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| **SAMPLE TEST QUESTION** | |
| **1. APTITUDE TEST** | |
| **Directions:** In the following question, pick the choice whose meaning is opposite to the word shown in capitals. | |
| 1. | HOI POLLOI: |
|  | (1) Cannibalism (2) Tyranny (3) The past (4) Aristocracy (5) Capitalist |
| **Directions:** In the following question, the descriptive sentence is aptly described by just one word. Select the choice which give the meaning most appropriately: | |
| 2. | One who talks in his sleep: |
|  | (1) Somniloquist (2) Somnivocalist (3) Somnambulist (4) Somnalesist (5) None of these |
| **Directions:** In each question below you will find three words. The first two words are related to each other in some way. The third word is also related in the same way to one of the four alternatives marked as: (1), (2), (3) and (4). Find it out. | |
| **Directions:** In each question below you will find three words. The first two words are related to each other in some way. The third word is also related in the same way to one of the four alternatives marked as: (1), (2), (3) and (4). Find it out. | |
| 3. | REMAIN : STAY LEAVE: ? |
|  | (1) Good-bye (2) Run (3) Farewell (4) Depart |
| 4. | POET : VERSE SCULPTOR : ? |
|  | (1) Artist (2) Chisel (3) Statue (4) Marble |
| **Directions:** In each question below you will find words, four of which are alike in some respect; they have something in common and belong to one category. Only one word is different from them; it does not belong to the category to which the other four belong. Which word is different from the rest? | |
| 5. | (1) Foot ball (2) Cricket (3) Polo (4) Chess (5) Hockey |
| 6. | (1) Eye (2) Nose (3) Tongue (4) Finger (5) Liver |
| 7. | In a code where a numeral represents an alphabet the most likely code for the word RECESS is: |
|  | (1) 913155 (2) 723245 (3) 865277 (4) 233300 (5) 983499 |
| 8. | If in a code a,b,c, means `try your best', b,o,p,o means `try again & again' x,y,a means `all the best' - Then `your best again' is represented by |
|  | (1) c a o (2) p o c (3) a c p (4) y c a (5) o c y |
| **Directions:** In the following question complete the given series | |
| 9. | 48,24,72,36,108, . . . . . . . . . . . |
|  | (1) 110 (2)115 (3) 64 (4) 54 (5) 125 |
| 10. | Of the following numbers which one is the greatest? |
|  | (1) (0.6 x 0.6)-12 (2) 0.004 x 100 (3) (-0.7)4 (4) 0.2 x 0.2 |
| 11. | Which of the following numbers is least? |
|  | (1) (1/4)2 (2) 49 (3) 4-9 (4) 42 |
| 12. | It costs Rs.4.25 for two adults and their child to attend the Circus. If the child's ticket is half the price of adult's ticket, what is the price of an adult's ticket? |
|  | (1) Rs.0.75 (2)Rs. 1.70 (3) Rs.1.75 (4) Rs.1.44 |
| 13. | If `a' is less than 50 and 'b' is less than 25, it follows that: |
|  | (1) a=2b (2) `a` is greater than b (3) a+b is less than 75 (4) a-b =25 (5) None of these |
| **2A. TECHNICAL TEST (for Engineer Trainees)** | |
| **PART 1 - GENERAL** | |
| 1. | A series combination of Resistance and Capacitor is put across a Thyristor to protect it from: |
|  | (1) High Currents (2) High voltage (3) High rate of change of voltage (4) High rate of change of current (5) Thermal run away |
| 2. | A Babbitt is: |
|  | (1) An eutectic of iron and iron phosphide  (2) A gadget of measuring volume  (3) Antimony bearing lead or tin alloy  (4) A measure of magnetic induction produced in a material  (5) None of these above |
| 3. | An Induction motor is: |
|  | (1) Self-starting with zero torque (2) Self-starting with very high torque (3) Self-starting with smaller torque than the rated torque (4) None of the above |
| **PART II - SPECIALISED FIELDS** | |
| **ELECTRICAL ENGINEERING** | |
| 1. | The transformer capacity is 200 KVA, percentage impedance is 4% and tolerance impedance is 10%. The short circuit current in KA is: |
|  | (1) 0.39 (2) 8.21 (3) 8210 (4) 82100 (5) 0.821 |
| 2. | A 20 KVA transformer was found to have 600 W Iron losses and 700 W Copper losses, when supplying full load at 0.8 power factor. The efficiency of the transformer on full load is: |
|  | (1) 92.5% (2) 91.2% (3) 100% (4) 98.2% (5) None of these |
| 3. | A water heater holds 20 litres of water. An electric immersion heater which will raise the temperature of the water from 10 degree C to 88 degree C in 55 minutes and efficiency of 85%. The rating in KW is |
|  | (1)7685000 (2)2330 (3)2.33 (4) 23.3 (5) None of these |
| **ELECTRONICS ENGINEERING** | |
| 1. | A 10 Kw transistor is modulated to 80%. The average side band power will be: |
|  | (1) 1.8 KW (2) 8 KW (3) 3.2 KW (4) 4.6 KW (5) 4.26 KW |
| 2. | A resonant circuit has the resonance frequency 1 MHz and quality factor, Q, 100. Its 3-db band width is: |
|  | (1) 10 KHz (2) 5 KHz (3) 100 KHz (4) 20 KHz (5) None of these |
| **MECHANICAL ENGINEERING** | |
| 1. | The inlet valve of a four stroke cycle I.C. engine remains open for nearly: |
|  | (1) 180o (2) 125o (3) 235o (4) 200o (5) 275o |
| 2. | Diesel cycle efficiency is maximum when the cut off is: |
|  | (1) Increased (2) Decreased (3) Maximum (4) Minimum (5) Zero |
| **ANSWER KEY** | |
| **1. APTITUDE TEST** | |
|  | 1(4) 2. (1) 3.(4) 4.(3) 5.(4) 6.(5) 7.(1) 8. (1) 9.(4) 10.(1) 11.(3) 12.(2) 13.(3) |
| **2A. TECHNICAL TEST - PART I - GENERAL** | |
|  | 1(3) 2.(3) 3.(3) |
| **PART II - SPECIALISED FIELDS** | |
| 1. | ELECTRICAL ENGG. 1. (2) 2. (1) 3.(3) |
| 2. | ELECTRONICS ENGG. 1. (3) 2. (1) |
| 3. | MECHANICAL ENGG. 1. (3) 2. (5) |
| The tests have been designed to determine whether you have a sound knowledge of your subject. You are, therefore, advised to revise all the sections of your course syllabus in order to prepare adequately for the test. | |
|  | **ETs - 2010** |