



# CBCS SCHEME

21CV584

USN

--	--	--	--	--	--	--	--	--	--

Question Paper Version : A

Fifth Semester B.E. Degree Examination, June/July 2024

## Quality Control and Quality Assurance

Time: 1 hr.]

[Max. Marks: 50

### INSTRUCTIONS TO THE CANDIDATES

1. Answer all the **fifty** questions, each question carries one mark.
2. Use only **Black ball point pen** for writing / darkening the circles.
3. **For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.**
4. Darkening two circles for the same question makes the answer invalid.
5. **Damaging/overwriting, using whiteners** on the **OMR** sheets are strictly prohibited.

1. Finding ways to do better than standard and breaking through the unprecedented levels of performance is called
  - a) Quality planning
  - b) Quality Improvement
  - c) Quality inspection
  - d) Quality Assurance
2. What should the company focus on to achieve quality more economically?
  - a) Appraisal cost
  - b) Prevention cost
  - c) External failure cost
  - d) Internal failure cost
3. Select which one is not an external failure cost
  - a) Testing
  - b) Helpline support
  - c) Warranty work
  - d) Complaint resolution
4. PDCA cycle stands for
  - a) Plan – Define – Check – Act
  - b) Prepare – Define – Correct – Act
  - c) Prepare – Do – Correct – Act
  - d) Plan – Do – Check – Act
5. Quality is “Fitness of purpose or use” stated by
  - a) Juran
  - b) Crosby
  - c) W. Edward
  - d) IBM
6. The following quality guru is associated with the cost of non-conformance.
  - a) Imai
  - b) Taguchi
  - c) Feigenbaum
  - d) Ishikawa
7. QIP stands for
  - a) Quality Improvement Program
  - b) Quality Imparts Process
  - c) Quality Import Procedure
  - d) None of these
8. \_\_\_\_\_ is a part of quality management focused on providing confidence that quality requirements will be fulfilled.
  - a) Quality
  - b) Quality assurance
  - c) Quality updating
  - d) Quality management

9. Identify the benefits of quality.
- Gives positive company image
  - Increases market share, transfer into improved profit
  - Creates an atmosphere for high employee morale, which improves productivity
  - All the above
10. Performance of a product is
- How long the product lasts
  - Whether the product is capable of doing the intended job
  - How easy it is to repair the product
  - How often the product fails.
11. \_\_\_\_\_ are quality management and quality assurance standards.
- ISO 22000
  - ISO 14000
  - ISO 9000
  - None of these
12. Who is known as father of TQM?
- Edward Deming
  - Joseph Juran
  - Philip Crosby
  - Kaorn Ishikawa
13. The pillar of TQM which recognizes that product quality is a result of process quality.
- Customer focus
  - Process management
  - Employee Empowerment
  - Continuous Improvement
14. The aspiration of the company in a short duration is called
- Vision Statement
  - Mission statement
  - Quality policy statement
  - Submission statement
15. The quality policy is approved by
- Quality Improvement Team
  - Quality Council
  - Quality Control Team
  - Quality Assurance Team
16. The latest version of ISO 9001 in ISO 900 family
- ISO 9001 : 2000
  - ISO 9001 : 2022
  - ISO 9001 : 2015
  - ISO 9001 : 2008
17. ISO 14000 standards are for
- Administration
  - Environment Management System
  - Quality Management System
  - Supply Chain System
18. Benchmarking is not a
- Systematic search for best practices
  - Systematic search for initiating competitions
  - Systematic search for innovative ideas
  - Systematic search for highly effective operating procedures
19. Direct comparison with competitor is done with the following form of benchmarking.
- Internal benchmarking
  - Competitive benchmarking
  - Functional benchmarking
  - Generic benchmarking
20. One of the following is not a quality management principle on the basis of which ISO : 2015 and ISO 9001 : 2015 are based on
- Customer focus
  - Leadership
  - Customer dissatisfaction
  - Evidence based decision making.



34. Use of extra cement to surface finish of concrete work leads to  
a) Craze and Flake off    b) Late setting    c) Segregation    d) Rough finish
35. As per IS 269-1975, initial setting time of ordinary cement is  
a) 15 minutes    b) 60 minutes    c) 30 minutes    d) 600 minutes
36. Cement has to be tested within maximum of \_\_\_\_\_ period since the receipt of samples of testing is made  
a) 1 week    b) 3 months    c) 6 months    d) 15 days
37. IS 383 – 2016 is for  
a) Course and fine aggregate for concrete - specification  
b) 43 grade cement - specification  
c) Code of practice for brick work  
d) Steel - specification
38. If compressive strength test is done on individual bricks, then the minimum value should not fall below \_\_\_\_\_ percent of upper limit of class of brick.  
a) 12%    b) 10    c) 15    d) 20
39. Permissible number of defective bricks for efflorescence test of bricks for a lot size of 2001 to 10000 bricks should be  
a) 1    b) 0    c) 2    d) 3
40. Test to be conducted on steel bars and wires used in concrete reinforcement  
a) Tensile test    b) Bend test    c) Rebend test    d) All of these
41. Minimum distance of point of impact from edge or shape discontinuity by Rebound hammer testing procedure should be  
a) 20mm    b) 30mm    c) 10mm    d) 50mm
42. The best practice of quality control in construction phase is / are  
a) Inspect workmanship    b) Document inspection findings  
c) Corrective action    d) All of these
43. Common NDT tests done at site does not include one among these  
a) Core test    b) Schmidt hammer test  
c) USPV test    d) Compression test
44. The concrete quality grading for a pulse velocity of 3.5 to 4.5 km/sec by cross probing will be  
a) Good    b) Excellent    c) Doubtful    d) Medium
45. Process of evaluating a building to be ready for service is called  
a) Handover    b) Commissioning    c) Checking    d) Evaluating
46. Ultrasonic testing is done on materials to determine  
a) Yield strength    b) Hardness  
c) Ultimate tensile strength    d) Cracks below the surface

47. Probable accuracy of prediction of concrete strength by rebound hammer test will be \_\_\_\_\_ percent of compression strength.  
a)  $\pm 25\%$                       b)  $\pm 10\%$                       c)  $\pm 5\%$                       d)  $\pm 30\%$
48. Influential factors of Rebound hammer test numbers depends on  
a) Type of cement and aggregates                      b) Surface condition  
c) Age of concrete                      d) All of these
49. In USPV test, the estimated strength of concrete may vary from actual strength by \_\_\_\_\_ percent.  
a) 20                      b) 5                      c) 10                      d) 15
50. USPV test method is used to know  
(i) Homogeneity of concrete  
(ii) Presence of cracks, voids  
(iii) Value of dynamic elastic modulus of concrete  
(iv) Quality of concrete in relation to standard requirement  
a) Only (i) and (ii)                      b) (i), (ii) and (iv)  
c) All (i), (ii), (iii) and (iv)                      d) (ii) only

\*\*\*\*\*