TECHNICAL ASSISTANT (DERT)

YEAR OF ADVT: 2016 DATE OF EXAM: 29-NOV-2018

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

QUESTION BOOKLET

SERIES IV

Subject : General English, General Knowledge & Aptitude & Arithmetic

BOOKLET SERIAL NO.

280016

Marks : 300 Time : 3 (three) hours

Read the following instructions carefully before you begin to answer the questions.

INSTRUCTIONS TO CANDIDATES

1. This booklet contains **200 questions** to be answered in a separate OMR Answer Sheet using Black Ball Pen in following two parts.

Part-A : General English : 50 questions, Part-B : General Knowledge & Aptitude : 100 questions, Part-C : Arithmetic : 50 questions.

2. All Questions are compulsory.

- 3. You will be supplied the Answer sheet separately by the invigilator. You must complete the details of particulars asked for.
- 4. Answers must be shown by completely blackening the corresponding circles in the Answer Sheet against the relevant question number by Black Ball Pen. OMR Answer Sheet without marking series/double series marking shall not be evaluated.

Example :

Supposing the following question is asked :-

The Capital of Meghalaya is -

- A. Guwahati
- B. Kohima
- C. Shillong
- D. Delhi

You will have four alternatives in the Answer Sheet for your response corresponding to each question of the Question Booklet as below :-



In the above illustration, if your chosen response is alternative C i.e. Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ball Point Pen only as below :-



WHICH IS THE ONLY CORRECT METHOD OF ANSWERING :

- 5. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any one question.
- 6. There will NOT be any negative marking for wrong answers.
- 7. The Answer Sheet must be handed over to the invigilator before you leave the Examination Hall.
- 8. No rough work is to be done on the Answer Sheet. Space for rough work has been provided in the question booklet.

PART-A: GENERAL ENGLISH FULL MARKS: 100

Each question carries 2 marks :

Directions : In the following, a sentence/part of the sentence is underlined. Below are given alternatives to the underlined part which may improve the sentence. Choose the correct alternative. In case no improvement is required, choose "No improvement".

1. She told the children not to stop the work.

- a) not stopping
- b) don't stop
- c) not stopping of
- d) No improvement

2. I am not <u>telling</u> you that you should hunt out people to pursue your policies.

a) asking

- b) saving
- c) speaking

d) No improvement

3. He succeeded by dint of hard work.

- a) by means of
- b) by doing
- c) by virtue of
- d) No improvement

4. You <u>have read</u> that book for ages.
a) have been reading
b) had read
c) will be reading
d) No improvement

5. He is resembling his father.

- a) has been resembling
- b) resembles like
- c) resembles

d) No improvement

6. It has been two years <u>since I have seen him</u> last.

- a) when I have seen him
- b) since I had seen him
- c) since I saw him
- d) No improvement

7. He told to us everything he knew.
a) us everything he knew
b) us everything he is knowing
c) us everything he was knowing
d) No improvement

Directions : In the following, choose the alternative which best expresses the meaning of the given Idiom/Phrase :

- 8. Sit on the fencea) to be defeated and dejectedb) halting between two opinions
- c) to be relaxed and comfortable
 - d) to be in a tricky position

9. Under a clouda) warned severelyb) under suspicionc) under suspensiond) under scrutiny

10. Shake off a) forget

c) remember

c) look happy

11. Pull a long face a) look tired

b) look ugly d) look dejected

b) imagine

d) take away

12. A hornet's nest
a) a comfortable position
b) a dilemma
c) among thorns
d) an unpleasant situation

Directions : Choose the most appropriate word/phrase closest in meaning to the underlined word/phrase and select your answer from the given options :

13. He <u>disdained</u> to notice the insult.a) was very proudb) refusedc) was unhappyd) was too reluctant

14. The poem is very <u>evocative</u>.a) thrillingb) enchanting

c) emotional d) incantory

15. He made an <u>impromptu</u> speech. a) without preparation

- b) thoughtless
- c) improper
- d) long and boring

16. They both enjoyed the evening stroll.a) tratb) walkc) jogd) gallop

17. In his <u>adversity</u> he remembered his father.
a) spirituality
b) seniority
c) misery
d) familiarity

Directions : From the given options, choose the word which best expresses the meaning of the given word : **18.** Brutala) humanec) compassionate

19. Revel a) glory c) reveal

20. Eternal a) forever c) temporary

21. Frigid a) cordial c) icy b) bold d) stifling

b) short term

d) time being

b) savage

d) revert

d) sympathetic

b) make merry

-) -----

22. Enamoureda) authorisedb) enclosedc) qualifiedd) charmed

Directions : From the given options, choose the word which is opposite in meaning to the given word :

23. Abrupta) suddenb) spongyc) smoothd) crisp

24. Thorough a) detailed c) cursory

25. Nasty a) unpleasant c) beautiful

26. Dexterity a) effortlessly c) clumsiness

27. Assemble a) flock c) group d) ugly

b) pleasant

b) utter

d) intensive

b) proficiencyd) skilfulness

b) scatter

d) hoard

Directions : In each of the following questions there is a capitalized word which has been used in four different way. Select the option in which the usage of the word is <u>not</u> <u>appropriate</u>.

28. RAWc) are waitinga) some tribes in Africa eat raw meat.c) are waitingb) it was such a raw deal**37.** Do you thinkc) his style is still rawa) would comed) he had a raw with his friends last nightc) are coming

29. CLOSE

a) if you close your eyes, you will not be able to see.

b) this road is closed.

c) Rahul and Ravi are closed friends.

d) the judge declared the case closed.

30. PACK

a) people packed into the stadium to watch the cricket match.

b) what pack do they offer in the company ?

c) a pack of dogs hounded them.

d) the aircraft's engines packed up

31. TRAVEL

a) light travels faster than sound.b) my mind travelled over the past eventsc) the railway travels hundreds of miles across the country.d) travel helps to broaden our understanding of other people.

32. MIND

a) I have made up my mind.

b) we are all of one mind on this issue.

c) would you please mind the baby while I'm gone ?

d) I mind you to be careful when you are alone in the house.

Directions : In the following sentences, use the appropriate form of Verbs given in order to complete the sentence :

33. He	Indian journalism to educate		
the public.	na sa ang man na sing		
a) pioneered	b) was pioneering		
c) has pioneered	d) had pioneered		
	al inflows upward		
pressure on the rup	ee.		
a) create			
c) have created	d) will create		
35. All types of	vegetation in this		
region.			
a) see	b) are seen		
c) is seen	d) saw		
36. We	till evening came.		
a) wait	b) waited		
c) are waiting	d) will wait		
37. Do you think the			
a) would come	b) will come		

would comeb) will comeare comingd) will be coming

Directions : Identify the best way of writing the sentence in the context of correct usage of standard written English.

38. a) John said that he will visit me now.

- b) John said that he will visit me then.
- c) John said that he would visit me now.
- d) John said that he would visit me then.
- **39.** a) Excess knowledge is a dangerous thing
 - b) Excessive knowledge is a dangerous thing
 - c) A little knowledge is a dangerous thing
 - d) A less knowledge is a dangerous thing
- **40.** a) His house consists three bedrooms and a toilet
 - b) His house comprises of three bedrooms and a toilet
 - c) His house comprises three bedrooms and a toilet
 - d) His house consists with three bedrooms and a toilet

Directions : Fill in the blanks choosing the correct pair of words :

41. We _______ to inform you that we cannot include your thesis in our library, on the ______ of not receiving permission from your supervisor.
a) saddened, reason
b) repent, justification
c) lament, pretext

d) regret, ground

42. When her illness took a turn for the worse, the doctors took ______ to _____ the situation.
a) steps, ameliorate
b) modes, improve
c) approaches, better
d) measures, enhance

43. The public relations agency _____ out all the stops to ensure a _____ attendance at the gala. a) gave, phenomenal

- b) pulled, spectacular
- c) took, marvellous
- d) forked, staggering

Directions : Select whichever word you consider most appropriate for the blank space :

44. An accomplice is a partner ina) businessb) crimec) constructiond) gambling

45. A person who pretends to be what he is not is called an _____

a) imbiber b) impresario c) imitator d) imposter

46. Allowance due to a wife from her husband on legal separation is

a) debt	b) alimony
a) componention	d) damage

c) compensation d) damages

47. Those who live in trees are called _____a) adhesiveb) fluvialc) arboreald) frill

48. Spanish-speaking people living in the U.S. are called ______
a) Hispanic b) Spaniards
c) Afro-American d) Portuguese

49. Sleep-walking is called _____a) hallucinationb) reveriec) somnambulismd) incantation

50. Using a milder word/phrase instead of a harsh or direct one is _____

a) Euphemism b) metaphor c) simile d) anecdote

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PART-B: GENERAL KNOWLEDGE & APTITUDE FULL MARKS: 100

Each question carry 1 mark : c) India d) the U.S.A. **51.** Which among the following countries in the **62.** The world's largest Islamic nation is Indian sub-continent permits dual citizenship ? a) Bangladesh b) Indonesia b) Sri Lanka a) Pakistan c) Pakistan d) Turkey c) India d) Bangladesh 63. The oldest product of biotechnology known 52. Ozone layers absorb to man is a) infared rays a) antibiotics b) humulin b) ultraviolet rays coming from the sun c) alcoholic drinks d) citric acid c) all radiations from the sun d) cosmic rays 64. Greenhouse effect is a case of a) air pollution 53. Which element in chillies causes a burning b) water pollution c) pollution of edible greens sensation? a) Capsaicin b) Cyanogen d) non-degradable pollution pollutants d) Capsicum c) Ammonia 65. Wasteland is land which is 54. The highest position in the country an IAS a) uncultivable officer may aspire for is b) degraded beyond repair a) Governor, RBI b) Cabinet Secretary c) degraded but cultivable c) Home Secretary d) Foreign Secretary d) alkaline soil 55. The offending substance in the liquor 66. Identify the non-polymer among the tragedies leading to blindness etc. Is following a) ethyl alcohol b) amyl alcohol a) Elastomer b) Waxes c) benzyl alcohol d) methyl alcohol c) Fibres d) Resins 56. Which of the following gases is not found 67. Programmes of afforestation are launched to free in air? a) improve the economic resources of the region a) Nitrogen b) Hydrogen b) prevent desertification c) Oxygen d) Carbon dioxide c) stop soil erosion d) achieve all the above results **57.** The Black Box is a device used in an aircraft 68. There is a Hyderabad in Pakistan. In which to a) control the speed province? b) detect any flaw in the engines a) Sind b) NWFP c) record the flight data c) Puniab d) Bahuchistan d) maintain contact with the ground 69. Legumes are highly nutritious, because they 58. World Literacy Day is observed on are rich is a) October 12 b) October 13 a) starch b) oils d) November 1 d) protein c) September 8 c) fat **59.** The playing time of the full version of the 70. Acid rain occurs because of pollution of air Indian National Anthem is by a) 52 seconds b) 45 seconds a) Carbon monoxide b) Chlorine c) 48 seconds d) 1 minute c) Sulphur dioxide d) Carbon dioxide 60. Acid rain occurs because of pollution of air **71.** Epigraphy is the study of by a) epidemics b) temple architecture a) Carbon monoxide b) Chlorine c) inscriptions d) rocks and mountains c) Sulphur dioxide d) Carbon dioxide 72. Suez Canal was designed by **61.** Which country, among the following, has a) Ferdinand de Lesseps b) Le Corbusier the largest electorate in the world? c) John Napier d) Verron a) Australia b) Canada

72 The term "Dales	's denou" devotes	QC . Which among the following is a fast
73. The term "Baker		86. Which, among the following, is a fast
a) 11	b) 13 d) 10	growing tree ? a) Teak b) Encalyptus
c) 14	u) 10	d) Coconut
74 10th December	, in modern international	c) Banyan d) Coconut
history, is known as		87. Mouth and foot diseases in cattle are caused
a) Workers' Day	b) U.N. Day	L *
	ay d) Commonwealth Day	a) Bacteria b) Virus
c) Human Rights De	ly dy common can bay	c) Fungi d) Penicillium
75. The first test tub	e baby was born in	
a) the USA	b) France	88. The age of a tree can be determined by
c) the UK	d) India	a) counting the number of annual rings
Web Mer		b) thickness of the bark
	ocket to hit the moon was	c) the bulk of the tree
a) Apollo II	b) Luna 9	d) the number of branches
c) Lunik 2	d) Zond 5	Pranactives)
		89. Guwahati was known as in
77. Palm oil is extra	cted from	ancient times
a) Coconut palm	b) Dalmuma nalm	a) Hampinagara b) Pollomaruva
a) Coconut palm	b) Palmyra palm d) Joddy palm	c) Jagadrakshakpur d) Pragjyotishpur
c) Oil palm	d) Joudy paini	90. 'Toda' tribals are to be found in large
78 Who among the	following, first propounded	numbers in the state of
the theory of natural		a) Andhra Pradesh b) Tamil Nadu
a) Aristotle	b) Hobbes	c) Orissa d) Madhya Pradesh
c) Locke	d) Socrates	-,
		91. 'Acoustics' is a branch of study dealing with
79. "Love Story" wa	as written by	a) historical sites b) architecture
a) Khushwant Singh	b) William Golding	c) sound d) trigonometry a trademost
c) Dom Moraes	d) Erich Segal	
Station in the	Margaria and a factor of the	92. The first country to launch a space shuttle
	ps of the Mahatma Gandhi	was
and sanitation"- is the		a) the U.S.A. b) China
a) Sudarshan Iyenga c) R.N. Tagore		c) Japan d) the U.K.
c) K.N. Tagore	d) P.V. Narasimha Rao	93. Who among the following, was known as
81 Which among t	the following states, is often	'Gadadhar', in his younger days ?
described as 'God's		a) Swami Vivekananda
a) Jammu and Kashi		b) Sri Ramakrishna Paramahamsa
c) Goa	d) Kerala	c) Shri Ramana Maharishi
		d) Swami Sivananda
82. The holy shrine	of Badrinath lies in	
a) Leh	b) Ladakh	94. Which of the following ideologies is
c) Uttaranchal	d) Jammu and Kashmir	associated with the state of Israel ?
		a) Existentialism b) Zionism
	e following, is not a cereal ?	c) Pan-Arabism d) Neo-terrorism
a) Oilseeds	b) Wheat	
c) Rice	d) Barley	95. The Supreme Court has held in a landmark
84. Silkworm consu	mes	ruling, that "horse racing is not gambling, but
a) mulberry leaves	b) flowers	a) a game of skill
c) barks	d) roots	b) an outdoor game like golf
		c) a consummate art
85. Which of the	following has the highest	d) an intelligent sport
protein per gram ?		
a) Groundnut	b) Soyabean	
c) Apple	d) Wheat	
-)Phic	ey micut	

108. The Central American Republic of British 96. Thomas Alva Edison is associated with a number of inventions. Which one of the Honduras is now known as following is not associated with him? a) Anatolia b) Belize a) Cinematography b) Electric lamp c) Benin d) Cape Verde c) Gramophone d) Transistor 109. 'ISBN' printed on books stands for 97. Jerusalem is the Holy city of the a) International Standard Book Number b) Christians b) Indian Standard Book Number a) Jews c) Muslims d) All the three c) Indian Standards Bureau Norms d) International Society of Booksellers, New 98. Singapore is a York. b) Republic a) Dominion d) Chinese Colony 110. Indus Valley Civilization is called the c) Hindu Kingdom Proto-historic civilization because its people had 99. What did Marie Antoinette ask the hungry known about mobs to eat ? b) writing a) art a) Dates b) Oats c) copper d) pottery d) Hamburgers c) Cakes **111.** The two minerals required to keep teeth **100.** Which of the following is a rift valley ? and bones intact and in good condition are a) Kashmir Valley b) Damodar Valley a) Lead and Zinc c) Narmada Valley b) Calcium and Phosphorus d) Chambal Valley c) Copper and Sulphur **101.** The city of Chandigarh was designed by d) Iron and Iodine a) Jacob Epstein b) Le Corbusier c) Ferdinand de Lesseps d) Rodin Aug te **112.** The Headquarters of UNESCO is a) New York b) Washington 102. The first to reach the North Pole by c) Paris d) Amsterdam overland journey was a) Robert Peary b) Edward White **113.** International Date line is an imaginary c) Magellan d) Amundsen a) straight line b) zigzag line c) elliptical line d) curved line 103. The first metal used by man was 114. Which among the following places, is a) copper b) iron c) aluminium d) gold reckoned as the birthplace of Asian Art? a) Ajanta b) Gandhara 104. 'Savannah' is a c) Mathura d) Vijayanagar a) desert b) forest d) snow-clad mountain c) grassland 115. Which among the following, is not an essential macronutrient? **105.** Bats can fly in the dark because a) Carbohydrate b) Protein a) they have a better vision in the dark c) Fats d) Vitamin b) the light startles them c) they produce high pitch sounds called **116.** Aspirin is an ultrasonics a) anti-inflammatory agent d) none of the above b) Analgesic c) antibiotic **106.** Who among the following, is the first d) Antihistamine Indian to win an Oscar Award? b) Bhanu Athaiva a) Dilip Kumar 117. The Nokrek National Park and the c) Shabana Ajmi d) Naseeruddin Shah Balpakram National Park are located in a) Mizoram b) Manipur 107. Cambria is an old name for c) Meghalaya d) Assam b) Ireland a) France c) New Zealand d) Wales 118. Which, among the following cities, has been branded the "School Capital of India" ?

a) Bangalore b) Chennai

c) Gandhinagar d) Dehra Dun a) Q b) U c) R d) M 119. The founder of the YMCA was a) Gregory Peck 129. Pointing to a photograph, Sunil said, "His b) Lord Mountbatten daughter Meera is a grand daughter of my c) Sir George Williams mother". Whose photograph was it ? d) James Ramsay Macdonald a) Sunil's b) Sunil's son 120. Which among the following, is known as c) Sunil's uncle 'fight or flight' hormone ? d) cannot be said definitely a) Adrenaline b) Estrogen c) Insulin d) Oxytocin 130. A is B's sister. C is B's mother. D is C's father. E is D's mother. How is A related to D? 121. In India, the population census is carried a) Grand father b) Grand mother out once in every c) Daughter d) Grand daughter a) 5 years b) 10 years c) 6 years d) 15 years 131. What will be the next term in the following series ? According 122. to the World Health BKS, DJT, FIU, HHV, Organisation, the disease which causes the death a) JGV b) IJX of the largest number of people is c) GJW d) JGW a) AIDS b) tubercolosis c) malaria d) ebola 132. B is twice as old as A but younger than F. C is half the age of A but twice the age of D. 123. Which one of the following is used in dry Which of the following persons form the pair of cleaning of garments ? oldest and youngest ? a) Asphalt b) Naphtha a) F and A b) B and F c) Diesel oil d) Lubricating oil c) F and D d) C and F **124.** Cooking gas is a mixture of 133. In a family, there are six members a) Carbon dioxide and Oxygen A,B,C,D,E and F. A and B are a married couple, b) methane and ethylene A being the female member. D is the only c) butane and propane daughter of C who is the sister of A. E is the d) Carbon dioxide and Carbon monoxide brother of D. B is the son-in-law of F whose wife has already expired. How is C related to **125.** Life expectancy is highest in the world in **B**? a) Canada b) Germany a) Sister b) Sister-in-law c) Japan d) Norway c) Neice d) Daughter-in-law Each question carry 1 mark : 134. "Chi kai Shi" means "Earth is round", "Chu Chin Chi" means "Banana is sweet". "Kul 126. In the given series, one number does not fit Shak Kai" means "Balls are round". Then which in. Find that out. letter code stands for Earth ?

3, 5, 11, 14, 17, 21a) 14b) 11c) 17d) 21

127. The average of three numbers x,y and z is 15. Thrice the sum of y and z is 81. What is the value of x ?a) 12b) 15

	- /
c) 18	d) 27

128. The series of letters given here follow a definite order. Study the series and select the letter that will continue the given series.

PQUROQURNQUR

a) Chi b) Shi c) Kai d) Chu

135. Susheela is richer than Ramya whereas Akila is richer than Priya. Chandra is as rich as Ramya. Shoba is richer than Susheela. According to the above propositions, which of the following statements is definitely true ? a) Chandra is poorer than Akila

b) Susheela is richer than Priya

c) Shoba is richer than Ramya

d) Priya is the poorest of all

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136. In a certain code, 'juice me choice' is coded as 'set let ket', 'green rose flower' is coded as 'me ret jet' and 'rose favourite choice' is coded as 'let ret bet'. Which of the following is coded as 'bet' as per the above code ?

favourite
flower

137. A boy has as many sisters as brothers, but each girl has only half as many sisters as brothers. How many boys and girls are there in the family ?

a) 4 boys and 6 girls

b) 6 boys and 4 girls

c) 3 boys and 4 girls

d) 4 boys and 3 girls

138. The average age of five children is 6 years which get doubled, when their mother's age is included. What is the mother's age ?

	U U
a) 30 years	b) 42 years
c) 48 years	d) 40 years

139. Five years ago Prakash's mother was three times as old as Prakash. After seven years she will be twice as old as Prakash. How old is Prakash's mother now ?

a) 17 years	b) 36 years
c) 41 years	d) 48 years

140. In an election, a certain candidate was elected with a majority equal to one third of the number of votes polled by the defeated candidate. If the defeated candidate has got 20 more votes, even then the other candidate would have been elected by a margin of 2 votes. Find the number of voters who exercised their franchise

a) 276	b) 268
c) 288	d) 294

141. Out of 80 employees of a company one-fourth have cars, one half have scooters and one-tenth have both cars and scooters. How many have neither a car nor a scooter?

a) 32	b) 12
c) 30	d) 28

142. On a New Year Day, each one of the ten friends presented a sum of Rs.10 to all the others. The total amount of money presented was

a) Rs.1000	b) Rs.900
c) Rs.810	d) Rs.90

143. When a dice is thrown, what is the probability that the number shown on the dice is not divisible by 3 ?

a)	$\frac{2}{3}$	b)	$\frac{4}{7}$
c)	<u>5</u> 6	d)	$\frac{1}{6}$

144. Prakash, Deepak, Ajit, Suresh and Neela work in the same factory. Neela joined the factory before Ajit, but after Deepak. Prakash started working in the factory before Deepak but after Suresh. Who is the senior most among these ?

a) Prakash b) Deepak c) Ajit d) Suresh

145. A man had returned after a day's bird shooting. He was asked how many birds he had in his bag. He said, they are all sparrows but six, all pigeons but six and all doves but six. How many birds had he in all ?

a) 18	b) 15
c) 9	d) 12

146. Which number will come in the place of question mark ?

	528,	496,	466,	?, 412, 388
a) 454				b) 444
c) 438				d) 439

147. Numbers in the following series follow a certain arrangement. Find out the right number that will come in the place of the question mark. 97–98, 100, 103, ?, 112, 118

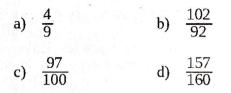
	57, 50, 100	$, \pm 00, \cdot, \pm 12$, 110
a) 108		b) 105	
c) 104		d) 107	

148. A bus starts from city A. The number of women in the bus is half the number of men. In city B, 10 men leave the bus and 5 women enter. Now number of men and women are equal. How many passengers were in the bus when it started ?

a) 15	b) 30
c) 36	d) 45

149. Complete the following series by providing the missing numbers from the choices given below :

2		7		17		37		77		?
5	,	10	,	20	,	40	,	80	,	?



150. Three women are going together. Two of them are mothers, while two of them are daughters. How is the youngest related to the oldest of the three ?

a) mother

b) daughter

c) grand daughter

d) cannot be concluded

c) 218

d) 432

Each question carries 2 marks :

151. A sum of Rs. 1360 has been divided among 161. A man has 20 bicycles and tricycles. If the A, B and C such that A gets $\frac{2}{3}$ of what B gets total number of wheels of these vehicles is 50, how many tricycles does he have ? $\frac{1}{4}$ of what C gets. B's share is : a) 10 b) 15 and B gets d) 5 c) 6 a) Rs. 120 b) Rs. 160 d) Rs. 300 c) Rs. 240 **162.** Two numbers are in the ratio 3 : 7 and their L.C.M. is 84, then the greater number is **152.** If $\sqrt{24} = 4.899$, the value of $\sqrt{\frac{8}{3}}$ is a) 21 b) 28 c) 36 d) 12 b) 2.633 a) 1.634 c) 0.634 d) 1.633 **163.** If $\frac{4}{5}$ of an estate be worth Rs. 16,800, **153.** A cricketer has a certain average for 10 innings. In the eleventh inning, he scored 108 $\frac{3}{7}$ of the estate is then the value of runs, thereby increasing his average by 6 runs. a) Rs. 9,000 b) Rs. 21,000 His new average is c) Rs. 72,000 d) Rs. 90,000 a) 48 runs b) 52 runs d) 60 runs c) 55 runs 164. No perfect square can end in the digit **154.** The unit digit in 3⁴⁰ is a) 0 b) 1 d) 9 c) 8 b) 3 a) 1 c) 7 d) 9 **165.** Which of the following is not a leap year ? 155. The number which exceeds 16% of it by 42 a) 2020 b) 2000 c) 1996 d) 1900 a) 52 b) 50 **166.** If $x^2 + 4y^2 = 4xy$, then x : y is d) 40 c) 48 a) 1:2 b) 2:1156. When a commodity is sold for Rs.34.80, d) 1:4 c) 1:1 there is a loss of 2%. What is the cost price of $\frac{1}{4}$ of cost price, the gain the commodity ? **167.** If gain is b) Rs.40.25 a) Rs.26.10 percent is c) Rs.46.40 d) None of the above a) 50% b) 40% d) 20% c) 25% **157.** If 2A=3B and 4B=5C, then A : B : C is a) 15:10:8 b) 4:3:2 **168.** At what rate percent per annum will the c) 8:10:15 d) 2:3:4simple interest on a sum of money be $\frac{2}{5}$ of 158. A person travels equal distances with speeds of 3 km/hr, 4 km/hr and 5 km/hr and the amount in 10 years? takes a total time of 47 minutes. The total b) $4\frac{1}{2}\%$ distance (in km) is a) 4% a) 2 b) 3 d)5c)4d) $5\frac{2}{3}\%$ c) 6% **159.** The length of a rectangular hall is 5 m more than its breadth. The area of the hall is 750 169. The principal that amounts to Rs.4913 in 3 m². The length of the hall is a) 15 m b) 25.5 m years at $6\frac{1}{4}\%$ per annum compound interest c) 27 m d) 30 m compounded annually is **160.** How many cubes of 3 cm edge can be cut a) Rs. 3096 b) Rs. 4076 out of 18 cm edge ? d) Rs. 4096 c) Rs. 4085

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b) 216

a) 36

is

10

170. A train of length 200m takes 10 seconds to cross a bridge of length 50m. How much time will it take to cross a pole?

a) 4 seconds	b) 5 seconds	
c) 6 seconds	d) 8 seconds	

171. Present ages of Rahul and Mukul are in the ratio of 5:4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Mukul's present age in vears? a) 24b) 28

	-,
c) 32	d) None of the above

172. The side of a square X is 110% of the side

of another so	juare Y, then	area of X area of Y	is equal
to			
a) 121	b) 1.	21	
c) 1.1	d) 12		

173. The number of distinct prime factors of $6^{10}x7^{17}x33^{25}$ is

a) 3	b) 4
c) 5	d) None of the above

174. If 0 <a<1, th="" the<=""><th>In the value of $a + \frac{1}{a}$</th></a<1,>	In the value of $a + \frac{1}{a}$
a) less than 4	b) greater than 4
c) less than 2	d) greater than 2

175. A tank is filled in 5 hours by three pipes A, B and C. The pipe C is twice as fast as B and B is twice as fast as A. How much time will pipe A alone take to fill the tank?

a) 20 hrs	b) 25 hrs
c) 30 hrs	d) None of the above

176. How long will it take a sum of money invested at 5% p.a. simple interest to increase its value by 40%?

a) 5 years	b) 8 years
c) 7 years	d) 6 years

177. A sum of money placed at compound interest doubles itself in 8 years. It will amount to four times itself at the same rate of interest in a) 10 years b) 12 years c) 16 years d) 20 years

178. The percentage increase in the area of a rectangle, if each of its sides is increased by 20%, is

a) 46%	b) 44%
c) 42%	d) 40%

179. Three years ago, the average age of A and B was 18 years. With C joining them, the average age becomes 22 years. How old is C now?

a) 24 years	b) 27 years
c) 28 years	d) 30 years

180. If x is positive, which of the following signs should replace the asterisk (*) in

	$\frac{1}{2}$	* $\frac{1+x}{2+x}$?
a) >		b) <	
c) ≤		d) ≥	

181. The value of $1 \div [1 + 1 \div \{1 + 1 \div (1 + 1 \div 2)\}]$ is

a)	$\frac{5}{8}$		b)	$\frac{3}{5}$
c) 1			d) 2	2

182. The cost price of an article is 64% of the marked price. The gain percent after allowing a discount of 12% is

a) 50%	b) 48.5%
c) 37.5%	d) 25%

183. If three numbers are in the ratio 3 : 4 : 5 and the sum of their squares is 1250, then the smallest number is

a) 12	b) 15
c) 20	d) 24

184. A man completes $\frac{5}{8}$ of a job in 10 days. At this rate, how many more days will it take him to finish the job? b) 7

a) 6

c) $7\frac{1}{2}$

d) None of the above

185. Three cubes of iron whose edges are 6 cm. 8 cm and 10 cm respectively, are melted and formed into a single cube. The edge of the new cube formed is

a)	12	cm	b)	14	cm
c)	16	cm	d)	18	cm

186. The calendar for the year 2018 will be the same for the year :

a) 2020	b) 2022
c) 2023	d) none of the above

187. One card is drawn at random from a pack of 52 cards. What is the probability that the card is a face card ?

- $\frac{4}{13}$ 3 b) a) 13
- $\frac{1}{4}$ d) c)__

188. The polygon which has equal number of diagonals and sides, is a

a) heptagon	b) hexagon
c) pentagon	d) quadrilateral

189. The least number by which 294 must be multiplied to make it a perfect square, is b) 3 a) 2

d) 6 c) 5

190. What should come in place of the question mark in the equation?

	$\sqrt{\frac{?}{169}}$	=	54 39
a) 108 c) 2916			b) 324 d) 4800

191. In a group of 30 people, 21 like tea and 16 like coffee. How many people like both tea and coffee ?

a) 7	b) 5
c) 9	d) 10

192. The sum of two numbers is 40 and their difference is 4. The ratio of the two numbers is b) 11 : 18 a) 21 : 19 c) 11 : 9 d) None of the above

193. Rohit is facing North-East. He turns 90° in the anti-clockwise direction & then 135° in the clockwise direction. Which direction is he facing now ?

a) West	b) North-West
c) East	d) South-East

194. If it is Saturday today, what day will be there on the 110th day from today ? a) Wednesday b) Thursday

u) meanesday	o) maioady
c) Friday	d) Tuesday

195. What is the area of the largest circle that can be drawn inside a rectangle with sides 42 $cm = 56 cm = 2 T_{a} t_{a} = \frac{22}{1}$

cm x 56 cm : [Take n	- 7]
a) 616 cm ² c) 2464 cm ²	 b) 1386 cm² d) 784 cm²

196. A train is running at 80 km/hr and a car is running at 120 metre per 5 seconds. Which of the following is correct?

a) Train is faster b) Both at same rate c) Car is faster d) Not possible to say

197. If 1+3=127, 2+4	=864, then 5+1=?
a) 251	b) 1251
c) 6251	d) None of the above

198. The average of first 10 odd natural numbers is

a) 9	D) 11
c) 13	d) None of the above

199. Complete the following sequence with the appropriate number from options below.

	4, 7, 12,	19, 28,, 52
a) 39		b) 41
c) 43		d) 47

200. If S = sum of the first five odd natural numbers, and P = sum of the first five prime numbers then

a) $P - S = 0$	b) $P - S = 2$
c) $S - P = 2$	d) $S + P = 50$