Superintendent in the District Jail(s) in Meghalaya.

Year of Advt: 2019 Date of Exam: 18-Nov-2023

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

# **QUESTION BOOKLET**

**SERIES I** 

Subjects : General English, General Knowledge & Aptitude

**BOOKLET SERIAL NO.** 

# 7265

Marks : 300Time :  $2^{1}/_{2}$  hours

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

# **INSTRUCTIONS TO CANDIDATES**

1. This booklet contains **150 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,

- 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 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:-

# A B 🔵 D

## 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.

SDJ-23

### PART - A - GENERAL ENGLISH

#### Marks :100

Each question carries 2 marks :

Directions : Out of the four alternatives, choose the word which is most similar in meaning to the given word.

1. Abominable	
a) Detestable	b) Flattering
c) Attractive	d) Sloppy
2. Voracious	
a) Acute	b) Haughty
c) Gluttonous	d) Strong
3. Sycophant	
a) Pilot	b) Sadist
c) Flatterer	d) Servant
4. Hybrid	
a) Combined	b) Complex
c) Transplanted	d) Mixed
5. Malice	
a) Ill-will	b) Spite
c) Cruelty	d) Evil
6. Admonish	
a) Admire	b) Advise
c) Censure	d) Dismiss
7. Uncouth	
a) Wasteful	b) Uncultured
c) Undesirable	d) Gracious
8. Immaculate	
a) Spotless	b) Colour
c) Gorgeous	d) Simple
9. Judicious	
a) Legal	b) Generous
c) Indiscriminate	d) Sensible
10. Compliant	
N 8 7' 1 1'	1

a) Yielding c) Adamant b) Complaining d) Livid

Directions : Out of the four alternatives, choose the word which is most opposite in meaning to the given word. 11. Fictitious a) Foreign b) Fancy c) Imaginative d) Real 12. Timid a) Tender b) Tall c) Brave d) Big 13. Brash a) Handsome b) Arrogant c) Kind d) Polite 14. Delinquent a) Law-abiding b) Uncivil c) Quarrelsome d) Jealous 15. Delectable a) Heavy b) Tasty c) Nice d) Unsavoury 16. Mellow a) Fickle b) Hot c) Irrational d) Excitable 17. Delicate a) Fit b) Strong c) Rugged d) Ungainly 18. Fragile a) Broad b) Tall c) Strong d) Heavy 19. Eccentric b) Sober a) Normal c) Genial d) Sociable 20. Solicit b) Reject a) Acknowledge c) Refute d) Cherish

Directions : In each of the questions below, only one among the given alternatives is correctly spelt. Find the correctly spelt word.

21. a) Managableb) Manageablec) Manegabled) Managiable

SDJ-23

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<ul><li>22. a) Exemple</li><li>c) Example</li></ul>	b) Exampel d) Examplle	
<ul><li>23. a) Draut</li><li>c) Drougt</li></ul>	b) Drout d) Drought	
<ul><li>24. a) Pshycology</li><li>c) Psycology</li></ul>	<ul><li>b) Psychology</li><li>d) Physchology</li></ul>	
<ul><li>25. a) Beckon</li><li>c) Beckone</li></ul>	<ul><li>b) Beccon</li><li>d) Bekkon</li></ul>	
<ul><li>26. a) Caliber</li><li>c) Calibre</li></ul>	<ul><li>b) Caleber</li><li>d) Celeber</li></ul>	
<ul><li>27. a) Carriar</li><li>c) Carrier</li></ul>	<ul><li>b) Carier</li><li>d) Carryier</li></ul>	
<ul><li>28. a) Graduaet</li><li>c) Graduete</li></ul>	<ul><li>b) Greduate</li><li>d) Graduate</li></ul>	
<ul><li>29. a) Ancestor</li><li>c) Ancester</li></ul>	<ul><li>b) Ancesstor</li><li>d) Ancoester</li></ul>	
<b>30.</b> a) Courter c) Cortier	b) Courtier d) Courteer	

Directions : Four alternatives a, b, c, d are given. You are required to select the most suitable alternative to the given idioms and phrases.

<b>31.</b> Hard-hearted	
a) Emotional	b) Cruel
c) Rude	d) Sentimental

- 32. On the wane a) On the heights b) Stand still c) Verge of corruption
- d) Gradually declining

33. Good innings a) Long and successful spell b) Fine experience c) Victorious win d) Ultimate success

34. Tooth and nail a) Using unfair means b) With strength and fury c) With weapons d) As best as one could

SDJ-23

35. Cut above a) Taller than b) More active than c) A little rougher than d) Rather superior to

36. Cry wolf a) Listen eagerly c) Turn pale

37. Kick the bucket a) To conclude c) To die

38. Die in harness a) Cease to live c) Die for country

39. Take exception to a) Object c) Hear

b) Give false alarm d) Keep off animals

b) To kill d) To win

b) Die of a disease d) Die while working

b) Suggest d) Excuse

40. A bolt from the blue a) Struck by thunder b) A piece of bad luck c) A flash of lightning d) A complete surprise

Directions : In the following passage, there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, four words are suggested, one of which fits the blank appropriately. Find out the appropriate word for each blank.

We should accept the 41 of life if we desire to go 42. Many of our 43 have set examples of utmost success which they 44 through hard struggle. Everyone knows that a man without courage and a hard-working 45 never succeeds. Indeed such a man does nothing but curse his 46. But it is 47 that the 48 lies in their 49 and not in anything like supernatural power. We should always 50 that the ways to success are full of thorns.

41. a) Problems c) Challenges

b) Difficulties d) Nature

42. a) Up

b) Straight

#### c) There

d) Ahead

b) Predecessors

d) Forerunners

b) Enjoyed

b) Capacity

d) Quality

b) Fate

d) Merit

b) Reality

d) Clear

b) Meet

d) Danger

d) Felt

## 43. \_\_\_\_

a) Ancestorsc) Successors

#### 44.

a) Attainedc) Achieved

# 45. \_\_\_\_

a) Spirit c) Ability

#### 46.

a) Destinyc) Birth

## 47. \_\_\_\_

a) Factc) True

## 48. \_\_\_\_\_

a) Problemc) Fault

#### 49.

a) Meditation	b) Thinking	
c) Understanding	d) Thought	

#### 50.

a) Kept in the mindc) Bear in mind

b) Have in the mindd) Put mind

#### PART - B - GENERAL KNOWLEDGE & APTITUDE

#### Marks : 200

#### Each question carries 2 marks :

51. Women in India were enfranchised on the same terms as men for the first time by the Montfort reforms as a result of

a) Agitation launched by All-India Women's conference

b) Indian National Congress persistent demand

c) Muddiman Committee's Report

d) All India Depressed class Conference

**52.** Which country is known as the sugar bowl of the world ?

a) India	b) Cuba	
c) Russia	d) USA	

**53.** Which countries lie on either side of the Radcliffe Line ?

a) India and Bangladesh

b) Nepal and India

c) North and South Korea

d) India and Pakistan

54. Which government agency prepares the topographical maps of India ?

a) Geological Survey of India

b) Survey of India

- c) Defence Ministry
- d) Geographical Survey of India

**55.** Which crop requires water-logging for its cultivation ?

a) Tea	b) Coffee
c) Rice	d) Wheat

**56.** Which state is the leading producer of golden colored *Muga* silk ?

a)	West	Bengal	b)	Assam
c)	Tamil	Nadu	d)	Kerala

57. Which was the first geostationary satellite of India ?

a) IKS-1	b) INSAI-I
c) APPLE	d) CARTOSAT-I

**58.** Most of the people of the middle-east belong to the following group of people :

a) Alpine	b) Mediterranean
c) Nordic	d) Mongolian

**59.** Name the soil requiring least application of fertilizers as it gets renewed naturally.

a) Alluvial b) Desert

c) Black d) Laterite

**60.** Who among the following got the Bharat Ratna Award before becoming the President of India ?

a) Dr. Zakir Hussain

b) Dr. Rajendra Prasad

c) V. V. Giri

d) Dr. S. Radhakrishnan

61. Which one of the following official discharges the duties of the office of the President, if both the President and Vice-President are not available ?

a) The Speaker of Lok Sabha

b) The Chief Justice of India

c) Chairman of the Union Public Service Commission

d) The Prime Minister

**62.** A national emergency remains in operation, with the approval of the Parliament, for

a) A maximum period of three years

b) A maximum period of one year

c) A maximum period of six months

d) An indefinite period

63. Which one of the following states sends maximum representatives to the Lok Sabha ?a) Himachal Pradeshb) Madhya Pradeshc) Uttar Pradeshd) West Bengal

64. When was NITI A	Aayog established ?
a) 1 <sup>st</sup> January, 2015	b) 1st January, 2016
c) 1st January, 2014	d) 1 <sup>st</sup> January, 2017

65. A member of the council of ministers can hold office without being a member of the state legislature for a maximum period of a) Three months b) Six months

a)	Three months	b) Six months	
c)	One year	d) Two years	

66. Which river flows through Satpuras and the Vindhyas ?a) Godavarib) Gandak

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#### c) Tapti

**67.** In which of the following areas maximum precipitation is received from the summer monsoon ?

a) The Coromandel coasts

b) The Western Himalayans

c) The North-eastern hilly region

d) The Central Indian hills

**68.** What kind of soil is treated with gypsum to make it suitable for cropping ?

a) Acidic

b) Alkaline

c) Soil with excess clay content

d) Red soil

**69.** Which of the following major sea ports of India does not have a natural harbor ?

a) Mum	bai	b)	Cochin

c) Paradip d)	Marmagao
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70. In which state do the Angamis live ?

a) Madhya Pradesh

b) Arunachal Pradesh

c) Nagaland

d) Andaman and Nicobar Islands

71. 'Right to education as a fundamental duty to every parent to send their children to School from the age of 6 to 14 years,' which amendment has added this ?

a) 94<sup>th</sup> amendment act

b) 86th amendment act

c) 73th amendment act

d) 97<sup>th</sup> amendment act

72. The Supreme Court consists of a Chief Justice and

a) 7 judges	b) 14 judges
c) 21 judges	d) 30 judges

73. Which one of the following countries is the first country in the world to propose a carbon tax for its people to address global warming ?
a) New Zealand b) Australia
c) Japan d) China

74. Which of the following programmes has been recognized by the Guinness Book of World Records ?

a) Pradhan Mantri Mudra Yojana

b) AADHAR

SDJ-23

c) Mahatma Gandhi National Rural Employment Guarantee Scheme

d) Pradhan Mantri Jan Dhan Yojana

75. The country which had launched the first official family planning programme in 1952 is a) India b) China

c) USA . d) Japan

76. Under the UN mandate, which of the following organization is responsible for social security ?

a) UNESCO

b) International Labour Organisation

c) Economic and Social Council

d) General Assembly

77. Which one of the following statements about Compressed Natural Gas (CNG) is not true ?a) It is environmentally much cleaner than the fossil fuels

b) It is obtained during refining of crude oil

c) It is made up of methane

d) It is not liquefied

78. Which of the following gas has the highest global warming potential ?

- a) Carbon dioxide b) Methane
- c) Nitrous oxide d) Sulphur dioxide

79. The greatest threat to the world's coral reef systems emanates from

a) UV light band

- b) Cyanide fishing
- c) Starvation caused by decline in zooplankton
- d) More frequent coral bleaching

**80.** Which of the following National Parks in India is the only floating park in the world ?

a) Pin Valley National Park in Himachal Pradeshb) Phawngpui Blue Mountain National Park in Mizoram

c) Nokrek National Park in Meghalaya

d) Keibul Lamjao National Park in Manipur

81. Asbestos causes

a) Liver damage	b) Kidney stone
c) Lung cancer	d) Jaundice

**82.** The Agency for Toxic Substances and Disease Registry (ATSDR) is based in

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a) Atlanta	b) Brazil
c) New York	d) Japan

5

**83.** The last six characters of the alphanumeric IFSC printed on the cheques helps in identifying the

a) Bank Branch

b) Type of Account

c) Bank Name

d) Business or profession of customer

84. Smog containing high levels of sulphur dioxide is called

a) Photochemical smog

b) Reducing smog

c) Oxidising smog

d) Acidic smog

85. At the end of the trial carried on by the British Government, the deposed Mughal Emperor Bahadur Shah Zafar was exiled toa) South Indiab) Jammu

c) London	d) Yangoon

**86.** A steel ball floats on mercury because a) Mercury does not allow any metallic ball to sink in it

b) The density of mercury is less than that of steel

c) Mercury is also a metal in the liquid formd) The density of mercury is higher that of steel

87. A football bounces when it falls on the ground because

a) It is made up of rubber

b) Of its property of elasticity

c) It is hollow

d) It is very light and is able to overcome the resistance of air

**88.** Three identical vessels A, B, and C are filled with water, mercury and kerosene, respectively up to an equal height. The three vessels are provided with identical taps at the bottom. If the three taps are opened simultaneously, then which vessel is emptied first ?

a) Vessel A

b) Vessel B

c) Vessel C

d) A, B and C will be emptied in the same time

89.Which one of the following is not a vector ?a) Forceb) Energyc) Velocityd) Momentum

90. When a wave goes from one place to an-

other, it transports a) Matter

c) Mass

b) Energy

d) Humidity

91. The latest model of 'Fuel Cell' cars are

a) Electricity-powered b) Solar-powered

c) Hydrogen-powered d) CNG-powered

**92.** When Mr. Jawaharlal Nehru became the Prime Minister of India, he delivered an inaugural address to the Nation, towards the midnight of 14<sup>th</sup> August 1947, which has been given a special name. What is the speech called ?

a) Love Tryst for India

b) Tryst with Destiny

c) Freedom Speech

d) Duty, Honour and Country

93. A lunar eclipse occurs when

a) The sun, the moon and the earth are not in the same line

b) The moon comes between the sun and the earth

c) The earth comes between the sun and the moon

d) The sun comes between the earth and the moon

94. The sky appears blue because

a) Because it is actually blue

b) In white light the blue component dominates

c) All colours interfere to produce blue

d) The atmosphere scatters blue colours more than the others

**95.** The technique of recording and reproducing three-dimensional images of objects is known as

a) Holography	b) Videography
c) Lexicography	d) Photography

**96.** All the colours on the screen of a colour television are produced by mixing lights of colours

a) Red, yellow and green

b) Red, yellow and blue

c) Red, green and blue

d) Yellow, green and blue

**97.** In our houses we get 220 V AC. The value 220 represents

a) Constant voltage	b) Effective voltage
c) Average voltage	d) Peak voltage

SDJ-23

**98.** A common fluorescent tube contains a) Sodium vapour

b) Argon at low pressure

c) Mercury vapour at low pressure

d) Neon at low pressure

**99.** The process by which energy is generated in the sun is the

a) Fission of uraniumb) Fission of thoriumc) Fusion of hydrogend) Fusion of helium

c) rusion of nydrogen u) rusion of nenum

100. For a nuclear reactor enriched nuclear fuel is required. What is enriched uranium ?a) Pure U-235

b) Fuel having 50% U-235

c) Fuel having nearly 5-6% U-235

d) Pure U-238

101. The planets are

a) Luminous bodies that twinkle

b) Luminous bodies that do not twinkle

c) Non-luminous bodies that twinkle

d) Non-luminous bodies that do not twinkle

**102.** If an apple is released from an orbiting spaceship, it will

a) Fall towards the earth

b) Move along with the spaceship at the same speed

c) Move at a higher speed

d) Move at lower speed

**103.** The branch of medicine dealing with the study of liver is called

a)	Nephrology		b) Haematology
c)	Hepatology	,	d) Ethology

104. A Whistle-blower is someone who

a) Whistles a classical music

b) Swimmerets. Is adept in whitling.

c) Boasts about himself/herself

d) Informs on any illegal, unethical or corrupt activity going on in the organisation

**105.** A situation where very high prices are charged from customers for a limited period of time is known as

a) Zipping	b) Bamboozling
c) Price Gouging	d) Hoodwinking

106. Which of the following is the largest digestive gland in humans ?a) Spleenb) Liver

a) Spleen

c) Pancreas d) Colon

107. The universal recipient blood group isa) A<sup>+</sup>b) AB<sup>+</sup>

c)  $O^+$  d)  $B^+$ 

**108.** Which of the following diseases is caused by bacteria ?

a) Dengue b) Chikungunya

c) Kala azar d) Meningococcal meningitis

**109.** Who is the ex-officio Chairman of Rajya Sabha?

a) President of India

b) Leader of the Ruling Party

c) Vice President of India

d) Senior-most member of Rajya Sabha

**110.** Which of the following drugs is not a hallucinogen ?

a) LSD	b) Heroin
c) Marijuana	d) Codeine

111. Liquid hydrocarbons are converted to low molecular weight gaseous hydrocarbons by a process known as

a) Hydrogenation	b) Cracking
c) Oxidation	d) Reduction

**112.** The substance that is added to make natural rubber strong and bouncier is

a) Polythene	b) Phosphorus
c) Sulphur	d) Iodine

113. Mordants are substances that

a) Fix colours on fabrics

b) Have a bleaching action

c) Have the capacity of increasing the intensity

of colour

d) Is an edible salt

114. Which of the following personalities was an Indian diplomat and the first female President of the United Nations General Assembly? a) Aruna Asaf Ali

b) Chonira Belliappa Muthamma

c) Sucheta Kripalani

d) Vijaya Lakshmi Pandit

**115.** In the process of dialysis, used on patients with affected kidneys, the phenomenon involved is

a) Diffusion b) Osmosis

c) Cataphoresis d) Electrophoresis		124. Hen is related to Chick in the same way as	
		tiger is related to	
116. A 'foam' is an	example of	a) Colt	b) Calf
a) Gas dispersed in liquid		c) Lamb	d) Cub
b) Liquid dispersed in	n a liquid		
c) Solid dispersed in liquid		125. Find the odd one among the following	
d) Liquid dispersed in liquid		a) Mercury	b) Moon
		c) Jupiter	d) Saturn
117. In which countr	y would you find the 'Table		
Mountain', a flat-topped mountain forming a		126. In a certain	code language, if the word

ge, if the word REGISTRATION is coded as TSIGERNOITAR, then how the word ACCU-RATE coded in that language?

a)	UCCAETAR	b)	UACCETAR
c)	UCACETAR	d)	UCCATEAR

127. In a certain code language, if IMPEND = 61 and DISH = 40, then FRUIT = ? a) 90 b) 100 c) 74 d) 76

128. Akash travels 8 km towards the East then turns right and travels 9 km. After that he travels 6 km towards East, turns left and travels 5 km, then he travels 13 km towards the East and stops. How far is he from the starting point, in horizontal direction?

a) 41 km	b) 14 km
c) 21 km	d) 27 km

129. A's mother's father is the husband of B's mother. How is A related to B, if A and B are males ?

a) Uncle	b) Father
c) Nephew	d) Son

130. Given the statements :

100. Given the Statements .			
A + B means A is the son of B			
A - B means A is the daughter of B			
$A \times B$ means A is the father of B			
$A \div B$ means A is the mother of B			
If $[M \times N+O-P \div Q]$ , then how is M related to			
Q?			
a) Husband b) Brother-in-Law			

c) Cousin d) Uncle

131. The reflection of a wall clock in a mirror shows the time as 3 hours 40 minutes. What is the actual time ?

a) 8 hours 20 minutes b) 8 hours 25 minutes

c) 8 hours 35 minutes

d) 8 hours 45 minutes

SDL23

prominent landmark overlooking one of the capital cities of the country ?

a) Sri Lanka	b) Czech Republic
c) South Africa	d) Turkey

118. Philosopher's wool contains zinc as its a) Oxide b) Bromide c) Nitrate d) Sulphide

119. The Olympic Flame symbolises

a) Speed, Perfection and Strength

b) Unity among various Nations of the World

c) Sports as a means of securing harmony among Nations

d) Continuity between the ancient and the modern games

120. As per the 2011 Census, the largest population of Scheduled Tribes in India is the State of a) Bihar b) Madhya Pradesh d) Meghalaya c) Nagaland

121. Two varieties of coffee - A and B are mixed in the ratio 3:2. The mixture is sold at Rs.100 per kg at 100% profit. If variety A costs Rs.10 per kg more than variety B, what is the cost of variety B per kg?

a) Rs.34	b) Rs.44
c) Rs.54	d) Rs.64

122. If 2 is subtracted from the middle digit of each number and the second and the third digits are interchanged and then the digits in the number are arranged in descending order, which number among the original numbers is the lowest number ?

a) 647	b) 738
c) 264	d) 875

123. Find the next letter in the series, A, B, D, H, a) L b) N c) R d) P

8

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**132.** What is the angle between the hands of the clock, when it shows 50 minutes past 5 O'clock ?

a) 125°	b) 95°
c) 130°	d) 120°

**133.** If 1<sup>st</sup> January 2012 is Sunday, then which day of the week will the New Year be celebrated in 2016 ?

a) Friday	b) Sunday
c) Wednesday	d) Saturday

**134.** In a leap year which month has the same calendar as that of July in that year ?

a) January	b) August
c) May	d) October

135. In a class of 95 students, 40 play cricket,<br/>50 play football and 10 play both cricket and foot-<br/>ball. How many students play only football ?a) 45b) 30c) 40d) 28

**136.** In a class of 180 students, 110 students passed in Chemistry and 120 students failed in Mathematics. 30 students failed in both the subjects. How many students failed in chemistry only ?

a) 40	b) 30
c) 45	d) 60

**137.** Four persons A, B, C and D arrive at a meeting. D arrives 10 minutes after B and 20 minutes before A, who arrives 10 minutes before C. Who is the first person to arrive at the meeting ?

a) A	b) B
c) C	d) D

**138.** P, Q, R, S and T sit around a table. P sits two seats to the left of R and Q sits two sits to the right of R. If S sits in between Q and R, who sits to the immediate right of P ?

a) T	b) S
c) Q	d) R

**139.** R, S, M, N, K and P have different shares of property (in terms of rupees). S is having more property than N and K, but less than R. M has neither more property than S nor less property than N. N's property is not less than K's property. P has the least property. How many persons have more property than N?

Two
Four

**140.** Find the odd one among the following

 a) 441
 b) 289

 c) 361
 d) 343

141. My office is to the east of my house. My sister's office is to the south-east of my office. A park is to the south of my office. In which direction is my house located with respect to the park ?

a) North-east	b) South-west
c) North-west	d) South-east

142. The price of a commodity A is twice that of commodity B. If the price of A is increased by 10% and that of B is increased by 25%, then what is the percentage increase in the total price of the product ?

a) 15%	b) 20%
c) 17%	d) 19%

143. A person has just enough money to buy 50 bananas or 30 watermelons. He decides to spend only 90% of his money and buy 9 watermelons. How many bananas can he buy with the remaining money that he wants to spend? a) 45 b) 30

a) 45	0) 50
c) 15	d) 25

144. A sum of money under compound interest, interest being compounded half yearly, doubles in 3 years. In how many years will it become 32 times itself?

a) 20 years	b) 18 years
c) 12 years	d) 15 years

145. A train covered the first 75 km of its journey at 15 km/hr, and the remaining part of the journey in 4 hours. If the average speed of the train for the whole journey is 20 km/hr, find the distance covered in the last 4 hours of the journey?

a) 100 km	b) 50 km
c) 75 km	d) 200 km

**146.** A train of length 300 m travels at a speed of 36 km/hr. In how many seconds does it cross a bridge of length 700 m ?

a) 70 seconds	b) 100 seconds
c) 200 seconds	d) 300 seconds

SDJ-23

147. P and Q working together can complete a piece of work in 24 days. The ratio of their efficiencies is 2 : 3. In how many days can the faster person complete the work working alone ?

a) 40 days	b) 50 days
c) 30 days	d) 20 days

148. Pipes P and Q are inlet pipes while R is the outlet pipe of the tank. Pipe P supplies water at 30 litres/hour. Pipe Q can fill the tank in 6 hours while pipe R can empty it in 24 hours. The empty tank gets filled in 2 hours when all the three pipes are opened simultaneously. What is the capacity of the tank ?

a) 40 litres	b) 60 litres
c) 80 litres	d) 100 litres

**149.** Two solutions of sulphuric acid are mixed in the ratio 1:9. The concentrations of sulphuric acid in the first and the second solutions are 10% and 20% respectively. What is the concentration of sulphuric acid in the resulting solution ?

a) 1370	0) 1770
c) 19%	d) 21%

**150.** The average age of the 25 students of a class is 20 years. If the teacher's age is also included, the average goes up by 0.5 years. Find the age of the teacher ?

a) 30 years	b) 31 years
c) 32 years	d) 33 years

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