

CIL MT
Mechanical :
2017 Official
Paper (English)

200 Questions

Que. 1 _____ is the brightest planet in the Solar system.

1. Mars
2. Venus
3. Saturn
4. Jupiter

Que. 2 Who among the following became the first woman to receive Sahitya Akademi Award in Maithili for her novel Marichika?

1. Lily Ray
2. Shefalika Verma
3. Usha Kiran Khan
4. Niraja Renu

Que. 3 Which of the following countries is the largest producer of milk?

1. China
2. Brazil
3. Australia
4. India

Que. 4 What is the role of the Attorney General of India?

1. To oversee the functioning of the Supreme Court and the High Courts
2. To provide legal advice to the Government of India
3. To provide free legal services to citizens who cannot afford legal fees
4. To review the income and expenditure of the Government of India

Que. 5 What is “WhatsApp” Messenger?

1. An instant messaging application
2. A rapid search engine
3. An app-based advertising portal
4. A free game exchange platform

Que. 6 Who was the twenty - fourth Jain Tirthankara?

1. Parasnath
 2. Mahavira
 3. Rishabha
 4. Gomateshwara
-

Que. 7 Who is the current Vice President of India?

1. Nasim Zaidi
 2. S. M. Krishna
 3. Sumitra Mahajan
 4. Venkaiah Naidu
-

Que. 8 Identify the ore from which Aluminum is extracted.

1. Malachite
 2. Bauxite
 3. Uraninite
 4. Argentite
-

Que. 9 Who won 2016 Chess Championship title?

1. Gary Kasparov
 2. Vishwanathan Anand
 3. Magnus Carlsen
 4. Sergey Karjakin
-

Que. 10 Which of the following is the hottest planet in the Solar system?

1. Mercury
 2. Mars
 3. Jupiter
 4. Venus
-

Que. 11 Who is the founder of IT giant Infosys?

1. Vishal Sikka
 2. Nandan Nilekani
 3. Narayana Murthy
 4. Azim Premji
-

Que. 12 Which schedule of the India Constitution has provisions regarding powers, authority and responsibilities of Panchayats?

1. Twelfth Schedule
 2. Eleventh Schedule
 3. Eighth Schedule
 4. Tenth Schedule
-

Que. 13 Which is the deepest point on earth?

1. Challenger Deep in Mariana Trench
2. Tagebau Hambach mine, Germany

3. Milwaukee Deep
4. Voronya Cave, Georgia

Que. 14 Which of following is India's highest point?

1. Mt. Everest
2. K1
3. Nanda Devi
4. Kanchenjunga

Que. 15 What is 'Jallikattu'?

1. A traditional bull-taming sport popular in Tamil Nadu
2. A bull worship festival at Pashupatinath temple, Nepal
3. A popular watersport enjoyed by the Marina beach, Chennai
4. The traditional name for "People's Leader" in Tamil

Que. 16 Where has India's first floating elementary school been inaugurated?

1. Loktak Lake, Manipur
2. Kake Pichola, Udaipur
3. Naini Jheel, Nainital
4. Dal Lake, Srinagar

Que. 17 In 2016, who became the second woman Prime Minister of Great Britain?

1. Angela Merkel
2. Melania Trump
3. Margaret Thatcher
4. Theresa May

Que. 18 What does SIDBI stand for?

1. Synchronised Investment Deployment Board of India
2. Strategic Industries Development Board of India
3. Small-scale Investment and Deployment Bank of India
4. Small Industries Development Bank of India

Que. 19 Which of the following statements about the President of India is correct?

1. The President of India must be a member of Rajya Sabha.
 2. The President of India must be a member of Lok Sabha.
 3. The President of India shall be a member of a House of the Legislature of any State.
 4. The President of India shall not be a member of either House of Parliament or of a House of the Legislature of any State.
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Que. 20 Who was the Governor General of India during the “First War of Independence of 1857”?

1. Lord Canning
 2. Lord Dalhousie
 3. Lord Warren Hastings
 4. Lord Cornwallis
-

Que. 21 Who was the last Mughal emperor of India?

1. Alamgir II
 2. Ahmad Shah Bahadur
 3. Bahadur Shah II
 4. Aurangzeb
-

Que. 22 Identify the nearest planet from the Sun.

1. Neptune
 2. Jupiter
 3. Mars
 4. Mercury
-

Que. 23 Which film won in the ‘Best Film’ category in the 70th British Academy Film Awards (BAFTA) given away in February 2017?

1. The Jungle Book
 2. Manchester by the Sea
 3. Moonlight
 4. La La Land
-

Que. 24 Who among the following won the 2016 Asian Champions (Women’s) Trophy?

1. China
 2. Australia
 3. India
 4. Iran
-

Que. 25 Who became the first Indian woman to be nominated as a member of the International Olympic Committee (IOC)?

1. Sumitra Mahajan
 2. Sonia Gandhi
 3. Nita Ambani
 4. Supriya Sule
-

Que. 26 The curved surface area of a hemisphere is $72\pi \text{ cm}^2$, then its radius is:

1. 8 cm

2. 7 cm
3. 6 cm
4. 5 cm

Que. 27 If two is added to the denominator of a rational number it becomes 1 and if 4 is added to the numerator it becomes $\frac{1}{2}$. Then the sum of the numerator and the denominator of the rational number is:

1. -22
2. -2
3. 2
4. 22

Que. 28 If x_1 and x_2 are the roots of the equation $2x^2 + 3x - 9 = 0$ then the equation which has the roots $1/x_1$ and $1/x_2$ is:

1. $9x^2 + 3x - 2 = 0$
2. $-9x^2 - 3x - 2 = 0$
3. $9x^2 - 3x - 2 = 0$
4. $9x^2 - 3x + 2 = 0$

Que. 29 If y exceeds x by 15 % then x is less than y by what percent?

1. $13\frac{1}{25}$
2. $13\frac{1}{23}$
3. $13\frac{1}{24}$
4. $13\frac{1}{22}$

Que. 30 The total number of even factors of $2^5 \times 3^3 \times 5^2$ is:

1. 30
2. 5
3. 10
4. 60

Que. 31 An army of 2100 men has provision for 50 days. After 10 days due to injuries some of them left and the food were now enough for next 50 days for remaining men. The number of men left is:

1. 400
2. 420
3. 410
4. 650

Que. 32 For a positive integer n, $2^{5n} - 5^{2n}$ is divisible by:

1. 2
2. 3
3. 7
4. 5

Que. 33 The number of terms in the sequence 5, 20, 80, 320,....., 5120 is:

1. 9
2. 7
3. 6
4. 8

Que. 34 If the sum of 2 numbers is 185, their LCM is 1700 and HCF is 5. Then the difference between 2 numbers is:

1. 15
2. 10
3. 25
4. 20

Que. 35 In a chemistry lab two beakers A and B contains 36% and 40% of spirit respectively. If two liters from A is mixed with 4 liters of B. The ratio of spirit and water in the resulting mixture is:

1. 19 : 46
2. 29 : 46
3. 29 : 55
4. 29 : 45

Que. 36 The average of 7 numbers is 28. The average of first three of them is 23 and the last three of them is 42. Then the fourth number is:

1. 3
2. 2
3. 1
4. 0

Que. 37 A can finish the work in 30 days and B in 40 days. They both work together for 5 days and then B leaves. How many days will A take to complete the remaining work?

1. 22 days
2. 21.75 days
3. 21.25 days
4. 21 days

Que. 38 Mr. Vivek divides Rs. 1703 such that 4 times the 1st share, thrice the 2nd share and twice the third share amount to the same. Then the value of the 2nd share is:

1. Rs. 452
2. Rs. 524
3. Rs. 520
4. Rs. 542

Que. 39 If $-5 \leq x \leq 3$ and $-1 \leq y \leq 0$, then the minimum value of $2y - 3x$ is:

1. -8
2. -9
3. -11
4. -10

Que. 40 Find x , given $5(\sqrt{5})^{x+6} = (\sqrt{5})^{2x+7}$:

1. $x = 1$
2. $x = -1$
3. $x = -2$
4. $x = 0$

Que. 41 If three sides of the triangle is given 18 cm, 41 cm and 41 cm. Then the area of triangle is:

1. 375 cm^2
2. 350 cm^2
3. 360 cm^2
4. 400 cm^2

Que. 42 Ms. Hema invests Rs. 8000 for six months at 20% per annum compounded quarterly. The total amount she gets after 6 months is :

1. Rs. 8820
2. Rs. 8880
3. Rs. 8800
4. Rs. 8802

Que. 43 Mr. Arun rows a boat with the stream at 10 km/hr and against the stream in 5 km/hr. In still water, his rate of rowing in km/h is:

1. 7.5
2. 2.5
3. 5
4. 15

Que. 44 Due to economic surges the price of eggs suddenly reduced by 40%. This enabled a woman to buy 64 more for \$30. Then the reduced price per dozen is :

1. \$ 2

2. \$ 2.25
3. \$ 2.75
4. \$ 2.5

Que. 45 A flight has to travel between 2 cities A and B, 2000 km apart. The flight was slowed down due to bad weather. Its average speed for the trip reduced by 200 km/hr and the time of flight increased by 30 min. The duration of the flight with original speed is:

1. 2 hrs
2. 2.25 hrs
3. 2.6 hrs
4. 2.75 hrs

Que. 46 In a bio gas plant the population of yeast bacteria increases at a rate of 19% per annum but there is an additional annual increase of 1% in population due to various other inputs in the system. The percentage increase in the yeast population after 2 years is:

1. 41%
2. 44%
3. 45%
4. 40%

Que. 47 The number of terms in the sequence 20, 25, 30,, 160 is:

1. 22
2. 29
3. 23
4. 26

Que. 48 Mr. Shiva invested equal amount of money in two private firms which gives 15% simple interest per annum for 3.5 years and 5 years respectively. If the difference in their interests is Rs. 315. The amount invested by Mr. Shiva in each firm is:

1. Rs. 1400
2. Rs. 1450
3. Rs. 1405
4. Rs. 1500

Que. 49 Pipe A can fill the tank 5 times faster than pipe B, if pipe A and B together fill the tank in 50 minutes, then pipe B alone can fill the tank in:

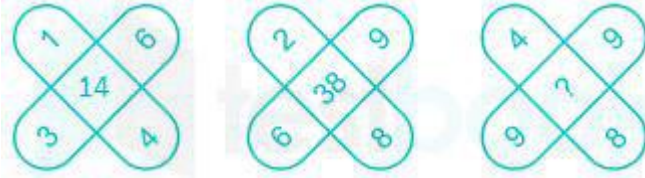
1. 300 minutes
2. 345 minutes
3. 330 minutes
4. 350 minutes

Que. 50

A train 130 meters long travelling at 54 km/hr crosses the bridge in 30 sec. Then the length of the bridge is:

1. 320 meters
2. 350 meters
3. 325 meters
4. 375 meters

Que. 51 Find the missing number from the given alternatives.?



1. 42
2. 41
3. 51
4. 49

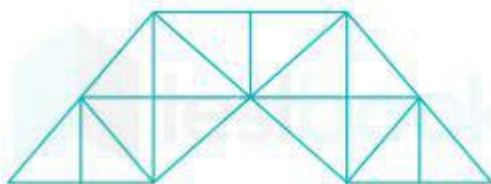
Que. 52 Hemant is older than Bipin but younger than Mamta. Vinod is older than Sudhanshu. Mamta is not as old as Vinod but is older than Bipin. Sudhanshu is not as old as Bipin. Who is the youngest?

1. Mamta
2. Bipin
3. Sudhanshu
4. Hemant

Que. 53 Five friends are sitting around a circular table. Rahul is to the right of Pramod and is second to the left of Sachin. Tushant is not between Pramod and Sachin. Kamal is second to the right of Tushant. Who is second to the left of Rahul?

1. Tushant
2. Kamal
3. Pramod
4. Sachin

Que. 54 How many triangles are there in the following figure?



1. 30 or more
2. 14
3. 29
4. 25

Que. 55 Which of the answer figure is exactly the mirror image of the question figure, when the mirror is held on the line X Y?



- 1.
- 2.
- 3.
- 4.

Que. 56 Dinesh walks 2 km towards South and turns to his right and walks 3 km. He then turns to his right and walks 4 km and turns again to his right and walks another 3 km. He then turns left and walks 1 km and stops there. How far and in which direction is Dinesh from the starting point?

1. 5 km West
2. 3 km North
3. 3 km East
4. 5 km South

Que. 57 Identify the word which belongs to the class of given words. Ring, Bracelet, Necklace, _____

1. Bangle
2. Gold
3. Jewellery
4. Ornament

Que. 58 Choose the correct alternative that will complete the given number series. 2, 9, 28, 65, ?, 217

1. 126

2. 102
3. 146
4. 193

Que. 59 Select the related number from the given alternatives.

29 : 65 :: 43 : ?

1. 86
2. 76
3. 93
4. 92

Que. 60 R' is the husband of 'Q', 'P' is the daughter of 'R', 'S' is the husband of 'P', 'E' is the daughter of 'S'. What is the relationship of 'E' to 'Q'?

1. Cousin
2. Daughter
3. Grand Daughter
4. Niece

Que. 61 From the given alternatives select the word which cannot be formed using the letters of the given words.

EXAMINATION

1. NATION
2. INMATE
3. EXAMINE
4. ANIMATION

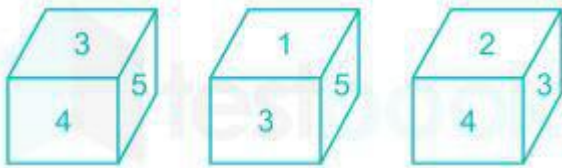
Que. 62 The age of Manish is half of that of his mother. His mother is 9 years younger to his father, and Manish is 7 years older than his sister. The age of his father is three times that of his sister, what is the age of Manish?

1. 27 years
2. 30 years
3. 33 years
4. 32 years

Que. 63 What is related to 'Sympathy' in the same way as 'Virtue' is related to 'Vice'?

1. Emotion
2. Cruelty
3. Kindness
4. Charity

Que. 64 Three positions of a cube are shown below. Which number will be opposite to the face containing 4?



1. 2
2. 1
3. 5
4. 6

Que. 65 Find the odd number pair from the given alternatives.

1. 24 – 48
2. 60 – 79
3. 12 – 72
4. 84 – 96

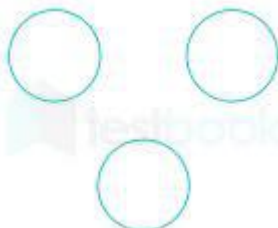
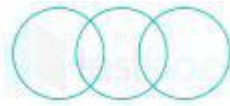


Que. 66 Select the related letters from the given alternatives.

ADGJ : QTWZ :: BEHK : ?

1. NQTV
2. PQWZ
3. PSVY
4. CFIL

Que. 67 Identify the diagram that best represents the relationship among classes given below.

Boy, Girl, Student

1. 
2. 
3. 
4. 

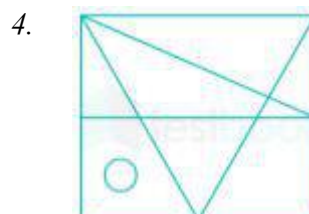
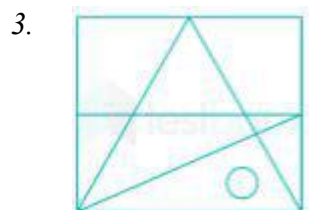
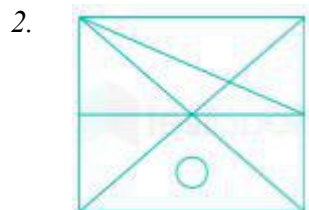
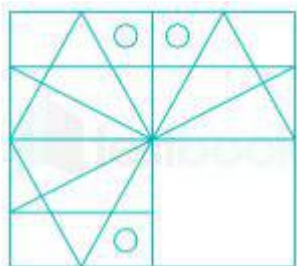
Que. 68 If 'x' means 'additions', '-' means 'division', '÷' means 'subtraction' and '+' means 'multiplication', then what will be the value of $16 + 5 - 10 \times 6 \div 3 = ?$

1. 8
2. 11
3. 15
4. 9

Que. 69 In a row of boys, Sandeep is eleventh from the right and Deepak is also eleventh from the left. When Sandeep and Deepak interchange their positions, Deepak become seventeenth from the left. How many boys are there in the row?

1. 25
2. 30
3. 27
4. 26

Que. 70 Select the figure from the alternatives which will complete the pattern in given question figure.



Que. 71 Select the one which is different from other three alternatives.

1. BCKL
2. LNST
3. EFNO
4. HIQR

Que. 72 Four sets of three statements each are given below. Take these statements to be true even if they look factually absurd. Select one alternative in which third statement is implied by the first two statements.

1. All bats are balls. All stumps are bats. Therefore, all balls are stumps.
2. All fruits are flowers. All vegetables are fruits. Therefore all vegetables are flowers.
3. All train are buses. All buses are roads. Therefore, all roads are buses.
4. All R's are T's. All T's are Q's. Therefore, all Q's are R's.

Que. 73 In a certain code language SHOWER is written as RINXDS. How will REPORT be written in that code language?

1. PERTRO
2. SDQPSS
3. QFOPQU
4. QFOQUP

Que. 74 Some equations are solved on the basis of a certain system. Find the correct answer for the unsolved equation on that basis.

$$11 * 7 = 72, 14 * 7 = 147, 17 * 9 = ?$$

1. 240
2. 175
3. 208
4. 233

Que. 75 Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

_ l m _ j _ m k _ _ m k j l m _

1. j k m j l j
2. j l m k j m
3. j k m l j j
4. j k l j l k

Que. 76 In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the INCORRECT word or phrase from the given options.

This book is not only beautifully printed yet is free from mistakes.

1. Is
2. Not only

3. From
4. Yet is

Que. 77 Select the word that is spelled **INCORRECTLY**.

1. Monarchy
2. Monetary
3. Momentary
4. Monastery

Que. 78 In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the **INCORRECT** word or phrase from the given options.

I think most of the problems could be overcomed if we tried hard enough.

1. Could be
2. Overcomed
3. Most of the
4. I think

Que. 79 Select the option that completes the sentence **CORRECTLY**.

The last rays of the sun _____ fading away when I reached home.

1. Are
2. Will be
3. Were
4. Was

Que. 80 Select the option that completes the sentence **CORRECTLY**.

The plan _____ is quite sound but I don't like the way it is being implemented.

1. Oneself
2. Itself
3. Myself
4. Himself

Que. 81 Select the word that best expresses the meaning of the underlined word.

If you abstain from unnecessary criticism, you will be happier in life.

1. Avoid
2. Indulge
3. Differ
4. Deny

Que. 82 In the following question, out of the four alternatives, choose the word which is opposite in meaning to the given word and click the button corresponding to it.

ELEGANT

1. Natural
2. Neat
3. Tactless
4. Awkward

Que. 83 Select the option that completes the sentence **CORRECTLY**.

We do not accept any liability _____ damage or losses.

1. At
2. With
3. For
4. Against

Que. 84 In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the **INCORRECT** word or phrase from the given options.

His parents prohibited him against joining the modeling career.

1. His
2. Prohibited
3. Against
4. Modeling career

Que. 85 Select the option that best expresses the meaning of the underlined phrase/group of words.

Several houses had to be demolished to decongest the road.

1. Put down
2. Taken down
3. Pulled down
4. Broken down

Que. 86 In the following question, out of the four alternatives, choose the word which is opposite in meaning to the given word and click the button corresponding to it.

INNOCENT

1. Naive
2. Unfamiliar
3. Childlike
4. Guilty

Que. 87 In the following sentence, four words or phrases have been underlined. One of them is incorrect. Select the **INCORRECT** word or phrase from the given options.

You need to improve your voice control in case to win the singing competition.

1. In case
2. Your

3. Need to
4. To win

Que. 88 Select the word that is spelled **INCORRECTLY**.

1. Emmission
2. Emerge
3. Emergency
4. Eminence

Que. 89 Select the option that best expresses the meaning of the underlined phrase/group of words.

His evidence has revealed the involvement of his neighbor in the crime.

1. Brought about
2. Brought off
3. Brought out
4. Brought round

Que. 90 Select the word that is spelled **INCORRECTLY**.

1. Finaly
2. Finale
3. Final
4. Finely

Que. 91 Select the word that best expresses the meaning of the underlined word.

A corrupt officer is a disgrace to the whole department.

1. Disgust
2. Disturbance
3. Scandal
4. Shame

Que. 92 Select the **ANTONYM** of the given word.

FINITE

1. Limited
2. Deep
3. Endless
4. Wide

Que. 93 Find the appropriate meaning of the underlined idiom.

Value education should be a part and parcel of any education system.

1. An essential part
2. A plus part

3. An additional part
4. An important part

Que. 94 Select the word that best expresses the meaning of the underlined word.

He made some very pertinent comments. They would certainly help us revise the project.

1. Thoughtful
2. Relevant
3. Applied
4. Related

Que. 95 Select the option that completes the sentence CORRECTLY.

You are annoyed with me, _____?

1. Don't you
2. Aren't you
3. Are you
4. Do you

Que. 96 Read the following passage and answer the given questions.

Providing stable freshwater supplies is a priority for every country in the world. Yet stable supplies are increasingly hard to come by in many countries, as water - related risks increase. For example, recent droughts threatened GDP growth in the United States. Monsoon floods killed hundreds and displaced thousands in India. Increased competition for water may impact energy production in China, and the list goes on.

Worlds Resource Institute's Aqueduct project recently evaluated, mapped, and scored water risks like these in 100 river basins and 180 nations - the first such country - level water assessment of its kind. We found that 36 countries face "extremely high" levels of baseline water stress. This means that more than 80 percent of the water available is withdrawn annually by agricultural, domestic, and industrial users leaving businesses, farms, and communities vulnerable to scarcity. Such situations severely threaten national water security and economic growth - especially if a country does not have adequate water - management plans in place. This information is highly relevant for a country's economy, environment, and communities.

It's also important for countries to understand the underlying natural factors that drive their water - related risks and respond accordingly. Extremely high levels of baseline water stress, for example, don't necessarily mean that a country will fall victim to scarcity. Armed with the right information, countries facing extremely high stress can implement management and conservation strategies to secure their water supplies.

Singapore, for example, has the highest water stress ranking. The country is densely populated and has no freshwater lakes or aquifers, and its demand for water far exceeds its naturally occurring supply. Yet the country is consistently held up as an exceptional water manager. Singapore invests heavily in technology, international agreements, and responsible management, allowing it to meet its freshwater needs. Advanced rainwater capture systems contribute 20 percent of Singapore's water supply, 40 percent is imported from Malaysia, grey water reuse adds 30 percent, and desalination produces the remaining 10 percent of the supply to meet the country's total demand. These forward - thinking and innovative management plans provide a stable water supply for Singapore's industrial, agricultural, and domestic users - even in the face of significant baseline water stress.

Singapore is held as an example for water management. Match the strategies with the actual practice.

- | | |
|----------------------------|-------------------------|
| a. Use of technology | i) import from Malaysia |
| b. International agreement | ii) rain water capture |

c. Responsible management iii) desalination and grey water use

1. a - ii, b - i, c - iii
2. a - ii, b - iii, c - i
3. a - iii, b - i, c - ii
4. a - i, b - ii, c - iii

Que. 97 In water stressed countries, which of the following consume most water according to the passage?

1. Industries
2. Farms
3. Communities
4. All of the above

Que. 98 Which statement is NOT correct according to the passage?

1. In highly water stressed countries more than 80% water is used by agriculture, domestic and industrial users.
2. Forward - thinking and innovative management plans can provide a stable water supply for a country.
3. Extremely high levels of baseline water stress mean that a country will fall victim to scarcity.
4. 36 countries face “extremely high” levels of baseline water stress.

Que. 99 In many countries stable water supply is difficult because:

1. Water related risks are on an increase
2. There is an increased competition for water
3. They have a high baseline water stress level
4. Providing fresh water is a priority for them

Que. 100 The main purpose of the passage is to:

1. Warn the water stressed countries to take necessary steps to manage water scarcity
2. Stress why it is important to analyze water risk at the country level
3. Report the baseline water stress study on 180 countries
4. Show that extremely high water stress can be managed

Que. 101 As per maximum shear stress theory of failure. The relation between yield strength in shear (τ_y) and yield strength in tension (σ_t) is:

1. $\tau_y = 1.2 \sigma_t$
 2. $\tau_y = 0.7 \sigma_t$
 3. $\tau_y = 0.3 \sigma_t$
 4. $\tau_y = 0.5 \sigma_t$
-

Que. 102 Which micrometer is used for measuring the span between the teeth of a gear?

1. Blade micrometer
2. Screw thread micrometer
3. Disc micrometer
4. Dial micrometer

Que. 103 What is the correct sequence of operations in powder metallurgy?

1. Compacting, Sintering, Blending, Production of metal powder
2. Production of metal powder, Compacting, Sintering, Blending
3. Production of metal powder, Blending, Compacting, Sintering
4. Production of metal powder, Blending, Sintering, Compacting

Que. 104 An element is subjected to pure shear stress ($+\tau_{xy}$). What will be the Principal stress induced in the element?

1. $(\sigma_{1,2} = \pm 2\tau_{xy})$
2. $(\sigma_{1,2} = 0)$
3. $(\sigma_{1,2} = \frac{\tau_{xy}}{2})$
4. $(\sigma_{1,2} = \pm \tau_{xy})$

Que. 105 A cantilever carries a concentrated load (W) at its free end. It's Shear force diagram will be:

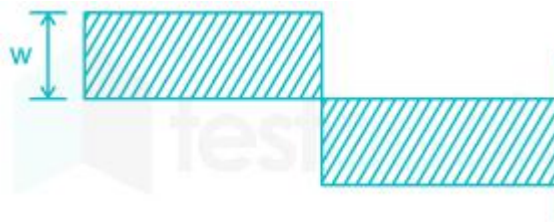
1.



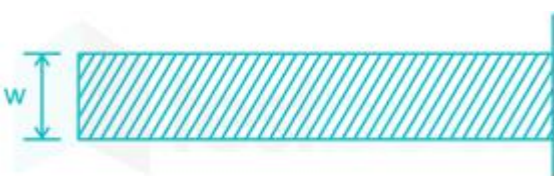
2.



3.



4.



Que. 106

A closed system of constant volume experiences a temperature rise of 50°C when a certain process occurs. The heat transferred in the process is 100 kJ. The specific heat at constant volume for the pure substance comprising the system is $1 \text{ kJ/kg } ^{\circ}\text{C}$, and the system contains 3 kg of this substance. Work done in this case is:

1. 50 kJ
2. -100 kJ
3. -50 kJ
4. 100 kJ

Que. 107 In natural convection heat transfer, Nusselt number is a function of:

1. Reynolds number and Prandtl number
2. Prandtl number and Rayleigh number
3. Reynolds number and Grashof number
4. Prandtl number and Grashof number

Que. 108 Choose the correct order of tool materials arranged, according to the decreasing order of their hot hardness.

1. Ceramics, Cermets, Tungsten Carbide, HSS
2. Cermets, Ceramics, Tungsten Carbide, HSS
3. Tungsten Carbide, Ceramics, Cermets, HSS
4. Cermets, Tungsten Carbide, Ceramics, HSS

Que. 109 The angular motion of a disc is defined by the relation ($\theta = 3t + t^3$), where θ is in radians and t is in seconds. What will be the angular position after 2 seconds?

1. 14 rad
2. 12 rad
3. 18 rad
4. 16 rad

Que. 110 A copper pipe carrying refrigerant at $T^{\circ}\text{C}$ is covered by cylindrical insulation of thermal conductivity $k \text{ W/mK}$. The heat transfer coefficient over the insulation surface is $h \text{ W/m}^2\text{K}$. The critical thickness of insulation would be.

1. k/h
2. $2k/h$
3. $2h/k$
4. h/k

Que. 111 Which one of the following is not the controllable process parameter in ECM?

1. Inter electrode gap
2. Voltage
3. Pulse on time
4. Feed rate

Que. 112 In which of the following non-traditional machining processes, tool wear doesn't occur?

1. EDM
2. USM
3. ECM
4. EBM

Que. 113 In a turning tool, crater wear occurs on _____.

1. Base
2. Flank face
3. Rake face
4. Shank

Que. 114 _____ is the capacity of material to absorb energy when it is elastically deformed and then upon unloading, to have this energy recovered.

1. Toughness
2. Tensile strength
3. Plasticity
4. Resilience

Que. 115 Which force is acting on the core when the metal is poured into a mould cavity?

1. Gravity
2. Inertia
3. Buoyancy
4. Drag

Que. 116 During a simple sensible heating process, the relative humidity _____.

1. Increases
2. Decreases
3. Is zero
4. Remains constant

Que. 117 The head loss due to friction in turbulent flow through a pipe is:

1. Directly proportional to velocity
2. Inversely proportional to square of velocity
3. Inversely proportional to velocity
4. Directly proportional to square of velocity

Que. 118 The gating ratio refers to the cross sectional areas of:

1. Sprue : In-gate : Runner

2. Sprue : Runner : In-gate
3. In-gate : Runner : Sprue
4. Runner : Sprue : In-gate

Que. 119 If u and v represents velocity components in x and y directions of a two-dimensional potential flow, then $\frac{\partial u}{\partial x}$ is equal to:

1. $\frac{\partial v}{\partial x}$
2. $\frac{\partial v}{\partial y}$
3. $\frac{\partial u}{\partial y}$
4. $-\frac{\partial v}{\partial y}$

Que. 120 What is the atomic packing factor of BCC structure?

1. 0.64
2. 0.68
3. 0.74
4. 0.52

Que. 121 If the proportion of oxygen is less than the proportion of acetylene is oxy-acetylene gas welding, the flame produced is _____.

1. Plasma arc
2. Carburizing flame
3. Oxidizing flame
4. Neutral flame

Que. 122 Kaplan turbine is a:

1. Low discharge, high head turbine
2. High discharge, low head turbine
3. Low discharge, low head turbine
4. High discharge, high head turbine

Que. 123 Which of the following welding method is not a solid state welding process?

1. Friction welding
2. Forge welding
3. Resistance spot welding
4. Ultra-sonic welding

Que. 124 Which is the isothermal reversible reaction in which a solid phase is converted into two or more intimately mixed solids on cooling?

1. Peritectoid

2. Peritectic
3. Eutectic
4. Eutectoid

Que. 125 Elliptical gear train used in differential gear of automobile helps in:

1. Reducing jerk
2. Assisting in speed change
3. Reducing speed
4. Turning

Que. 126 The cutting speed of the tool in turning operation is:

1. Directly proportion to diameter of the workpiece
2. Inversely proportional to diameter of the workpiece
3. Inversely proportional to the square of the diameter of workpiece
4. Directly proportional to the square of the diameter of the workpiece

Que. 127 A car starting from rest attains a maximum speed of 100 kmph in 20 seconds. What will be its acceleration assuming it is uniform?

1. 1.0 m/s^2
2. 1.4 m/s^2
3. 1.8 m/s^2
4. 2.0 m/s^2

Que. 128 A disc with mass moment of inertia (I) and an angular velocity ω rad/s is spinning about the axis of spin. The angular velocity of precession of the axis of spin is (ω_p), the torque causing precession will be given by:

1. $(I\omega^2\omega_p)$
2. $(I\omega\omega_p)$
3. $(\frac{1}{2}I\omega^2\omega_p)$
4. $(\frac{1}{2}I\omega\omega_p)$

Que. 129 Two walls of same thickness and cross-sectional area have thermal, conductivities in the ration 1 : 2. If the ratio of temperature drop across the two walls is 2 : 3, what is the ratio of heat flow?

1. 1 : 2
2. 1 : 3
3. 2 : 1
4. 3 : 1

Que. 130

A hole of diameter (d) is to be punched through a sheet metal of thickness (t). How much force is required to punch the hole if the ultimate shear stress of the sheet metal is (τ)?

1. $d\tau$
2. $\frac{\pi}{4}d^2t\tau$
3. $\pi d\tau$
4. $\frac{\pi}{4}d^2\tau$

Que. 131 Which of the following locating device is used to locate cylindrical jobs?

1. Drill jigs
2. V-blocks
3. Angle plates
4. Metal pins

Que. 132 In rolling process, roll separation force can be reduced by:

1. Increasing the roll diameter
2. Increasing the friction between the rolls and workpiece
3. Providing backup roll
4. Reducing the roll diameter

Que. 133 The frequency of the vibrations generated by the transducer in ultra-sonic machining will in the order of _____.

1. 10 kHz
2. 5 kHz
3. 2 kHz
4. 20 kHz

Que. 134 An eye bolt is to be used lifting a load of 70 kN and the tensile stress is not to exceed 100 MPa. The core diameter of the bolt (in mm) will be given by:

1. $\left(\frac{2100}{\pi}\right)^{\frac{1}{2}}$
2. $\left(\frac{2800}{\pi}\right)^{\frac{1}{2}}$
3. $\left(\frac{210}{\pi}\right)^{\frac{1}{2}}$
4. $\left(\frac{280}{\pi}\right)^{\frac{1}{2}}$

Que. 135 A heat engine which receives 80 kJ of heat at 100°C and rejects 70 kJ of heat to the ambient at 30°C is to be designed. The thermal efficiency of the heat engine is:

1. 70%
2. Cannot be determined.
3. 1.88%
4. 12.5%

Que. 136 In flat belt drive, the condition for maximum power transmission is given by (where T maximum tension and T_c centrifugal tension in belt)

1. $T = 3T_c$
2. $T = 2T_c$
3. $T = \pi T_c$
4. $T = 3\pi T_c$

Que. 137 How many elements are present in tool signature of a single point cutting tool used for turning operation?

1. 5
2. 6
3. 7
4. 8

Que. 138 What is the coordination number for a simple cubic structure?

1. 4
2. 8
3. 12
4. 6

Que. 139 Which of the following is the best suited for production of hollow pipes?

1. Centrifugal casting
2. Investment casting
3. Continuous casting
4. Hot chamber die casting

Que. 140 What is the maximum possible theoretical efficiency of a heat engine operating with a hot reservoir of gases at 2127°C , when the cooling water available is at 27°C ?

1. 98.8%
2. 90%
3. 87.5%
4. 100%

Que. 141 A ball and socket joint is example of _____ pair.

1. Screw
 2. Spherical
 3. Turning
 4. Rolling
-

Que. 142 Though vibration cannot be eliminated completely, it can be suppressed to a greater extent using :

1. Damper
2. Accumulator
3. Receiver
4. Reducer

Que. 143 In Euler's formula, the ratio of the effective length of the column to least radius of gyration of the cross section is known as:

1. Expansion ratio
2. Slenderness ratio
3. Thickness ratio
4. Compression ratio

Que. 144 Which of the following is used as a dielectric medium in EDM?

1. Salt solution
2. Silicon carbide solution
3. Al_2O_3 solution
4. Kerosene

Que. 145 Which of the following is not an input for material requirement planning?

1. Bill of materials
2. Purchase order
3. Inventory record file
4. Master production schedule

Que. 146 Tolerances for a hole and shaft assembly having a nominal size of 40 mm are as follows :

$$Hole = 40_{+0.02}^{+0.06} \text{ mm and shaft} = 40_{-0.08}^{-0.06} \text{ mm}$$

Determine Maximum material Limit (MML) of the hole.

1. 39.94 mm
2. 40.06 mm
3. 40.02 mm
4. 39.92 mm

Que. 147 In belt drive power transmitted is given by:

(Where T_t , T_s , and v are tight side tension, slack side tension and linear velocity of belt respectively)

1. $= \frac{(T_t - T_s)}{2v}$
2. $= \frac{(T_t + T_s)}{2v}$
3. $(T_t - T_s)v$
4. $(T_t + T_s)v$

Que. 148 In which of the following operations performed on lathe machine, chips do not occur?

1. Knurling
2. Boring
3. Reaming
4. Threading cutting

Que. 149 If a particle is in static equilibrium, then the work done by the system of force acting on that particle is:

1. Negative
2. Infinity
3. Zero
4. Positive

Que. 150 In turning operation, the typical ratio of heat generated in chip, tool and work piece is in the order of:

1. 70 : 20 : 10
2. 10 : 70 : 20
3. 10 : 20 : 70
4. 70 : 10 : 20

Que. 151 The pressure inside a Pelton turbine casing during working _____.

1. Increases
2. Remains constant
3. Decreases
4. First decreases and then increases

Que. 152 The stress - concentration factor (K) is:

1. Ratio of maximum stress occurring near discontinuity to average stress at critical section.
2. Ratio of minimum stress occurring near discontinuity to average stress at critical section.
3. Ratio of average stress at critical section to minimum stress occurring near discontinuity.
4. Ratio of average stress at critical section to maximum stress occurring near discontinuity.

Que. 153 A Wahl's stress factor (K_s) is:

(Where C spring index)

1. $\left(\frac{4C-1}{4C-4} + \frac{0.615}{2C} \right)$
2. $\left(\frac{4C-4}{4C-4} + \frac{0.615}{C} \right)$
3. $\left(\frac{4C-1}{4C-4} + \frac{0.615}{C} \right)$
4. $\left(\frac{4C-1}{4C-1} + \frac{0.615}{C} \right)$

Que. 154 The position of a particle in rectilinear motion is given by the equation $(x = t^3 - 2t^2 + 10t - 4)$, where x is in meters and t is in seconds. What will be the velocity of the particle at 3s?

1. 20 m/s
2. 25 m/s
3. 15 m/s
4. 30 m/s

Que. 155 When water glides over the runner blades of a hydraulic reaction turbine:

1. Pressure remains constant
2. Pressure decreases
3. Pressure first increases and then decreases
4. Pressure increases

Que. 156 A shaft with torsional stiffness (q) has a disc of mass moment of inertia (I) attached at the end, then the natural frequency (f_n) of free torsional vibration of the shaft is given by:

1. $f_n = 2\pi\sqrt{qI}$
2. $f_n = \frac{1}{2\pi}\sqrt{qI}$
3. $f_n = \frac{1}{2\pi}\sqrt{\frac{q}{I}}$
4. $f_n = 2\pi\sqrt{\frac{q}{I}}$

Que. 157 Electron beam machining can be carried out in _____.

1. Open air
2. Pressurized air
3. Water
4. Vacuum

Que. 158 If a moment M acting on a rigid body causes an angular displacement θ then work done by the moment is given by :

1. $M * \theta$
2. $3M * \theta$
3. $4M * \theta$
4. $2M * \theta$

Que. 159 The principle most commonly followed for locating work pieces in a fixture is:

1. 2 - 3 - 1
2. 1 - 2 - 3
3. 3 - 2 - 1
4. 1 - 3 - 2

Que. 160 Natural frequency (ω_n) of a passenger car whose weight is w Newton and whose suspension has a combined stiffness of k N/mm is given by:

1. $\omega_n = \sqrt{\frac{1}{km}}$
2. $\omega_n = \sqrt{km}$
3. $\omega_n = \sqrt{\frac{k}{m}}$
4. $\omega_n = \sqrt{\frac{km}{2}}$

Que. 161 Which of the following are provided in mould so as to increase the heat extraction capacity of the sand mould?

1. Chaplets
2. Core
3. Chills
4. Cope

Que. 162 The work transfer per unit mass for a steady flow process with reversible adiabatic compression is:

1. $\int v dp$
2. $\int s dT$
3. $\int p dv$
4. $\int T ds$

Que. 163 Which of the following is a pessimistic time estimate as per PERT?

1. The most probable time considering all conditions.
2. The shortest possible time in which an activity can be completed.
3. The maximum time that would be required to complete an activity.
4. The minimum time that would be required to complete an activity.

Que. 164 In Mohr's circle σ_1 and σ_2 are the principle stress acting at point on the component. The maximum shear stress τ_{max} is given by:

1. $\tau_{max} = \left(\frac{\sigma_1 * \sigma_2}{2}\right)$
2. $\tau_{max} = \left(\frac{\sigma_1 * \sigma_2}{4}\right)$
3. $\tau_{max} = \left(\frac{\sigma_1 - \sigma_2}{2}\right)$
4. $\tau_{max} = \left(\frac{\sigma_1 + \sigma_2}{4}\right)$

Que. 165 In Bernoulli's equation $\frac{p}{\rho g} + \frac{v^2}{2g} + z$, each term represents:

1. Total energy per unit mass
2. Total energy per unit volume

3. Total energy per unit weight
4. Total energy per unit flow area

Que. 166 The mechanism is said to be converted to a structure if the degree of freedom of mechanism reduced to:

1. 3
2. 1
3. 0
4. 2

Que. 167 The thickness of laminar boundary layer at a distance x from the leading edge over a flat plate varies as:

1. $x^{-\frac{1}{2}}$
2. $x^{\frac{1}{3}}$
3. $x^{\frac{1}{2}}$
4. X

Que. 168 The property relation for enthalpy change, dh is:

1. $Tds - pdv$
2. $Tds + vdp$
3. $Tds - vdp$
4. $Tds + pdv$

Que. 169 The period (T) for the pendulum with length (l) and placed at the gravitational acceleration (g) is given by:

1. $T = 2\pi\sqrt{\frac{l}{g}}$
2. $T = 2\pi\sqrt{lg}$
3. $T = 3\pi\sqrt{\frac{l}{g}}$
4. $T = 3\pi\sqrt{lg}$

Que. 170 The following limits are specified in a limit system, to give a clearance fit between a hole and a shaft:

$$Hole = 25_{-0.01}^{+0.02} \text{ mm and shaft} = 25_{-0.02}^{-0.004} \text{ mm}$$

Determine tolerance on a shaft.

1. 0.012 mm
2. 0.016 mm
3. 0.018 mm
4. 0.014 mm

Que. 171

A polar moment of Inertia (I) for hollow shaft with external diameter (D) and internal diameter (d) is given by:

1. $\frac{32D^4}{\pi d^4}$
2. $\frac{\pi(D^4-d^4)}{64}$
3. $\frac{\pi(D^4-d^4)}{32}$
4. $\frac{32(D^4-d^4)}{\pi}$

Que. 172 Sand and oxide layers adhering to the casting are removed by which of the following processes?

1. Heating
2. Shot blasting
3. Gas cutting
4. Air cooling

Que. 173 A steady, incompressible flow is given by $u = x^2 + y^2$ and $v = 2xy$. What is the convective acceleration along x direction at the point (1, 1)?

1. 12 unit
2. 6 unit
3. 8 unit
4. 24 unit

Que. 174 What happens to the liquid level, when a small diameter tube is inserted into a liquid whose contact angle is 125° ?

1. Liquid level in the tube will fall first and then rise.
2. Liquid level in the tube falls.
3. Liquid level in the tube remains constant.
4. Liquid level in the tube rises.

Que. 175 If v_1 and v_2 are the initial velocities of two bodies making direct collision and if u_1 and u_2 are their respective velocities after collision then the coefficient of restitution is given by:

1. $\frac{(u_1-u_2)}{(v_2-v_1)}$
2. $\frac{(u_1-u_2)}{(v_1-v_2)}$
3. $\frac{(u_1+u_2)}{(v_1+v_2)}$
4. $\frac{(v_1-v_2)}{(u_1-u_2)}$

Que. 176 In blanking operation, clearance is provided to:

1. Stripper
2. Die
3. Punch

4. Die and Punch

Que. 177 In which of the following processes, metal moulds are used?

1. Sand casting
 2. Investment casting
 3. Shell moulding
 4. Die casting
-

Que. 178 If m is the mass of the body and g is the acceleration due to gravity then the gravitational force is given by:

1. $m \times g^3$
 2. $m \times g^2$
 3. m/g
 4. $m \times g$
-

Que. 179 How much force will be exerted by the floor of the lift on a passenger of 80 kg mass when lift is accelerating downward at 0.81 m/s^2 ?

1. 740 N
 2. 700 N
 3. 720 N
 4. 680 N
-

Que. 180 Helmholtz function is expressed as:

1. $u - Ts$
 2. $-sdT + vdp$
 3. $h - Ts$
 4. $u + pv$
-

Que. 181 Which of the following is true for self - locking screw?

1. The coefficient of friction is equal to or greater than the tangent of the helix angle.
 2. The coefficient of friction is half of the tangent of the helix angle.
 3. The coefficient of friction is twice of the tangent of the helix angle.
 4. The coefficient of friction is less than the tangent of the helix angle.
-

Que. 182 The spring rate or stiffness (k) of the spring is given by:

(Where w load and δ deflection of spring)

1. $k = 2w\delta$
2. $k = \delta/w$
3. $k = w\delta$
4. $k = w/\delta$

Que. 183 Cold chamber die casting is suitable for which of the material listed below?

1. Brass
2. Tin
3. Zinc
4. Lead

Que. 184 In turning, chip thickness ratio will be _____.

1. Equal to zero
2. Greater than two
3. Greater than one
4. Less than one

Que. 185 The viscosity of liquids decreases with increase in temperature due to:

1. Decreased cohesive forces
2. Increased cohesive forces
3. Decreased molecular momentum transfer
4. Increased molecular momentum transfer

Que. 186 Which of the following involves planning the production output levels of major product lines produced by the firm?

1. Material requirement planning
2. Master production schedule
3. Computer aided process planning
4. Aggregate production planning

Que. 187 Acceleration of the reciprocating mass of a slider - crank mechanism is given by:

(Where ω is angular speed of the crank, θ is angle of inclination of the crank with the line of stroke, r is radius of crank and n is ratio of the length of the connecting rod to the crank radius)

1. $r\omega^2 \left(\sin 2\theta + \frac{\sin 2\theta}{n} \right)$
2. $r\omega^2 \left(\sin \theta + \frac{\sin 2\theta}{n} \right)$
3. $r\omega^2 \left(\cos 2\theta + \frac{\cos 2\theta}{n} \right)$
4. $r\omega^2 \left(\cos \theta + \frac{\cos 2\theta}{n} \right)$

Que. 188 Joule - Thomson coefficient is given by:

1. $\left(\frac{\partial p}{\partial T} \right)_h$
2. $\left(\frac{\partial T}{\partial h} \right)_p$

3. $\left(\frac{\partial h}{\partial p}\right)_T$

4. $\left(\frac{\partial T}{\partial p}\right)_h$

Que. 189 A thin cylindrical pressure vessel of 500 mm internal diameter is subjected to an internal pressure of 2 N/mm². What will be the hoop stress if the thickness of the vessel is 20 mm?

1. 25 N/mm²

2. 23 N/mm²

3. 27 N/mm²

4. 29 N/mm²

Que. 190 In resistance welding the voltage supplied is:

1. 100 V

2. 1 V

3. 500 V

4. 1000 V

Que. 191 What is the number of cycles completed per second for a four stroke diesel engine running at 6000 rpm?

1. 50

2. 500

3. 6000

4. 3000

Que. 192 The temperature distribution at a certain instant of time in a slab during a process is given by $T = 2x^2 + x + 5$, where x is in cm and T is in K. If the thermal diffusivity is 0.0002 cm²/s, the rate of change of temperature with time is given by:

1. 0.0008 K/s

2. 0.0004 K/s

3. -0.0004 K/s

4. -0.0008 K/s

Que. 193 When a shaft with diameter (d) is subjected to pure bending moment (M_b), the bending stress (σ_b) induced in the shaft is given by:

1. $\sigma_b = \left(\frac{32M_b}{\pi d^3}\right)$

2. $\sigma_b = \left(\frac{64M_b}{\pi d^3}\right)$

3. $\sigma_b = \left(\frac{64M_b}{\pi d^2}\right)$

4. $\sigma_b = \left(\frac{32M_b}{\pi^2}\right)$

Que. 194 In Electric discharge machining, temperature produced by the spark between tool and workpiece while machining will be in the order of _____.

1. 10 °C
2. 10000 °C
3. 100 °C
4. 1000 °C

Que. 195 In a reversible adiabatic process the ration $\left(\frac{T_1}{T_2}\right)$ is equal to:

1. $(v_1 v_2)^{\frac{\gamma-1}{\gamma}}$
2. $\left(\frac{v_1}{v_2}\right)^{\frac{\gamma-1}{\gamma}}$
3. $\left(\frac{p_1}{p_2}\right)^{\frac{\gamma-1}{\gamma}}$
4. $\left(\frac{p_2}{p_1}\right)^{\frac{\gamma-1}{\gamma}}$

Que. 196 According to the Ernst and Merchant theory, the relation between the shear angle (ϕ), friction angle (β) and rake angle (α) in single point cutting tool in turning is as follows:

1. $2\phi + \beta + \alpha = 90^\circ$
2. $2\phi + \beta - \alpha = 90^\circ$
3. $\phi + 2\beta - \alpha = 45^\circ$
4. $2\phi + \beta - \alpha = 45^\circ$

Que. 197 The Coriolis component of acceleration is applicable for which of the following mechanisms?

1. Pantograph
2. Crank - slider mechanism
3. Quick return motion mechanism (Slotted Lever)
4. Four bar chain

Que. 198 In Brayton cycle, heat addition is a _____.

1. Constant enthalpy process
2. Constant entropy process
3. Constant volume process
4. Constant pressure process

Que. 199 HSS tool is used to machine a 20 mm diameter steel shaft, at a spindle speed of 1000 revolutions per minute. What is the cutting speed?

1. π m/min
2. 20π m/min

3. π mm/min
4. 20π mm/min

Que. 200 According to Chvorinov, following is the correct formula for solidification time (T_s), where k = Mould casting constant, V = volume of casting, SA = surface area.

1. $T_s = V \left(\frac{SA}{k} \right)^2$
2. $T_s = k \left(\frac{SA}{v} \right)^2$
3. $T_s = k \left(\frac{V}{SA} \right)^2$
4. $T_s = V \left(\frac{k}{SA} \right)^2$

200 Questions

Que. 1	Correct Option - 2
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Que. 2	Correct Option - 1
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Que. 3	Correct Option - 4
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Que. 4	Correct Option - 2
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Que. 5	Correct Option - 1
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Que. 6	Correct Option - 2
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Que. 7	Correct Option - 4
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Que. 8	Correct Option - 2
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Que. 9	Correct Option - 3
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Que. 10	Correct Option - 4
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Que. 11	Correct Option - 3
----------------	--------------------

Que. 12	Correct Option - 2
----------------	--------------------

Que. 13	Correct Option - 1
----------------	--------------------

Que. 14	Correct Option - 4
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Que. 15	Correct Option - 1
----------------	--------------------

Que. 16	Correct Option - 1
----------------	--------------------

Que. 17	Correct Option - 4
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Que. 18	Correct Option - 4
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Que. 19	Correct Option - 4
----------------	--------------------

Que. 20	Correct Option - 1
----------------	--------------------

Que. 21	Correct Option - 3
----------------	--------------------

Que. 22	Correct Option - 4
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Que. 23	Correct Option - 4
----------------	--------------------

Que. 24	Correct Option - 3
----------------	--------------------

Que. 25	Correct Option - 3
----------------	--------------------

Que. 26	Correct Option - 3
Que. 27	Correct Option - 1
Que. 28	Correct Option - 3
Que. 29	Correct Option - 2
Que. 30	Correct Option - 4
Que. 31	Correct Option - 2
Que. 32	Correct Option - 3
Que. 33	Correct Option - 3
Que. 34	Correct Option - 1
Que. 35	Correct Option - 2
Que. 36	Correct Option - 3
Que. 37	Correct Option - 3
Que. 38	Correct Option - 2
Que. 39	Correct Option - 3
Que. 40	Correct Option - 1
Que. 41	Correct Option - 3
Que. 42	Correct Option - 1
Que. 43	Correct Option - 1
Que. 44	Correct Option - 2
Que. 45	Correct Option - 1
Que. 46	Correct Option - 2
Que. 47	Correct Option - 2
Que. 48	Correct Option - 1
Que. 49	Correct Option - 1
Que. 50	Correct Option - 1
Que. 51	Correct Option - 4

Que. 52	Correct Option - 3
Que. 53	Correct Option - 2
Que. 54	Correct Option - 3
Que. 55	Correct Option - 4
Que. 56	Correct Option - 2
Que. 57	Correct Option - 1
Que. 58	Correct Option - 1
Que. 59	Correct Option - 3
Que. 60	Correct Option - 3
Que. 61	Correct Option - 3
Que. 62	Correct Option - 2
Que. 63	Correct Option - 2
Que. 64	Correct Option - 2
Que. 65	Correct Option - 2
Que. 66	Correct Option - 3
Que. 67	Correct Option - 2
Que. 68	Correct Option - 2
Que. 69	Correct Option - 3
Que. 70	Correct Option - 4
Que. 71	Correct Option - 2
Que. 72	Correct Option - 2
Que. 73	Correct Option - 3
Que. 74	Correct Option - 3
Que. 75	Correct Option - 4
Que. 76	Correct Option - 4
Que. 77	Correct Option - 3
Que. 78	

	Correct Option - 2
Que. 79	Correct Option - 3
Que. 80	Correct Option - 2
Que. 81	Correct Option - 1
Que. 82	Correct Option - 4
Que. 83	Correct Option - 3
Que. 84	Correct Option - 3
Que. 85	Correct Option - 3
Que. 86	Correct Option - 4
Que. 87	Correct Option - 1
Que. 88	Correct Option - 1
Que. 89	Correct Option - 3
Que. 90	Correct Option - 1
Que. 91	Correct Option - 4
Que. 92	Correct Option - 3
Que. 93	Correct Option - 1
Que. 94	Correct Option - 2
Que. 95	Correct Option - 2
Que. 96	Correct Option - 3
Que. 97	Correct Option - 4
Que. 98	Correct Option - 3
Que. 99	Correct Option - 1
Que. 100	Correct Option - 1
Que. 101	Correct Option - 4
Que. 102	Correct Option - 3
Que. 103	Correct Option - 3
Que. 104	

Correct Option - 4

Que. 105 Correct Option - 4

Que. 106 Correct Option - 3

Que. 107 Correct Option - 4

Que. 108 Correct Option - 1

Que. 109 Correct Option - 1

Que. 110 Correct Option - 1

Que. 111 Correct Option - 3

Que. 112 Correct Option - 3

Que. 113 Correct Option - 3

Que. 114 Correct Option - 4

Que. 115 Correct Option - 3

Que. 116 Correct Option - 2

Que. 117 Correct Option - 4

Que. 118 Correct Option - 2

Que. 119 Correct Option - 4

Que. 120 Correct Option - 2

Que. 121 Correct Option - 2

Que. 122 Correct Option - 2

Que. 123 Correct Option - 3

Que. 124 Correct Option - 4

Que. 125 Correct Option - 4

Que. 126 Correct Option - 1

Que. 127 Correct Option - 2

Que. 128 Correct Option - 2

Que. 129 Correct Option - 2

Que. 130

Correct Option - 3

Que. 131 Correct Option - 2

Que. 132 Correct Option - 4

Que. 133 Correct Option - 4

Que. 134 Correct Option - 2

Que. 135 Correct Option - 4

Que. 136 Correct Option - 1

Que. 137 Correct Option - 3

Que. 138 Correct Option - 4

Que. 139 Correct Option - 1

Que. 140 Correct Option - 3

Que. 141 Correct Option - 2

Que. 142 Correct Option - 1

Que. 143 Correct Option - 2

Que. 144 Correct Option - 4

Que. 145 Correct Option - 2

Que. 146 Correct Option - 3

Que. 147 Correct Option - 3

Que. 148 Correct Option - 1

Que. 149 Correct Option - 3

Que. 150 Correct Option - 1

Que. 151 Correct Option - 2

Que. 152 Correct Option - 1

Que. 153 Correct Option - 3

Que. 154 Correct Option - 2

Que. 155 Correct Option - 2

Que. 156

	Correct Option - 3
Que. 157	Correct Option - 4
Que. 158	Correct Option - 1
Que. 159	Correct Option - 3
Que. 160	Correct Option - 3
Que. 161	Correct Option - 3
Que. 162	Correct Option - 1
Que. 163	Correct Option - 3
Que. 164	Correct Option - 3
Que. 165	Correct Option - 3
Que. 166	Correct Option - 3
Que. 167	Correct Option - 3
Que. 168	Correct Option - 2
Que. 169	Correct Option - 1
Que. 170	Correct Option - 2
Que. 171	Correct Option - 3
Que. 172	Correct Option - 2
Que. 173	Correct Option - 3
Que. 174	Correct Option - 2
Que. 175	Correct Option - 1
Que. 176	Correct Option - 3
Que. 177	Correct Option - 4
Que. 178	Correct Option - 4
Que. 179	Correct Option - 3
Que. 180	Correct Option - 1
Que. 181	Correct Option - 1
Que. 182	

Correct Option - 4

Que. 183 Correct Option - 1

Que. 184 Correct Option - 4

Que. 185 Correct Option - 1

Que. 186 Correct Option - 4

Que. 187 Correct Option - 4

Que. 188 Correct Option - 4

Que. 189 Correct Option - 1

Que. 190 Correct Option - 2

Que. 191 Correct Option - 1

Que. 192 Correct Option - 1

Que. 193 Correct Option - 1

Que. 194 Correct Option - 2

Que. 195 Correct Option - 3

Que. 196 Correct Option - 2

Que. 197 Correct Option - 3

Que. 198 Correct Option - 4

Que. 199 Correct Option - 2

Que. 200 Correct Option - 3
