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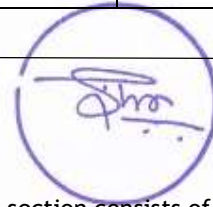
Branch: ..... Signature of Invigilator: .....

Semester: VIth Date: 30/04/2022 (MORNING)

Subject with Code: CE428 CONSTRUCTION MANAGEMENT

Marks Obtained	Section A (30)	Section B (20)	Total Marks (50)

INSTRUCTION TO CANDIDATE



1. The booklet (question paper cum answer sheet) consists of two sections. First section consists of MCQs of 30 marks. Candidates may mark the correct answer in the space provided / may also write answers in the answer sheet provided. The Second section of question paper consists of subjective questions of 20 marks. The candidates may write the answers for these questions in the answer sheets provided with the question booklet.
2. The booklet will be distributed to the candidates before 05 minutes of the examination. Candidates should write their roll no. in each page of the booklet.
3. Place the Student ID card, Registration Slip and No Dues Clearance (if applicable) on your desk. All the entries on the cover page must be filled at the specified space.
4. Carrying or using of mobile phone / any electronic gadgets (except regular scientific calculator)/chits are strictly prohibited inside the examination hall as it comes under the category of unfair means.
5. No candidate should be allowed to enter the examination hall later than 10 minutes after the commencement of examination. Candidates are not allowed to go out of the examination hall/room during the first 30 minutes and last 10 minutes of the examination.
6. Write on both side of the leaf and use pens with same ink.
7. The medium of examination is English. Answer book written in language other than English is liable to be rejected.
8. All attached sheets such as graph papers, drawing sheets etc. should be properly folded to the size of the answer book and tagged with the answer book by the candidate at least 05 minutes before the end of examination.
9. The door of examination hall will be closed 10 minutes before the end of examination. Do not leave the examination hall until the invigilators instruct you to do so.
10. Always maintain the highest level of integrity. Remember you are a BITian.
11. Candidates need to submit the question paper cum answer sheets before leaving the examination hall.

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI**  
**(END SEMESTER EXAMINATION)**

**CLASS: B.Tech**

**SEMESTER : 6<sup>th</sup>**

**BRANCH: All**

**SESSION :  
SP/2022**

**SUBJECT: Construction Management (CE 428)**

**TIME: 2.00 HOURS**

**FULL MARKS: 50**

**INSTRUCTIONS:**

1. The question paper contains 36 questions and total 50 marks.
2. The Section A contains 30 multiple choice questions and all are compulsory.
2. The Section B contains 6 questions and candidates may attempt any 5 questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.

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**SET A**

**SECTION A**

Select the correct answer for the following multiple choice questions.

- Q1. Which of the following is a type of structure of organization? [1]**
- (a) Line or military organization
  - (b) Line and staff organization
  - (c) Both a & b
  - (d) None of the above
- Q2. Which of these is not a type of project management organization? [1]**
- (a) Multinational organization
  - (b) Functional organization
  - (c) Matrix organization
  - (d) Pure project organization
- Q3. Who is the key responsible person in Pure Project organization? [1]**
- (a) Project Manager
  - (b) Site Engineer
  - (c) Contractor
  - (d) Structural Engineer

- Q4. Which of these is not a cause of project failure? [1]**
- (a) Improper Planning
  - (b) Poor weather condition
  - (c) Lack of technical skills
  - (d) Defective structural design
- Q5. Which details are required to draw project cash flow diagram? [1]**
- (a) Gross bill value
  - (b) Measurement period
  - (c) Retention money
  - (d) All of the above
- Q6. Which factor does not affect project cash flow diagram? [1]**
- (a) Margin
  - (b) Material Quality
  - (c) Certification Period
  - (d) Mobilization Advance
- Q7. What are the main objective of construction material management? [1]**
- (a) To minimize the material cost
  - (b) To procure and provide desired quality materials when required
  - (c) To reduce the transportation cost of materials
  - (d) All of the above
- Q8. Which of the following is not a function of material management? [1]**
- (a) Material Planning
  - (b) Material Production
  - (c) Procurement
  - (d) Materials accounting
- Q9. Which of this is not an advantage of inventory management? [1]**
- (a) It protects against lead time and demand uncertainty
  - (b) It protects against price changes
  - (c) It protects against contingencies
  - (d) All of the above
- Q10. In selective inventory control which method is based on rate of material consumption? [1]**
- (a) ABC Analysis
  - (b) MEP Analysis
  - (c) FSN Analysis
  - (d) VED Analysis
- Q11. Which of these is not a policy for inventory control? [1]**
- (a) Two bin system
  - (b) Material type replacement policy
  - (c) Lot size reorder point policy
  - (d) Fixed order interval scheduling policy
- Q12. The primary factor considered for implementing inventory control policy is [1]**
- (a) Maximum inventory

- (b) Reorder point
- (c) Lead time
- (d) Minimum stock level

Q13. In material management, EOQ stands for \_\_\_\_\_ [1]

- (a) Economic Option Quantity
- (b) Economic Order Quality
- (c) Early Order Quantity
- (d) Economic Order Quantity

Q14. Material wastage analysis can be done through which function of material management? [1]

- (a) Material Planning
- (b) Material Production
- (c) Materials accounting
- (d) Procurement

Q15. Which part of ISO 9000 series consist of guidelines for quality management and quality systems? [1]

- (a) ISO 9001
- (b) ISO 9002
- (c) ISO 9003
- (d) ISO 9004

Q16. TQM Stands for \_\_\_\_\_ [1]

- (a) Tentative Quality Management
- (b) Total Quality Measurement
- (c) Total Quality Management
- (d) Total Quantity Measurement

Q17. Which of these is not a principle of TQM? [1]

- (a) Customer orientation
- (b) Time management
- (c) Leadership commitment
- (d) Team Work

Q18. Quality control means \_\_\_\_\_. [1]

- (a) Implementing rules and regulation of safety
- (b) Implementing policy for accountability
- (c) Performing activities to ensure quality
- (d) Generating revenue through inspection

Q19. What are the advantages of quality control? [1]

- (a) Reduction in construction cost
- (b) Less inspection required
- (c) Both A & B
- (d) Only A

Q20. Which of these is not an objective of SQC? [1]

- (a) To know the trend of variables in the quality
- (b) To decide the suitable quality level
- (c) To assess the risk of project failure

(d) To reduce scrap and spoiled work

**Q21. At a work site, statistical quality control of concrete means [1]**

- (a) Measurement of risks to eliminate failures
- (b) Applying the theory of probability to sample testing or inspection
- (c) Reduction in wastage of inspection costs
- (d) Reduction in costs for the removal of defects

**Q22. ISO 9000 series is a guideline for \_\_\_\_\_. [1]**

- (a) To design business strategy
- (b) For marketing of business
- (c) To adopt good business practice
- (d) To help generating business idea

**Q23. \_\_\_\_\_ of every year is celebrated as National Safety Day. [1]**

- (a) March 4
- (b) April 4
- (c) March 14
- (d) April 14

**Q24. Pick up the incorrect statement from the following for various duties of a safety officers stipulated in the law are: [1]**

- (a) To advice the building workers for effective control of injuries.
- (b) To carry out safety inspections of buildings.
- (c) To check and evaluate effectiveness of action.
- (d) To comply with requirement of rules.

**Q25. From the following, which one is not an act and regulations for health and safety ? [1]**

- (a) Building and other construction workers Act, 1996
- (b) Building and other construction workers central rules, 1998
- (c) The Delhi Building and other construction workers Act, 2000
- (d) The Delhi Building and other construction workers rules, 2002

**Q26. The key functions of safety management system are, (1) Planning for safety, (2) Organizing for safety, (3) Scheduling for safety, (4) Controlling for safety. [1]**

- (a) 1, 3 and 4 are correct
- (b) 2, 3 and 4 are correct
- (c) 1, 2 and 3 are correct
- (d) 1, 2 and 4 are correct

**Q27. Setting up of National Safety Council (NSC) in India is \_\_\_\_\_. [1]**

- (a) 1956
- (b) 1976
- (c) 1986
- (d) 1966

**Q28. Which one method is not lawful for eliminating unsafe acts? [1]**

- (a) Showing disapproval of unsafe acts
- (b) Initial job instructions
- (c) Education
- (d) None of these

**Q29. The following is the indirect cost of accident [1]**

- (a) Money paid for treatment of worker
- (b) Compensation paid to worker
- (c) Cost of lost time of injured worker
- (d) All of the above

**Q30. Construction safety management is concerned with \_\_\_\_\_ hazards from the construction industry. [1]**

- (a) Reducing
- (b) Controlling
- (c) Eliminating
- (d) All of the above

### **SECTION B**

**Answer any 5 questions from the following:**

Q31. Discuss different hierarchies of management level. [4]

Q32. Write short notes on Project cash flow. [4]

Q33. Discuss the difference between ABC analysis and FSN analysis of selective inventory control mechanism. [4]

Q34. Discuss about inspection and quality control in a construction project. [4]

Q35. What is safety? How do you ensure safety at construction sites? [4]

Q36. A construction material trading company receives a total of 200 t as annual demand for steel reinforcement. The annual cost of carrying per unit t of reinforcement is 2,000, and the cost to place an order is 25,000. What is the economic order quantity? [4]

**:::::30/04/2022:::::**