

### **PGDC-Model Paper**

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# Important Notice about the Entrance test for PGDC-2008 (CET-2008)

#### Admission to PGDC-2008 (CET-2008)

#### Information for the students

- Admit cards shall be dispatched to the students at their latest mailing address latest by 28<sup>th</sup> May 2008.
- In case any candidate does not receive, the same could be downloaded after 5<sup>th</sup> June 2008.
- For any queries, please send e-mails in the following email ID.

#### pdnpti@yahoo.com.

 All the candidates have been given the centre of examination as per their preference given in column 14 of the application form.

Contact Phone Numbers: 011-26940722 / 26952083 / 26971551

#### Question pattern for the CET

Total number of Questions - 120 Numbers

#### Questions breakup

General Aptitude - 30 Numbers
 General Engineering & Science - 30 Numbers
 Engineering Specialization - 60 Numbers
 Viz. Mechanical or Electrical/EEE or Electronics/ECE/Instrumentation

A Sample question paper for the examination is given in the following pages.

### The following is the model question papers for the 90 minutes CET. Sample Paper

#### Q1. to Q30 Part-I. General Aptitude (common)

Q1. If TEST is to be coded as SERT then STUDEN	I IS to	o be	coded as
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- i. RTUCDMS
- ii. RTTDDNV
- iii. RTTDDNS
- iv. SSUCEMT
- Q2. What is the smallest number that may be added to make 899 a perfect cube root?
  - i. 71
  - ii. 101
  - iii. 171
  - iv. 1
- Q3. At what price a car is to be sold to get 20% gain If its purchase price is of Rs. 80.000/-?
  - i. Rs. 92000
  - ii. Rs. 96000
  - iii. Rs. 64000
  - iv. Rs. 95000

and so on

#### Q31. to Q60. General Engineering/Science (Common)

- Q31. 1 Horse power(HP) is equal to
  - i. 726 Watts
  - ii. 736 Watts
  - iii. 746 Watts
  - iv. 732 Watts
- Q32. The function of a fuse in an electrical circuit is to
  - i. heat up
  - ii. protect by opening circuit
  - iii. sort by melting the circuit
  - iv. fuse for formation of alloy

- Q33. For proper combustion, the following materials are required
  - i. proper fuel
  - ii. adequate air
  - iii. heat
  - iv. all the above

and so on.

#### **PART-II**

#### Q61. to Q120 Model question paper (Mechanical Specialization)

- Q61. A perfect engine works on the Carnot cycle between 1000degree centigrade and 200 degree centigrade. The efficiency of the engine will be
  - i. 80%
  - ii. 60%
  - iii. 62.8%
  - iv. 37.2%
- Q62. At critical point the enthalpy of vaporization is
  - v. zero
  - vi. Minimum
  - vii. Maximum
  - viii. Unpredictable
- Q63. When a strip made of iron and copper is heated
  - i. It gets twisted
  - ii. Iron bends on convex side
  - iii. Iron bends on concave side
  - iv. The strip breaks away

And so on

#### PART-II

#### **Q61. to Q120 Model question paper (Electrical Specialization)**

- Q61. The percent regulation of the alternator at unity power factor is
  - i. 1.05
  - ii. 10.5
  - iii. 21.5
  - iv. 27.5

- Q62. Zero power factor method of an alternator is used to find its
  - field resistance
  - ii. armature resistance
  - iii. efficiency
  - iv. voltage regulation
- Q63. An induction motor is
  - i. self-starting with zero torque
  - ii. self-starting with high torque
  - iii. self-starting with small torque as compared to rated torque
  - iv. assisted starting with zero torque

and so on

#### PART-II

## Q61. to Q120 Model question paper (Electronics/Electronics & Communication / Instrumentation Specialization)

- Q61. The intrinsic strand off ratio  $(\eta)$  of a UJT lies between
  - i. zero
  - ii. Greater than 1
  - iii.  $0.5 < \eta < 1$
  - iv.  $0 < \eta < 0.5$
- Q62. In a single phase dual converter,  $\alpha_1$  and  $\alpha_2$  are firing angles of the two converters. Then
  - i.  $\alpha 1 \alpha 2 = \pi/2$
  - ii.  $\alpha 1 + \alpha 2 = \pi$
  - iii.  $\alpha 1 \alpha 2 = \pi$
  - iv.  $\alpha 1 + \alpha 2 = \pi/2$
- Q63. Microwave antenna aperture efficiency depends on
  - i. Feed pattern
  - ii. Low side lobe levels
  - iii. Surface losses
  - iv. Antenna aperture

and so on