

(Sample Question Paper. The Actual Questions will vary)

- Q. 1 Displacement current density for time invariant field is
- a) Infinite c) Zero
- b) Indeterminate d) A function of field
- Q.2 The correct sequence of increasing order to electrical conductivity of the given materials is
- a) silicon, doped germanium, copper, gold
- b) doped germanium, silicon, copper, gold
- c) doped germanium, silicon, gold, copper
- d) silicon, doped germanium, gold, copper
- Q.3 A 0 -300 V voltmeter has an error of $\pm 2\%$ of full scale deflection. What would be the range of readings if true voltage is 30V?
- a) 24V-36V c) 25V-35V
- b) 29.4 V- 30.6 V d) 28V-32V
- Q.4 The material of wires used for making resistance standards is usually:
- a) manganin c) copper
- b) nichrome d) phosphor bronze
- Q.5 In an induction type energy meter, maximum torque is produced when the phase angle between the two fluxes is :
- a) 0° b) 45° c) 60° d) 90°

Mechanical Engineering
(Sample Question Paper. The Actual Questions will vary)

1. A solid shaft is used to transmit 120π kilowatt at 120rpm. The torque transmitted by the shaft is given as
 - a) 30 kNm
 - b) 60 kNm
 - c) 90 kNm
 - d) 120 kNm
2. For a simply supported beam of length 'L' carrying a uniformly distributed load of 'w' per unit length over the entire span, the value of maximum B.M is equal to
 - a) $\frac{wL^2}{4}$
 - b) $\frac{wL^2}{8}$
 - c) $\frac{wL^3}{4}$
 - d) $\frac{wL^3}{8}$
3. For two gears to mesh
 - a) the diametral pitch of both gears must be the same
 - b) tooth thickness of both gears must be same
 - c) number of teeth on both gears must be same
 - d) whole depth of both gears must be same
4. The pairs of gears have 18 and 40 teeth respectively, the centre distance is 58 mm, the module is equal to
 - a) 1 mm
 - b) 2 mm
 - c) 3 mm
 - d) 4 mm
5. Which of the following instruments is used to measure temperature?
 - a) Bourdon gage
 - b) Stroboscope
 - c) Thermocouple
 - d) Dial gage

Civil Engineering

(Sample Question Paper. The Actual Questions will vary)

- 1) The standard modular size of common building brick as _____
A) 190 x 90 x 90 (mm) B) 190 x 90 x 40 (mm)
C) Both (A) and (B) D) 200 x 100 x 100 (mm)
- 2) Proportion of cement mortar for damp-proof course is :
A) 1:1 B) 1:2
C) 1:4 C) 1:6
- 3) Which method is used mainly for non-destructive testing of piles?
A) Rebound hammer method B) Water-response method
C) Ultrasonic pulse velocity tester D) Windsor probe test
- 4) Pitch for industrial roof trusses for corrugated Galvanized Iron (GI) sheets is _____
A) 1/6 to 1/2 B) 1/24 to 1/12
C) 1/3 to 1/6 D) 1/48 to 1/12
- 5) Lug angles are used in _____
A) Compression members B) Tension members
C) Plate girder D) Bracings

Geology

(Sample Question Paper. The Actual Questions will vary)

Q.1 Which is the code for letter K?

- | | |
|------|------|
| a) e | c) d |
| b) m | d) b |

Q.2 Find the odd man out :

- | | |
|--------|--------|
| a) Cut | c) Nut |
| b) Put | d) But |

Q.3 If $3/p = 6$ and $3/q = 15$ then $p-q = ?$

- | | |
|----------|-----------|
| a) $1/3$ | c) $3/10$ |
| b) $2/5$ | d) $5/6$ |

Q.4 The youngest oceanic crust is found in

- | | |
|------------------|-------------------|
| a) Indian Ocean | c) Atlantic Ocean |
| b) Pacific Ocean | d) Arctic Ocean |

Q.5 Which of the following is a modern example of Aulacogen related river

- | | |
|----------------|----------------------|
| a) Niger River | c) Nile River |
| b) Ganga River | d) Mississippi River |

Architecture

(Sample Question Paper. The Actual Questions will vary)

- 1) A flux of 50 lumen falls perpendicularly on the surface area of 100 sq.m. The surface illumination in lux is;
 - a) 0.5
 - b) 2
 - c) 150
 - d) 5000
- 2) The neighborhood recreation does not have one of the following spaces;
 - a) Totlots
 - b) Parks
 - c) Play areas
 - d) Sports Centre
- 3) The sound level for Audiometric testing room should be kept at;
 - a) 20 dB
 - b) 30 dB
 - c) 10 dB
 - d) 40 dB
- 4) Slum Clearance and improvement Act came into existence in the year ;
 - a) 1970
 - b) 1972
 - c) 1956
 - d) 1950
- 5) Sound absorbing materials with medium to high sound absorbing coefficients have value ranging from;
 - a) >0.20
 - b) >0.40
 - c) >0.50
 - d) >0.75

Finance

(Sample Question Paper. The Actual Questions will vary)

- 1) As per the Income Tax Act in India, in the case of deemed let out property, the deduction which shall be allowed under Section 24 is
 - a) Interest on money borrowed
 - b) Repairs and collection charges
 - c) Insurance premium
 - d) Annual charge
- 2) Which major project did G D Birla launch in 1958 in collaboration with the Kaiser Corporation of USA in Uttar Pradesh?
 - a) Hindustan Copper Company
 - b) Hindustan Aluminium Company
 - c) Hindustan Paper Company
 - d) Hindustan Pencil Company
- 3) An accrued expense can best be described as an amount
 - a) paid and currently matched with earnings.
 - b) paid and not currently matched with earnings.
 - c) not paid and not currently matched with earnings.
 - d) not paid and currently matched with earnings.
- 4) Which of the following is not considered to be an advantage of the corporate form of doing business over the partnership form?
 - a) A potential perpetual and continuous life
 - b) The interests in the company are typically easily transferable
 - c) The managers in the company and shareholders have limited liability
 - d) Persons who manage the company are not necessarily shareholders
- 5) Which of the following statements is false?
 - a) Auditor's lien on his client's books and record is unconditional.
 - b) An adverse report is one where and auditor gives an opinion subject to certain reservation.
 - c) Cut-off procedures are generally applied by auditors to trading transactions.
 - d) Components of audit risk does not include sampling risk.

Human Resources

(Sample Question Paper. The Actual Questions will vary)

- 1) What organizational development technique involves changing the attitudes, stereotypes, and perceptions that work groups have about each other?
 - a) Team building
 - b) Intergroup development
 - c) Survey feedback
 - d) Sensitivity training
- 2) Power tends to corrupt and absolute power corrupts absolutely was said by
 - a) Lord Acton
 - b) Sammuel Johnson
 - c) Henry Kissinger
 - d) Abraham Lincoln
- 3) The act of increasing the knowledge and skills of any employee for doing a particular job is called
 - a) Vestibule training
 - b) Development
 - c) Training
 - d) Counseling
- 4) A theory that says that behavior is a function of its consequences is called :
 - a) Equity theory
 - b) Distributive theory
 - c) Re-distributive theory
 - d) Reinforcement theory
- 5) Under which legislation, any reward of settlement and production bonus, if paid constitutes wages.
 - a) Payment of wages Act, 1936
 - b) Equal remuneration Act, 1976
 - c) Equal Pay Act 1947
 - d) Minimum wages Act, 1938

Company Secretary

(Sample Question Paper. The Actual Questions will vary)

- 1) The property of a company is owned by
 - a) Promoters
 - b) Directors
 - c) Company
 - d) Member
- 2) Authorized capital offered for subscription to the public is called
 - a) Reserve capital
 - b) Issued capital
 - c) Subscribed capital
 - d) Paid up capital
- 3) Annual Report is submitted by the directors to
 - a) Auditors
 - b) Managing Director
 - c) Registrar of Companies
 - d) Members.
- 4) Minutes should be recorded in the minute's book within
 - a) 15 days of the meeting
 - b) 60 days of the meeting
 - c) 30 days of the meeting
 - d) Any time before the next meeting
- 5) A whole time company secretary shall be appointed in every company having a paid up capital of not less than
 - a) ` 1 Cr
 - b) ` 2 Cr
 - c) ` 5 Cr
 - d) ` 10 Cr

Safety

(Sample Question Paper. The Actual Questions will vary)

- 1) The only thing that can keep you safe consistently is _____.
 - a) Personal Protective Equipment
 - b) Directors
 - c) Obeying all warning signs
 - d) Your attitude
- 2) Who is responsible for making sure you are using the appropriate PPE and that is in good working condition ?
 - a) Your supervisor
 - b) Person in charge of safety
 - c) Your co-workers
 - d) You
- 3) A fire will continue to burn until _____.
 - a) Its heat is removed
 - b) All its fuel is burned up
 - c) Its oxygen runs out
 - d) Any of the above answers occurs
- 4) Failures to provide for Safety may result in :
 - a) Pain
 - b) Injury
 - c) Loss of time and money
 - d) All of the above
- 5) If there is an emergency you may have to use a fire extinguisher. It's important to know where the fire extinguishers are located and to:
 - a) Test them
 - b) Read the instructions posted on them
 - c) Keep one near your at all times
 - d) Store flammable under them