

Subject Code : 101 ▼

Subject Code	Exam Date	Q Id	Questions	Answer Key
101	26-10-2019	1	<p>During the Quit India Movement, "Parallel Government" was constituted at</p> <p>(A) Varanasi</p> <p>(B) Allahabad</p> <p>(C) Lucknow</p> <p>(D) Ballia</p>	(D)
101	26-10-2019	2	<p>When was the railway system established in India?</p> <p>(A) 1930</p> <p>(B) 1753</p> <p>(C) 1853</p> <p>(D) 1950</p>	(C)
101	26-10-2019	3	<p>Where is "Statue of Unity" located?</p> <p>(A) India</p> <p>(B) China</p> <p>(C) Bulgaria</p> <p>(D) Thailand</p>	(A)
101	26-10-2019	4	<p>Which of the following is true about Ayushman Bharat National Health Protection Scheme launched in 2018?</p> <p>(A) The scheme will have a defined benefit cover of Rs. 5 lakh per family per year</p> <p>(B) A beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empanelled hospitals across the country</p> <p>(C) States/ UTs can decide to implement the scheme through an insurance company or directly through the Trust/ Society or use an integrated model</p>	(D)

			(D) All of the options	
101	26-10-2019	5	<p>The person who has been presented the most effective Swachhta Ambassador award on the occasion of 150th birth anniversary of Mahatma Gandhi at the India Today Safaigiri Summit</p> <p>(A) Shri Sachin Tendulkar</p> <p>(B) Shri Akshay Kumar</p> <p>(C) Ms PV Sindhu</p> <p>(D) Shri Amir Khan</p>	(A)
101	26-10-2019	6	<p>Find out whether there is any Grammatical error in below sentence. If yes, that part of the sentence shall be indicated as the answer among the given options:</p> <p><b>Please convey / my best wishes / back to your parents.</b></p> <p>(A) Please convey</p> <p>(B) my best wishes</p> <p>(C) back to your parents</p> <p>(D) No error</p>	(C)
101	26-10-2019	7	<p>Fill up with the correct option:</p> <p><b>If I ..... you I should have told him the truth.</b></p> <p>(A) am</p> <p>(B) was</p> <p>(C) had been</p> <p>(D) were</p>	(D)
101	26-10-2019	8	<p>Out of the four alternatives, choose the one which can be substituted for the given words.</p> <p><b>To free somebody from all blame</b></p> <p>(A) Highbrow</p> <p>(B) Exonerate</p> <p>(C) Escapism</p>	(B)

			(D) Innocent	
101	26-10-2019	9	<p>In the following question, the first and the last part of the sentence/passage are given. The rest of the sentence/ passage is split into four parts and named P, Q, R and S. These four parts are not given in their proper order. Read the sentences and find out which of the four combinations is correct.</p> <p><b>Rohit went to the airport to see off his friend.</b>  P. He explained that he had lost his bag in the crowd.  Q. Rohit asked him why he was worried and anxious.  R. Just then, a policeman was seen with a teenager who had a bag in his hands.  S. The friend appeared worried and anxious about something.  <b>They told the policeman about their lost bag &amp; claimed it.</b></p> <p>(A) QSPR  (B) RPSQ  (C) PQRS  (D) SQPR</p>	(D)
101	26-10-2019	10	<p>Antonym of "<b>Perpetual</b>"</p> <p>(A) perennial  (B) enduring  (C) intermittent  (D) persistent</p>	(C)
101	26-10-2019	11	<p>Ravi can do a job in 10 days. Raman can do the same job in 20 days. They together start doing the job but after 4 days Raman leaves. How many more days will be required by Ravi to complete this job alone?</p> <p>(A) 7  (B) 6  (C) 4  (D) 5</p>	(C)

101	26-10-2019	12	<p>In a certain factory, there are 5 working days in a week. If the probability that it is Thursday and that a worker is absent is 0.03. Find the probability that a worker is absent, given that today is Thursday.</p> <p>(A) 5%</p> <p>(B) 10%</p> <p>(C) 25%</p> <p>(D) 15%</p>	(D)
101	26-10-2019	13	<p>A bird is sitting on a train A moving at a Speed of 40 kmph. It sees another train B at a Distance of 200 ms with Speed of 60 kmph coming from the opposite direction on the same rail track. It flies with an average Speed of 10kmph and sits on another train. Again immediately it flies back to the first train and again to the second train and so on. It does so before the two trains crash. What is the total Distance traveled by the bird?</p> <p>(A) 5 meters</p> <p>(B) 20 meters</p> <p>(C) 10 meters</p> <p>(D) 15 meters</p>	(B)
101	26-10-2019	14	<p>Find the remainder when <math>44^{66}</math> is divided by 10</p> <p>(A) 6</p> <p>(B) 7</p> <p>(C) 8</p> <p>(D) 9</p>	(A)
101	26-10-2019	15	<p>Monte Carlo is offering a summer discount of 20% on all the sweaters. Ram buys sweaters which cost him Rs. 3000/- and then resold them in his shop at a discount of 10% on the market price. Find the total profit he earned.</p> <p>(A) Rs. 300</p> <p>(B) Rs. 475</p> <p>(C) Rs. 270</p> <p>(D) Rs. 375</p>	(D)

101	26-10-2019	16	<p>In this series, you will be looking at both the letter pattern and the number pattern. Fill the blanks.</p> <p><b>B2CD, _____, BCD4, B5CD, BC6D</b></p> <p>(A) B2C2D</p> <p>(B) BC3D</p> <p>(C) B2C3D</p> <p>(D) BCD7</p>	(B)
101	26-10-2019	17	<p>Five people P, Q, R, S, and T are sitting in a row facing towards the north. P is two places away to the left of Q. R is two places away to the right of S. T is not sitting at the extreme left as well as next to R. Who is sitting in the middle?</p> <p>(A) S</p> <p>(B) P</p> <p>(C) R</p> <p>(D) Q</p>	(C)
101	26-10-2019	18	<p>Reaching a place of appointment on Friday I found that I was two days earlier than the scheduled day. If I had reached on the following Wednesday how many days late would I have been?</p> <p>(A) one day</p> <p>(B) two days</p> <p>(C) three days</p> <p>(D) four days</p>	(C)
101	26-10-2019	19	<p>“A @ B” means A is the mother of B</p> <p>“A # B” means A is the father of B</p> <p>“A % B” means A is the son of B</p> <p>How is X related to Z from the given equation?</p> <p><b>X % Y % Z</b></p> <p>(A) X is the grandson of Z</p> <p>(B) X is the father of Z</p>	(A)

			(C) X is the son of Z (D) None of the options	
101	26-10-2019	20	If "+" means "-", "*" means "/" then, what would be the value of the given equation? $4 * 2 / 4 - 2 + 3$ (A) 7 (B) 8 (C) 9 (D) 3	(A)
101	26-10-2019	21	The surface to be left unmachined is marked on the pattern by ----- (A) Red colour (B) Yellow colour (C) Black colour (D) Blue colour	(C)
101	26-10-2019	22	A perfect gas is one which obey's ----- (A) All gas laws (B) Only Boyle's law (C) Only Charle's law (D) None of the options	(A)
101	26-10-2019	23	Piezometer is used to measure (A) pressure in pipe, channels etc (B) atmospheric pressure (C) very low pressure (D) difference of pressure between two points	(C)
101	26-10-2019	24	In a rolling operation using rolls of diameter 500 mm, if a 25 mm thick plate cannot be reduced to less than 20 mm in one Pass, the coefficient of friction between the roll and the plate is	(A)

			<p>(A) 0.1412</p> <p>(B) 0.152</p> <p>(C) 0.8</p> <p>(D) 0.4</p>	
101	26-10-2019	25	<p>The included angle of Twist drill bit is</p> <p>(A) 118 deg</p> <p>(B) 128 deg</p> <p>(C) 108 deg</p> <p>(D) 98 deg</p>	(A)
101	26-10-2019	26	<p>Swab is used for -----</p> <p>(A) Smoothing &amp; cleaning out depression in the mould</p> <p>(B) Cleaning the moulding sand</p> <p>(C) Moistening the sand around the edge before removing pattern</p> <p>(D) Repairing &amp; finishing the mould</p>	(C)
101	26-10-2019	27	<p>Ratio of solidification time of a cylindrical casting (height = radius) to that of a cubic casting of side two times the height of cylindrical casting is _____</p> <p>(A) 0.5625</p> <p>(B) 0.52</p> <p>(C) 0.608</p> <p>(D) 0.406</p>	(A)
101	26-10-2019	28	<p>Which two of the following joining processes are autogeneous?</p> <p>(i) Diffusion welding</p> <p>(ii) Electroslag welding</p> <p>(iii) Tungsten inert gas welding</p> <p>(iv) Friction welding</p> <p>(A) (i) and (iv)</p>	(A)

			<p>(B) (ii) and (iii)</p> <p>(C) (ii) and (iv)</p> <p>(D) (i) and (iii)</p>	
101	26-10-2019	29	<p>An odd shaped body weighing 7.5kg and occupying <math>0.01\text{m}^3</math> volume will be completely submerged in a fluid having specific gravity of</p> <p>(A) 1</p> <p>(B) 1.2</p> <p>(C) 0.8</p> <p>(D) 0.75</p>	(D)
101	26-10-2019	30	<p>Couette flow is characterized by</p> <p>(A) steady, incompressible, laminar flow through a straight circular pipe</p> <p>(B) fully developed turbulent flow through a straight circular pipe</p> <p>(C) steady, incompressible, laminar flow between two fixed parallel plates</p> <p>(D) steady, incompressible, laminar flow between one fixed plate and the other moving with a constant velocity</p>	(D)
101	26-10-2019	31	<p>Jobs arrive at a facility at an average rate of 5 in an 8 hour shift. The arrival of the jobs follows Poisson distribution. The average service time of a job on the facility is 40 minutes. The service time follows exponential distribution. Idle time (in hours) at the facility per shift will be</p> <p>(A) <math>5/7</math></p> <p>(B) <math>14/3</math></p> <p>(C) <math>7/5</math></p> <p>(D) <math>10/3</math></p>	(B)
101	26-10-2019	32	<p>Thermal conductivity of water at 20 deg Cel is of the order of</p> <p>(A) 0.1</p> <p>(B) 0.23</p>	(D)



			(C) 0.42 (D) 0.51	
101	26-10-2019	33	The ratio of momentum diffusivity ( $\nu$ ) to thermal diffusivity ( $\alpha$ ), is called  (A) Prandtl number (B) Nusselt number (C) Biot number (D) Lewis number	(A)
101	26-10-2019	34	When the rate of evaporation of water is zero, the relative humidity of the air is  (A) 0% (B) 100% (C) 50% (D) unpredictable	(B)
101	26-10-2019	35	In an air-standard Otto cycle, air is supplied at 0.1 MPa and 308 K. The ratio of the specific heats ( $\gamma$ ) and the specific gas constant ( $R$ ) of air are 1.4 and 288.8 J/kg.K, respectively. If the compression ratio is 8 and the maximum temperature in the cycle is 2660 K, the heat (in KJ/kg) supplied to the engine is _____  (A) 1416 KJ/Kg (B) 1316 KJ/Kg (C) 1241 KJ/Kg (D) 2000 KJ/Kg	(A)
101	26-10-2019	36	The value of Poisson's ratio for steel is between  (A) 0.01 to 0.1 (B) 0.23 to 0.27 (C) 0.25 to 0.33 (D) 0.4 to 0.6	(C)

101	26-10-2019	37	<p>The device used to regulate the flow of the refrigerant in a system is known as -----</p> <p>(A) Capillary tube</p> <p>(B) Solenoid Valve</p> <p>(C) Thermostatic expansion valve</p> <p>(D) All of the options</p>	(D)
101	26-10-2019	38	<p>Pick up the wrong statement</p> <p>(A) 2-stroke engine can run in any direction</p> <p>(B) In 4-stroke engine, a power stroke is obtained in 4-strokes</p> <p>(C) Petrol engines occupy more space than diesel engines for same power output</p> <p>(D) Thermal efficiency of 4-stroke engine is more due to positive scavenging</p>	(C)
101	26-10-2019	39	<p>The major difficulty during welding of aluminum is due to its</p> <p>(A) high tendency of oxidation</p> <p>(B) high thermal conductivity</p> <p>(C) low melting point</p> <p>(D) low density</p>	(A)
101	26-10-2019	40	<p>A block weighing 200 N is in contact with a level plane whose coefficients of static and kinetic friction are 0.4 and 0.2, respectively. The block is acted upon by a horizontal force (in newton) <math>P=10t</math>, where <math>t</math> denotes the time in seconds. The velocity (in m/s) of the block attained after 10 seconds</p> <p>(A) 5</p> <p>(B) 6</p> <p>(C) 8</p> <p>(D) 3</p>	(A)
101	26-10-2019	41	<p>Scavenging air in diesel engine means</p> <p>(A) air used for combustion sent under pressure</p>	(D)

			<p>(B) forced air for cooling cylinder</p> <p>(C) burnt air containing products of combustion</p> <p>(D) air used for forcing burnt gases out of engine's cylinder during the exhaust period</p>	
101	26-10-2019	42	<p>In electro-discharge machining, the tool and work piece are submerged in</p> <p>(A) Kerosene oil</p> <p>(B) Sulphuric acid</p> <p>(C) Aluminium slurry</p> <p>(D) Nitric acid</p>	(A)
101	26-10-2019	43	<p>For brittle materials having static load, factor of safety is given as the ratio of</p> <p>(A) endurance strength and design stress</p> <p>(B) design stress and allowable stress</p> <p>(C) working stress and allowable stress</p> <p>(D) ultimate strength and design stress</p>	(D)
101	26-10-2019	44	<p>The boiling point of ammonia is</p> <p>(A) - 100 deg Cel</p> <p>(B) - 50 deg Cel</p> <p>(C) - 33.3 deg Cel</p> <p>(D) 0 deg Cel</p>	(C)
101	26-10-2019	45	<p>The thread note for a typical bolt will include the</p> <p>(A) Material</p> <p>(B) Centre line</p> <p>(C) Major diameter of the thread</p> <p>(D) Offset distance</p>	(C)
101	26-10-2019	46	<p>Euler's formula holds good only for</p> <p>(A) Long columns</p>	(A)

			<p>(B) Short columns</p> <p>(C) Both long and short columns</p> <p>(D) Weak columns</p>	
101	26-10-2019	47	<p>A hollow iron pipe is 21cm long and its external diameter is 8cm. If the thickness of the pipe is 1cm and iron weighs <math>8\text{gm/cm}^3</math>, then the weight of the pipe is -----</p> <p>(A) 3.6kg</p> <p>(B) 36kg</p> <p>(C) 36.9kg</p> <p>(D) 3.696kg</p>	(D)
101	26-10-2019	48	<p>Capillary action is due to</p> <p>(A) Surface tension</p> <p>(B) Cohesion of the liquid</p> <p>(C) Adhesion of the liquid molecules and the molecules on the surface of a solid</p> <p>(D) All of the options</p>	(D)
101	26-10-2019	49	<p>The saturation temperature of steam with increase in pressure increases</p> <p>(A) linearly</p> <p>(B) rapidly first and then slowly</p> <p>(C) slowly first and then rapidly</p> <p>(D) inversely</p>	(B)
101	26-10-2019	50	<p>Angles project true size, only when the plane containing the angle and plane of projection are</p> <p>(A) Adjacent</p> <p>(B) Aligned</p> <p>(C) Perpendicular</p> <p>(D) Parallel</p>	(D)

101	26-10-2019	51	<p>Time dependent permanent deformation is called</p> <p>(A) Plastic deformation</p> <p>(B) Elastic deformation</p> <p>(C) Creep</p> <p>(D) Anelastic deformation</p>	(C)
101	26-10-2019	52	<p>Consider a cantilever beam, having negligible mass and uniform flexural rigidity, with length 0.01m. The frequency of vibration of the beam, with a 0.5 kg mass attached at the free tip, is 100 Hz. The flexural rigidity (in <math>\text{Nm}^2</math>) of the beam is</p> <p>(A) 0.1</p> <p>(B) 0.08</p> <p>(C) 1</p> <p>(D) 0.065</p>	(D)
101	26-10-2019	53	<p>Which is best suitable method of layout for Ship building</p> <p>(A) Process Layout</p> <p>(B) Product layout</p> <p>(C) Fixed position layout</p> <p>(D) None of the options</p>	(C)
101	26-10-2019	54	<p>Which type of welding is highly recommended for welding materials having smaller wall thickness?</p> <p>(A) TIG</p> <p>(B) MAW</p> <p>(C) SAW</p> <p>(D) None of the options</p>	(A)
101	26-10-2019	55	<p>Air in a room is at <math>35^\circ\text{C}</math> and 60% relative humidity (RH) The pressure in the room is 0.1 Mpa. The saturation pressure of water at <math>35^\circ\text{C}</math> is 5.63 kPa. The humidity ratio of the air (in grain/kg of dry air) is</p> <p>(A) 21.74</p>	(A)

			(B) 22.3 (C) 25.17 (D) 20.37	
101	26-10-2019	56	Which of the following represent reducing scale? (A) 1:1 (B) 1:2 (C) 2:1 (D) 10:1	(B)
101	26-10-2019	57	Engineering stress-strain curve and True stress-strain curve are equal up to (A) Proportional limit (B) Elastic limit (C) Yield point (D) Tensile strength point	(C)
101	26-10-2019	58	Thermal conductivity of solid metals with rise in temperature normally (A) increases (B) decreases (C) remains constant (D) may increase or decrease depending on temperature	(B)
101	26-10-2019	59	The type of coupling used to join two shafts whose axes are neither in same straight line nor parallel but intersect is (A) flexible coupling (B) universal coupling (C) oldham coupling (D) chain coupling	(B)
101	26-10-2019	60	When heat is transferred by molecular collision, it is referred to as heat transfer by	(B)

(A) conduction

(B) convection

(C) radiation

(D) scattering