totally against blood donation.
(C) The author supports the idea of blood donation in small quantities.
(D) The author thinks that any amount of blood can be donated because the body replaces it.
- 168 According to the passage, the blood donor
(A) Must be a healthy person.
(B) Must be ready to donate blood free.
(C) Must have sufficient quantity of blood in his body.
(D) Should not have donated blood earlier at any time.
- 169 The statement 'the human body is a remarkable machine' signifies that the human body
(A) is very strong.
(B) Can be repaired like a machine when it breaks down.
(C) Has the capacity to make up for occasional losses.
(D) Can be precisely valued.

Note: Three pairs express the relationship similar to that expressed in the capitalized pair. Select that pair which is not related in this way.

- 170 EDITOR : NEWSPAPER
(A) Lecturer – University
(B) Teacher – School
(C) Nurse – Hospital
(D) Architect – Design

GENERAL KNOWLEDGE

Marks : 30

- 171 The members of Lok Sabha hold office for a term of
(a) 4 years (b) 5 years (c) 6 years (d) 3 years
- 172 The minimum age required to become a member of Rajya Sabha is
(a) 25 years (b) 21 years (c) 18 years (d) 35 years
- 173 The name of a candidate for the office of president of India may be proposed by
(a) any five citizens of India
(b) any five members of the Parliament
(c) any one member of the Electoral College
(d) any ten members of the Electoral College
- 174 The power of the Supreme Court of India to decide the dispute between the centre and states falls under its
(a) advisory jurisdiction (b) appellate jurisdiction
(c) original jurisdiction (d) constitutional jurisdiction
- 175 The president of India may resign his office by writing a resignation letter addressed to the
(a) Vice President
(b) Chief justice of India who administered the oath of the office to him
(c) Prime Minister
(d) Speaker of the Lok Sabha
- 176 The Vice President acts as the President of India when the
(a) President is sick (b) President is unable to discharge his duties
(c) President is absent from the country (d) all the above
- 177 The chief justice of the High Court is appointed by
(a) the governor of the state (b) the president of India
(c) the chief ministers of the states (d) the chief justice of India
- 178 What is Zero hour?
(a) When money bill is introduced in the Lok Sabha (b) When matters of utmost importance are raised
(c) When proposals of opposition are considered (d) Interval between morning and evening sessions
- 179 Which one of the following was appointed as prime minister even though he/she was not a member of either House of Parliament at the time of appointment?
(a) Lal Bahadur Shastri (b) Indira Gandhi
(c) P V Narasimharao (d) All of the above
- 180 To prevent recurrence of scams in Indian Capital Market, the Government of India has assigned regulatory powers to
(a) SEBI (b) RBI (c) SBI (d) ICICI
- 181 Which among the following banks neither advances loans against immovable property nor charges interest on deposits?
(a) Reserve Bank of India (b) State Bank of India
(c) Unscheduled Banks (d) None of the above
- 182 The largest producer of coal in the world is
(a) Russia (b) Canada (c) UK (d) USA
- 183 DRDL stands for
(a) Defence Research and Development Laboratory
(b) Department of Research and Development Laboratory
(c) Differential Research and Documentation Laboratory
(d) None of the above
- 184 For galvanizing iron which of the following metal is used?
(a) Aluminium (b) Copper (c) Lead (d) Zinc
- 185 For purifying drinking water alum is used
(a) for coagulation of mud particles (b) to kill bacteria
(c) to remove salts (d) to remove gases

- 186 Gravity setting chambers are used in industries to remove
 (a) SO₂ (b) NO₂
 (c) suspended particulate matter (d) CO
- 187 He is a mathematician and astronomer of the 12th century. His name is associated with India's third satellite. He is
 (a) Aryabhata (b) Bhaskara I
 (c) Bhaskara II (d) None of the above
- 188 Lal Bahadur Shastri
 (a) succeeded Pandit Nehru as the second Prime Minister of India.
 (b) signed the Tashkent Agreement with Ayub Khan for a ceasefire between India and Pakistan.
 (c) is also known as 'Man of Peace'.
 (d) all of the above.
- 189 Name of the instrument used to measure relative humidity
 (a) Hydrometer (b) Hygrometer
 (c) Barometer (d) Mercury thermometer
- 190 Profit made when an asset is sold for more than the price at which it was bought is called
 (a) capital (b) capital-gain (c) capitalism (d) None of the above
- 191 Recession is
 (a) slowing down of economic activity over a limited period
 (b) period during which unemployment may rise & demand & output may fall, leading to slump in trade
 (c) period that results from accumulation of unsold goods, owing to a fall in demand
 (d) all of the above
- 192 Shankaracharya was the founder of
 (a) Buddhism (b) Jainism
 (c) Aryasamaj (d) Advaitic philosophy
- 193 The 2006 World Cup Football Tournament was held in
 (a) France (b) China (c) Germany (d) Brazil
- 194 The Chief of the Army staff is assisted by
 (a) vice-chief of the Army Staff
 (b) Principal staff officers such as Deputy Chief Adjutant General, Military Secretary
 (c) Both (a) and (b)
 (d) None of the above
- 195 The official language of the Government of India is
 (a) English (b) Malayalam (c) Hindi (d) Marathi
- 196 The Olympic Symbol (Summer Games) comprises five rings or circles linked together to represent
 (a) the sporting friendship of all people (b) the five continents
 (c) both (a) and (b) (d) none of the above
- 197 The 'pulse' of the aquatic environment can be ascertained by measuring
 (a) nitrogen (b) oxygen (c) alkalinity (d) conductivity
- 198 What is the normal red blood count per cubic mm?
 (a) 2 million red blood cells (b) 3 million red blood cells
 (c) 4 million red blood cells (d) 5 million red blood cells
- 199 Which of the following statements is correct regarding Bal Gangadhar Tilak?
 (a) an aggressive freedom fighter
 (b) Author of Gita Rahasya
 (c) Started two well-known newspapers Kesari (Marathi) and Mahratta (English)
 (d) All of the above
- 200 Which one of the following constituents of human diet gets nearly destroyed during the process of cooking?
 (a) Carbohydrates (b) Fats (c) Proteins (d) Vitamins