Subject Code : 105 V

| Subject Code | Exam Date | $\begin{aligned} & \mathbf{Q} \\ & \text { Id } \end{aligned}$ | Questions | Answer Key |
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| 105 | 12-02-2021 | 561 | Government of India has decided to celebrate the birthday of Netaji Subhas Chandra Bose on $\qquad$ every year as "PARAKRAM DIWAS" to inspire people of the country, especially the youth, to act with fortitude in the face of adversity as Netaji did, and to infuse in them a spirit of patriotic fervour. <br> (A) 23rd January <br> (B) 3rd January <br> (C) 23rd December <br> (D) 3rd December | (A) |
| 105 | 12-02-2021 | 562 | Fouaad Mirza, who was recently seen in news, is a famous sportsperson of which event, qualified to represent India in the Tokyo Olympics? <br> (A) Javelin Throw <br> (B) Equestrian sports <br> (C) Shot put <br> (D) Boxing | (B) |
| 105 | 12-02-2021 | 563 | How is the Railway Protection Force (RPF) recently renamed by the Ministry of Railways? <br> (A) Railway Protection Service <br> (B) Indian Railway Force Service <br> (C) Indian Railway Service <br> (D) Indian Railway Protection Force Service | (D) |
| 105 | 12-02-2021 | 564 | Which Indian body recently warned against recording its sessions using mobile phones? <br> (A) Supreme Court <br> (B) Rajya Sabha | (B) |


|  |  |  | (C) RBI <br> (D) Ministry of Defence |  |
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| 105 | 12-02-2021 | 565 | Chauri Chaura is a town located in which Indian state/ UT? <br> (A) Uttar Pradesh <br> (B) Punjab <br> (C) Bihar <br> (D) West Bengal | (A) |
| 105 | 12-02-2021 | 566 | Look carefully for the pattern, and then choose which pair of numbers comes next. <br> 42403835333128 <br> (A) 2730 <br> (B) 2624 <br> (C) 2623 <br> (D) 3430 | (B) |
| 105 | 12-02-2021 | 567 | A,B,C,D,E,F and G are travelling in three buses $\mathrm{X}, \mathrm{Y}, \mathrm{Z}$ with at least two of them in any of these buses. Each of them likes a different sweet viz. Petha, Rasmalai, Rasagolla, Kheer, Sandesh, Chamcham and Jalebi, but not necessarily in the same order. <br> B is travelling in bus Y with E . <br> E's favourite sweet is Jalebi. <br> Those who travel in Bus X do not like Petha and Kheer. <br> The one who likes Rasmalai travels only with G in Bus Z. <br> The one whose favourite sweet is Sandesh does not travel in the same bus with either E or G . <br> A does not travel in Bus Y. <br> A likes Chamcham. <br> D and F are travelling in the same bus. <br> F does not like Rasagolla. <br> The one whose favourite sweet is Kheer does not travel in bus Y. <br> In which bus three of them are travelling? | (B) |


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|  |  |  | (A) Either X or Y <br> (B) Only X <br> (C) Only Z <br> (D) Only Y |  |
| 105 | 12-02-2021 | 568 | 'Reading' is related to 'knowledge' in the same way as 'Work' is related to: <br> (A) Money <br> (B) Employment <br> (C) Experience <br> (D) Engagement | (C) |
| 105 | 12-02-2021 | 569 | Find the day of the week on 27th Dec 1985. <br> (A) Sunday <br> (B) Monday <br> (C) Friday <br> (D) Thursday | (C) |
| 105 | 12-02-2021 | 570 | In a row of 20 persons, the position of Riya from the left side of the row is 6th. Find the no. of persons after Riya in the row? <br> (A) 14 <br> (B) 15 <br> (C) 16 <br> (D) 17 | (A) |
| 105 | 12-02-2021 | 571 | Rearrange the jumbled letters to make meaningful words and then select the one which is different. <br> (A) OMESU <br> (B) ROTINOM <br> (C) RETNIRP | (D) |


|  |  |  | (D) RETIAW |  |
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| 105 | 12-02-2021 | 572 | Choose the synonym of the word "AUGUST" <br> (A) Common <br> (B) Dignified <br> (C) Ridiculous <br> (D) Petty | (B) |
| 105 | 12-02-2021 | 573 | Find out whether there is any Grammatical error in the underlined part of the below sentence. If yes, indicate the correct answer among the given options, else indicate "No correction": <br> Because of the Internet, working at jobs at home have become much more common. <br> (A) has become <br> (B) had become <br> (C) may become <br> (D) No correction | (A) |
| 105 | 12-02-2021 | 574 | Fill up with the correct preposition: <br> I will have finished this project $\qquad$ Friday. <br> (A) by <br> (B) from <br> (C) since <br> (D) on | (A) |
| 105 | 12-02-2021 | 575 | Complete the following sentence meaningfully with options given: <br> There is a general $\qquad$ in the State that our ethics are declining and that our moral standards are $\qquad$ <br> (A) optimism, improving | (D) |


|  |  |  | (B) idea,futile <br> (C) feeling, normalising <br> (D) complaint, deteriorating |  |
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| 105 | 12-02-2021 | 576 | What is the correct meaning of the underlined phrase in the following sentence: <br> My friend had the special right or advantage of visiting England as the official guest of the Queen. <br> (A) reputation <br> (B) masterpiece <br> (C) extravagance <br> (D) privilege | (D) |
| 105 | 12-02-2021 | 577 | Antonym of Admire <br> (A) cheerful <br> (B) detest <br> (C) clumsy <br> (D) dismay | (B) |
| 105 | 12-02-2021 | 578 | Select the correct sentence. <br> (A) If the cab had started on time, she would have reached office on time. <br> (B) If the cab would have been started on time, she had reached office on time. <br> (C) If the cab would have started on time, she would have reached the office on time. <br> (D) If the cab would have started on time, she had reached office on time. | (A) |
| 105 | 12-02-2021 | 579 | Choose the correct alternative which can be substituted for the below given sentence: <br> The sales manager tried every trick in the book to sell the flat to my uncle, but they failed. | (C) |


| 2/15/2021 |  |  | 2/postExam/qp_check_dashboard.php?exam=Y29jaGluZmVidHdIbHZI <br> (A) Try to give the least discount <br> (B) Not ready to bargain <br> (C) Try every possible way <br> (D) Stuck in the midway |  |
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| 105 | 12-02-2021 | 580 | Choose the correct alternative which can be substituted for the below given clause: <br> 'Lasting for a very short time' <br> (A) Gregarious <br> (B) Snob <br> (C) Ephemeral <br> (D) Belligerent | (C) |
| 105 | 12-02-2021 | 581 | 12 men or 15 women can finish a work in 24 days, in how many days can the same work be finished by 8 men and 8 women? <br> (A) 20 <br> (B) 15 <br> (C) 22 <br> (D) 12 | (A) |
| 105 | 12-02-2021 | 582 | A man can cover a certain distance in 42 minutes. He covers two thirds of it at $4 \mathrm{Km} / \mathrm{hr}$ and the remaining $5 \mathrm{Km} / \mathrm{hr}$. The total distance is <br> (A) 3 km <br> (B) 9 km <br> (C) 1 km <br> (D) 4.5 km | (A) |
| 105 | 12-02-2021 | 583 | Within a rectangular garden 10 m wide and 20 m long, we wish to pave a walk around the borders of uniform width so as to leave an area of $96 \mathrm{~m}^{2}$ for flowers. How wide should the walk be? | (B) |


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|  |  |  | (A) 1 m <br> (B) 2 m <br> (C) 3 m <br> (D) 4 m |  |
| 105 | 12-02-2021 | 584 | A boat can travel with a speed of $13 \mathrm{~km} / \mathrm{hr}$ in still water. If the speed of the stream is $4 \mathrm{~km} / \mathrm{hr}$, find the time taken by the boat to go 68 km downstream. <br> (A) 3 hours <br> (B) 4 hours <br> (C) 5 hours <br> (D) 8 hours | (B) |
| 105 | 12-02-2021 | 585 | If 120 is $20 \%$ of a number, then $120 \%$ of that number will be : <br> (A) 560 <br> (B) 720 <br> (C) 680 <br> (D) 480 | (B) |
| 105 | 12-02-2021 | 586 | A, B, C enter into a partnership investing Rs. 35,000 and Rs. 45,000 and Rs. 55,000 respectively. The respectively shares of $A, B, C$, in an annual profit of Rs. 40,500 are: <br> (A) Rs. 10,500, Rs. 13,500 , Rs. 16,500 <br> (B) Rs. 11,500, Rs. 13,000, Rs. 16,000 <br> (C) Rs. 11,000, Rs. 14,000, Rs. 15,500 <br> (D) Rs. 11,500 , Rs. 12,500 , Rs. 16,500 | (A) |
| 105 | 12-02-2021 | 587 | Two pipes fill a tank in 10 hours and 12 hours respectively, while a third pipe empties the full tank in 20 hours. If all the three pipes operate simultaneously, in how much time the tank will be filled? | (C) |



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|  |  |  | across a 200 V supply. The total power consumed by each lamp will be $\qquad$ watts. <br> (A) 25 <br> (B) 50 <br> (C) 100 <br> (D) 200 |  |
| 105 | 12-02-2021 | 592 | In a dc generator, the brushes on the commutator are shifted from geometrical neutral positions to <br> (A) obtain highest generator voltage <br> (B) avoid sparking <br> (C) obtain highest generator efficiency <br> (D) All of the options | (B) |
| 105 | 12-02-2021 | 593 | The essential condition for stable parallel operation of two de generators having similar characteristics is that they should have <br> (A) same kilowatt output ratings <br> (B) drooping voltage characteristics <br> (C) same percentage regulation <br> (D) same no-load and full-load speeds | (B) |
| 105 | 12-02-2021 | 594 | Of the following circuits, the one which involves storage is <br> (A) RS Latch <br> (B) mux <br> (C) NAND <br> (D) decoder | (A) |
| 105 | 12-02-2021 | 595 | The number of interrupt lines in 8085 is <br> (A) 2 <br> (B) 3 | (D) |

(C) 4
(D) 5

## Hardwire control means

(A) Controlling the hardware with the help of software
(B) Controlling the plant with relays, contactors etc. without any programmable controller
(C) Controlling the plant with relays, contactors etc. with programmable controller
(D) None of the options

The stator of phase shifting transformer for use in conjunction with an A.C. potentiometer usually has a
(A) Single-phase winding
(B) Two-phase winding
(C) Three-phase winding
(D) Any of the options

In a 3-phase power measurement by two wattmeter method, the reading on one of the wattmeter is zero. The power factor of the load must be $\qquad$
(A) unity
(B) 0.5
(C) 0.3
(D) zero

12-02-2021
A control system has the following transfer function value of the corresponding time function is
(A) 1
(B) $1 / 8$
(C) $7 / 8$

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|  |  |  | (D) -1 |  |
| 105 | 12-02-2021 | 600 | Murray loop test can be used for location of <br> (A) ground fault on a cable <br> (B) short circuit fault on a cable <br> (C) both the ground fault and short-circuit fault <br> (D) None of the options | (C) |
| 105 | 12-02-2021 | 601 | The time constant of a first order process with resistance R and capacitance C is <br> (A) $\mathrm{R}+\mathrm{C}$ <br> (B) $\mathrm{R}-\mathrm{C}$ <br> (C) RC <br> (D) $1 / \mathrm{RC}$ | (C) |
| 105 | 12-02-2021 | 602 | FOUNDATION Fieldbus is unique in that: <br> (A) It has always been the leading fieldbus standard <br> (B) Data communication is entirely deterministic <br> (C) Power and data share the same wires <br> (D) Control algorithms may reside in the field devices | (D) |
| 105 | 12-02-2021 | 603 | What is the equivalent pressure in Pascal for 1atm pressure? <br> (A) 101.3 Pa <br> (B) 101.3 KPa <br> (C) 50.4 Pa <br> (D) 50.4 Kpa | (B) |
| 105 | 12-02-2021 | 604 | In a measuring system what is the term used to specify a difference between higher and lower calibration values? | (B) |


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|  |  |  | (A) Range <br> (B) Span <br> (C) Drift <br> (D) Threshold |  |
| 105 | 12-02-2021 | 605 | Which of the following error is caused by a reversal of measured property? <br> (A) Hysterisis <br> (B) Noise <br> (C) Digitization error <br> (D) Quantization error | (A) |
| 105 | 12-02-2021 | 606 | Which of the following is NOT one of the four major data processing functions of a computer? <br> (A) gathering data <br> (B) processing data into information <br> (C) analyzing the data or information <br> (D) storing the data or information | (C) |
| 105 | 12-02-2021 | 607 | The r.m.s. value of half wave rectified sine wave is 200 V . The r.m.s. value of full wave rectified AC. will be <br> (A) 100 V <br> (B) 141.4 V <br> (C) 111 V <br> (D) 282.8 V | (D) |
| 105 | 12-02-2021 | 608 | The frequency of domestic power supply in India is <br> (A) 60 Hz <br> (B) 50 Hz <br> (C) 100 Hz | (B) |


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| :---: | :---: | :---: | :---: | :---: |
|  |  |  | (D) 200 Hz |  |
| 105 | 12-02-2021 | 609 | Direction of rotation of motor is determined by <br> (A) Lenz's law <br> (B) Faraday's law <br> (C) Fleming's left-hand rule <br> (D) Coulomb's law | (C) |
| 105 | 12-02-2021 | 610 | Orifice type viscometer convert viscosity to <br> (A) Force <br> (B) Pressure <br> (C) Displacement <br> (D) Potential Difference | (B) |
| 105 | 12-02-2021 | 611 | What is the span of an ammeter with range -30 to +30 A ? <br> (A) 60 <br> (B) -60 <br> (C) 30 <br> (D) 20 | (A) |
| 105 | 12-02-2021 | 612 | Which of the following is an analog transducer? <br> (A) Encoders <br> (B) Digital tachometers <br> (C) Strain gauge <br> (D) Limit switches | (C) |
| $105$ | 12-02-2021 | $613$ | For a Measurement, indicated value is 225 V while true value is 226 V . What will be the static error of an instrument? <br> (A) -0.5 V | (D) |


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|  |  |  | (B) -1 V <br> (C) 0.5 V <br> (D) 1 V |  |
| 105 | 12-02-2021 | 614 | Which of the given statement is true for a zero-order system? <br> (A) Constant transfer function <br> (B) Varying transfer function with time <br> (C) Transfer function $=1 / \mathrm{S}$ <br> (D) Transfer function $=1 / \mathrm{S} 2$ | (A) |
| 105 | 12-02-2021 | 615 | Difference between input signal and feedback signal is known as $\qquad$ <br> (A) Output signal <br> (B) Feedback factor <br> (C) Error signal <br> (D) Input signal | (C) |
| 105 | 12-02-2021 | 616 | Which is the best type of RTD for longer lengths and applications? <br> (A) 4 wire RTD <br> (B) 2 wire RTD <br> (C) 3 wire RTD <br> (D) 1 wire RTD | (A) |
| 105 | 12-02-2021 | 617 | What is the time constant for a resistor-capacitor network? <br> (A) RC <br> (B) R <br> (C) C <br> (D) $\mathrm{R} / \mathrm{C}$ | (A) |


| 105 | 12-02-2021 | 618 | A small data file in the browser. <br> (A) FTP <br> (B) Web Server <br> (C) Cookie <br> (D) Database | (C) |
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| 105 | 12-02-2021 | 619 | ISP is? <br> (A) Intranet Service Provider <br> (B) Intranet System Processing <br> (C) Intelligent System Processing <br> (D) Internet Service Provider | (D) |
| 105 | 12-02-2021 | 620 | Resistance potentiometer consists of $\qquad$ <br> (A) capacitive element <br> (B) resistive element <br> (C) inductive element <br> (D) no elements | (B) |
| 105 | 12-02-2021 | 621 | Resistor is a $\qquad$ element <br> (A) Zero order <br> (B) First order <br> (C) Second order <br> (D) None of the options | (A) |
| 105 | 12-02-2021 | 622 | The flow can be measured directly by <br> (A) Pressure transducer <br> (B) Temperature switch <br> (C) Differential Pressure transducer and Square Root Extractor | (C) |




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|  |  |  | (D) PID |  |
| 105 | 12-02-2021 | 632 | Which of the following is a digital transducer? <br> (A) LVDT <br> (B) Encoder <br> (C) Thermistor <br> (D) Strain gauge | (B) |
| 105 | 12-02-2021 | 633 | A standard set of rules that allow electronic devices to communicate data with each other <br> (A) Ruler <br> (B) HMI <br> (C) Protocols <br> (D) None of the options | (C) |
| 105 | 12-02-2021 | 634 | A sine wave has a frequency of 50 Hz . Its angular frequency is $\qquad$ radian/second. <br> (A) $100 \pi$ <br> (B) $50 \pi$ <br> (C) $25 \pi$ <br> (D) $5 \pi$ | (A) |
| 105 | 12-02-2021 | 635 | The period of a sine wave is 0.02 seconds. Its frequency is <br> (A) 20 Hz <br> (B) 30 Hz <br> (C) 40 Hz <br> (D) 50 Hz | (D) |
| 105 | 12-02-2021 | 636 | "Pressure applied at any point of a liquid enclosed in a container, is transmitted without loss to all other parts of the liquid" is called | (D) |


| 2/15/2021 |  | 20.191. | 2/postExam/qp_check_dashboard.php?exam=Y29jaGluZmVidHdIbHZI <br> (A) Newton's Law <br> (B) Archimedes Law <br> (C) Einstein Law <br> (D) Pascal's Law |  |
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| 105 | 12-02-2021 | 637 | Some substance generates the voltage when they are subjected to mechanical forces or stress along specific planes. Such substance is known as <br> (A) Piezoelectric <br> (B) Thermo-electric <br> (C) Photo-electric <br> (D) Radio-active | (A) |
| 105 | 12-02-2021 | 638 | The reactance offered by a capacitor to alternating current of frequency 50 Hz is 20 ohms . If frequency is increased to 100 Hz , reactance becomes $\qquad$ ohms. <br> (A) 2.5 <br> (B) 5 <br> (C) 10 <br> (D) 15 | (C) |
| 105 | 12-02-2021 | 639 | Thermal wells are used in the temperature measurement to <br> (A) Guard against corrosive and oxidizing action on thermocouple materials <br> (B) Reduce measuring lag <br> (C) Increase the fidelity <br> (D) Increase the sensitivity | (A) |
| 105 | 12-02-2021 | 640 | Mcleod gauge is used to measure the <br> (A) Point velocity <br> (B) Flow rate | (C) |

(C) Low pressure
(D) Temperature

