

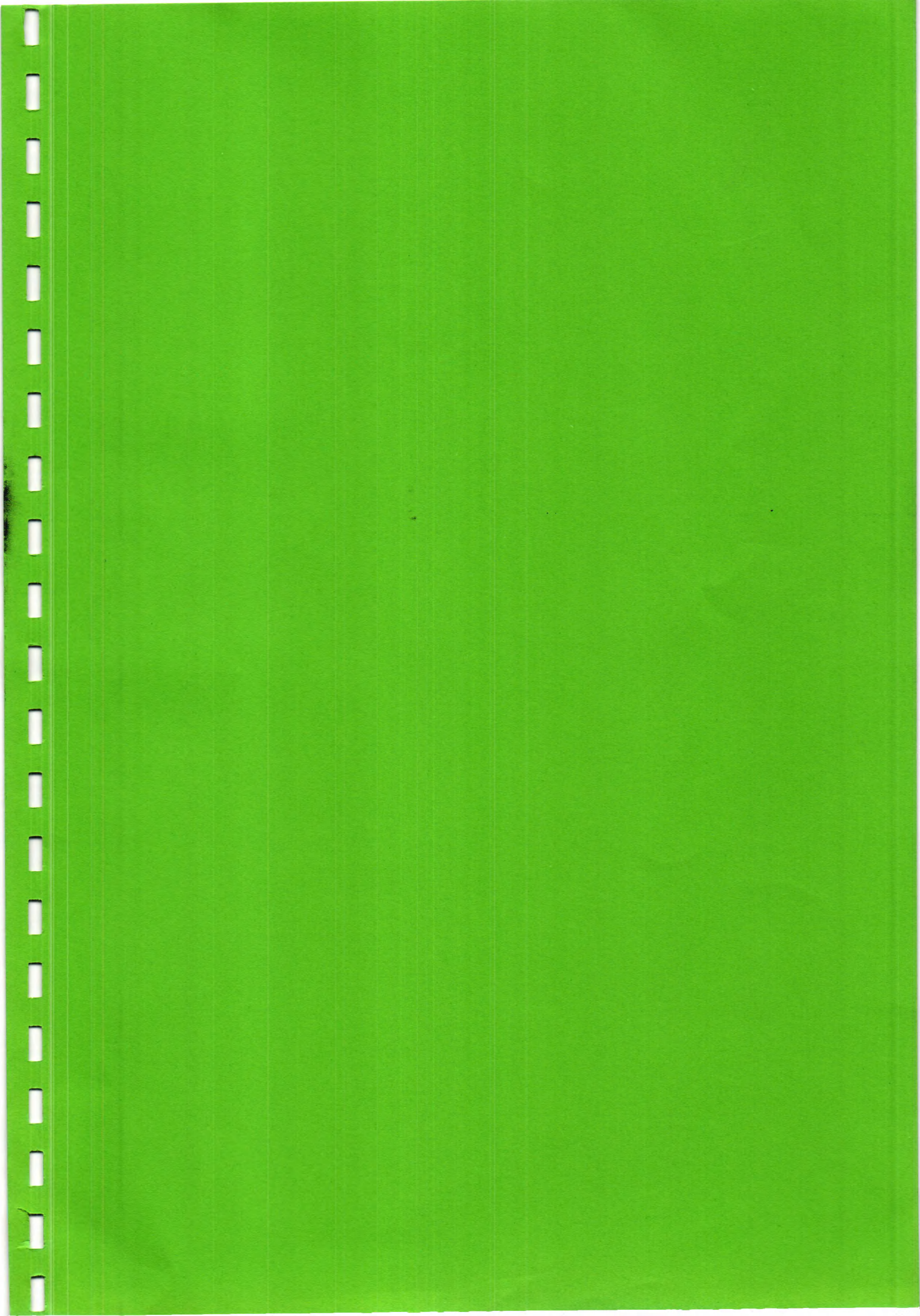
End Semester Examination  
February/March, 2018

XXXXXXXXXXXX

Level: B. E.  
Year : III

Course : CIEG 311  
Semester: II

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Special  
Camp/Computer

KATHMANDU UNIVERSITY  
End Semester Examination  
February/March, 2018

Marks scored:

Level: B. E.

Year : III

Course : CIEG 311

Semester: II

Exam Roll No. :

Time: 30 mins.

F. M. : 10

Registration No.:

Date **MAR 21 2018**

SECTION "A"

[20 Q. × 0.5 = 10 marks]

Mark "√" in the appropriate answer.

1. Which of the following is not a competitive sealed bidding?  
[a] Tender [b] Quotation [c] Labour contract [d] Direct Purchase
2. Commonly adopted method of qualification evaluation in public procurement is:  
[a] Pre-qualification [b] Post-qualification  
[c] Two envelope system [d] Any of them
3. Which of the following is higher in plan hierarchy?  
[a] Sectoral plan [b] Area development plan  
[c] Periodic plan [d] Strategic plan
4. Management of material flows both in and between links is:  
[a] Supply chain management [b] Link management  
[c] HRM [d] Flow management
5. Project operation and maintenance manual is prepared by:  
[a] Contractor [b] Engineer [c] Owner [d] Designer
6. Cracking of masonry is mostly not caused by:  
[a] Improper filling of joings [b] Plant growth  
[c] Settlement [d] Capillary rise
7. RCM stands for which type of maintenance?  
[a] Repair centered [b] Reliability centered  
[c] Renovation centered [d] Regular control
8. The design speed of class I in plain terrain is taken as:  
[a] 60 [b] 80 [c] 100 [d] 120
9. Under which hierarchy of asset management is the overall asset management policy categorized?  
[a] Strategic [b] Tactical [c] Operational [d] Functional
10. BPT is a tank provided in water supply system for:  
[a] Pressure reduction [b] Water distribution [c] Water intake [d] Water storage
11. Out turn of work means:  
[a] The capacity of doing work by a skilled person in the form of quantity per day  
[b] The economical use of construction material  
[c] Mobilization of skilled person in the construction site  
[d] Completion of project

12. The amount of depreciation can be calculated by \_\_\_\_\_.  
[a](Original cost – market value)/life [b] (Original cost – scrap value)/life  
[c](Original cost – sinking value)/life [d] (Original cost – book value)/life
13. Which of the following expenditures is not related to job over head?  
[a] Handling of materials [b] Amenities of labour  
[c] Interest on investment [d] Rent and taxes
14. Preliminary estimate is needed for:  
[a] Additional items [b] Administrative approval  
[c] Valuation of properties [d] Applying loans
15. The value of property is not dependent on \_\_\_\_\_.  
[a] Its structure [b] Maintenance [c] Legal control [d] Purchase cost
16. Which factor is not associated with the economic feasibility study of a project?  
[a] Project revenues [b] Benefit cost [c] Rate of return [d] NPV
17. The process of cleaning the newly installed pipe line and disinfect with chlorine solution is called:  
[a] First chlorination [b] Coagulation [c] Softening [d] Oxidation
18. The frequency of periodic maintenance of a graveled road is generally kept at:  
[a] 1-3 years [b] 2-4 years [c] 3-5 years [d] 4-6 years
19. Operational inspection of irrigation dam for seepage and erosion is advised to be made every \_\_\_\_\_.  
[a] Day [b] Week [c] Month [d] Year
20. Which one should be a project executing agency among the followings?  
[a] Users' committee [b] Division office  
[c] Ministry [d] District office

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SECTION "B"

Attempt *ALL* questions. Marks are indicated inside brackets. Suitable assumptions are permissible.

1. Describe how the procurement of services is carried out by adopting the Quality and Cost based selection (QCBS) method. [7]
2. How is the detailed bid evaluation made and what should be the criteria for awarding a bid? [7]
3. Differentiate between condition-based and reliability-centered types of maintenance. Give examples to support your answers. [7]
4. What are the possible causes of failure of a gravity type retaining wall? Suggest appropriate remedial measures that can control such failures. [7]
6. What do you understand by value engineering? How can it be made useful in project operation and maintenance? [6]
7. What is asset management? Describe its benefits in detail. [6]

