Mark Scored:

KATHMANDU UNIVERSITY
End Semester Examination
August, 2019

Level : B. Sc.
Year : IV

Course : MGTS 403
Semester : I

Exam Roll No. :

Time: 30 min

F. M. : 20

Registration No.:

Date AUG 12 2019

SECTION "A"
[20 Q × 1 = 20 marks]

Encircle the most appropriate answers.

1. What are the three interpersonal roles of managers?
   a. Figurehead, leader, and liaison
   b. Spokesperson, leader, coordinator
   c. Director, coordinator, disseminator
   d. Communicator, organiser, spokesperson

2. ..... developed the concept of *piece rate system*
   a. Henri Fayol
   b. Max Weber
   c. F. W. Taylor
   d. Russell Robb

3. Which of the following is false regarding why a SWOT Analysis is used?
   a. To build on the strengths of a business
   b. To minimize the weaknesses of a business
   c. To reduce opportunities available to a business
   d. To counteract threats to a business

4. Non programmed decisions are most likely to be made by:
   a. Middle management
   b. Lower management
   c. Supervisory management
   d. Top management

5. A hierarchical organization is an organizational structure fall under
   a. Modern organizational structure
   b. Traditional organization structure
   c. Technology and modern organizational structure
   d. Teams

6. Which one is not belongs to the French and Raven's sources of power
   a. Internal power
   b. Reward power
   c. Position power
   d. Punishment power

7. A small number of people who are committed to a common goal, objectives, and approach to this goal that they are mutually accountable to reaching is
   a. TEAMS
   b. Committees
   c. Organization
   d. Human Aspects

8. Who among the following proposed motivation theory based on Hierarchy of Needs?
   a. McGregor
   b. Maslow
   c. Mary Kay
   d. Herzberg

9. The steps in the control process are:
   a. Establishing, measurement, corrective action, comparison.
   b. Measurement, establishing, comparison, corrective action.
   c. Measurement, establishing, corrective action, comparison,
   d. Establishing, measurement, comparison, corrective action.

10. Which is not the part of the reinforcement theory (Behaviour Modification)?
    a. Positive reinforcement
    b. Negative reinforcement
    c. Neutral reinforcement
    d. Punishment

11. The phases of product life cycle are:
    a. Lunch, Growth, Mature, Substitution
    b. Substitution, Lunch, Growth, Mature
    c. Growth, Lunch, Mature, Substitution
    d. Growth, Mature, Lunch, Substitution

12. The states in systems engineering and the new product development process is:
    a. State the problem, investigate alternatives, model, integrate, assess, revaluate
    b. State the problem, investigate alternatives, integrate, model, lunch, assess, revaluate
    c. State the problem, investigate alternatives, model, integrate, lunch, assess
    d. State the problem, investigate alternatives, model, integrate, lunch, assess, revaluate

13. What are the three essential considerations in project management?
    a. Cost, Performance, Budget
    b. Cost, Quality, Performance
    c. Cost, Performance, Schedule
    d. Cost, Performance, Effort

14. The longest path through the network is called:
    a. Maximum longest path
    b. Critical Path
    c. PERT
    d. Precedence path

15. The mathematical model to calculate expected time if optimistic, most likely, and pessimistic times are given is:
    a. $\frac{a+4m+b}{6}$
    b. $\frac{a+4m+b}{9}$
    c. $\frac{a+4b+m}{6}$
    d. $\frac{m+4a+b}{6}$

16. A goal – based theory of "rational" is
    a. Utilitarian ethics
    b. Ethical egoism
    c. Rights-based ethics
    d. Environmental ethics

17. Which one of the following is NOT related to the core concepts in engineering ethics?
    a. The public interest
    b. Qualities of truth, honesty
    c. Professional performance
    d. Political contributions

18. The meaning of benchmarking is
    a. A symbol, word, or words legally registered or established by use as representing a company, or product
    b. Legal right of the owner of intellectual property
    c. Used to measure performance using a specific indicator
    d. Respectful care given by competent workers

19. Which of the following could be considered an engineering control for an office ergonomics hazard?
    a. Implementing a stretching program
    b. Switching to a chair with greater adjustability
    c. Implementing a pre-work screening process
    d. Purchasing wrist braces

20. According to the Super's psychological careers, the *exploration careers ages range* is
    a. birth to age 14
    b. ages 15 to 24
    c. ages 24 to 44
    d. ages 45 to 65

KATHMANDU UNIVERSITY
End Semester Examination
August, 2019

AUG 1 2 2019

Level : B. Sc.
Year : IV
Time : 2 hrs. 30 mins.

Course : MGTS 403
Semester : I
F. M. : 55

SECTION "B"
[7Q × 5 = 35 marks]

Attempt *ANY SEVEN* questions.

1. A manager's role is highly challenging and dynamic as compared to those of other employees (non-managers) in a company. Discuss the factors that make this so.

2. If sales units for years 2018, 2017, 2016, 2015 (n = 4) were 1,600; 1,200; 1,300; and 1,100 respectively, use the exponential smoothing method to forecast the number of sales units for years 2016 to 2018 where the value of α is 0.3.

3. List the various ways to departmentation. On the basis of functional departmentation draw an appropriate organizational structure for a technology-driven enterprise.

4. The concept of theory X and theory Y was developed by social psychologist Douglas McGregor. It describes two contrasting sets of assumptions that managers make about their people. How does theory X and theory Y motivate employees? Describe.

5. You must decide whether to buy new machinery to produce product *X* or to modify existing machinery. You believe the probability of a prosperous economy next year is 0.6 and of a recession is 0.4. Prepare a decision tree, and use it to recommend the best course of action. The applicable payoff table of profits (+) and losses (-) is:

	N_1 :Prosperity ($)	N_2 : Recession ($)
A_1 (Buy new)	+950,000	-200,000
A_2 (Modify)	+700,000	+300,000

6. To empower employees and implement TQM as a continuing effort, everyone in the organization must be trained in the techniques of TQM. Explain seven tools that are particularly helpful in the implementation of TQM.

7. A strong work ethic is an important part of being successful in professional development. On the basis of this argument, list the core concepts in Engineering Ethics.

8. Suppose you are hired as a head in Engineering Design committee in an organization. How would you develop a new product (prototype)?

9. As an R&D manager, what actions might you take or programs you might implement to assure that your organization gets maximum benefit from patentable ideas?

SECTION "C"

[2 Q × 10 = 20 Marks]

Attempt *ANY TWO* questions.

10. Ergonomics is defined as the scientific study of the relationship between man and his working environment. On the basis of this statement, list the objectives of ergonomics and draw a well labelled posture (sit all the way back in your ergo chair) for computer user.

11. Following table lists the activity of a project along with their time estimates.

Activity	Predecessor	Duration		
		Most Likely	Optimistic	Pessimistic
A	-	5	4	6
B	-	12	8	16
C	A	5	4	12
D	B	3	1	5
E	D,A	2	2	2
F	B	6	4	8
G	C,E,F	14	10	18
H	G	20	18	34

The scheduled completion date for this project is 60 days. Draw the network diagram and find:

a. The probability that the project – will be finished within the scheduled date.
b. The probability that the project will be completed at least 4 days prior to the expected time.
c. What should be the scheduled completion time for the probability of completion to be 90%.
d. If the project manager wants to be 99% sure that the project will be completed on the scheduled date, if the schedule date is expected date, how many days before that date should he start the project work?

12. While some management theories have been fads that have not influenced a company's performance in the long term, others have enhanced quality and productivity. Each theory has its merits and drawbacks. Describe in detail, scientific, administrative and behavioural theories of management.

Re-schedule

KATHMANDU UNIVERSITY
End-Semester Examinations
August, 2019

Examination Time : 11.00 A. M. to 2.00 P. M.

Date	Day	I - II	II – II	III – II	IV – I
August 9	Friday	PHYS 102 ARCH 161		EEEG 309 MEEG 309 MEEG 317 COMP 302 GEOM 315 CIEG 308 ENVS 335 PHAR 311 BIOT 306 PHYS 311 CHEG 314	
August 11	Sunday		MATH 208 ENVS 224 PHAR 212 BIOT 210 PHYS 213 ARCH 215 MATH 211		
August 12	Monday	ENVE 101 CHEM 102		GEOM 313 CHEG 312	MGTS 403
August 13	Tuesday	ARCH 112		ETEG 301 EPEG 301 MEEG 308 COMP 314 CIEG 309 MGTS 302 BIOT 307 PHYS 312 ENVS 318 ENVS 345	
August 14	Wednesday		EEEG 214 MEEG 202 COMP 232 GEOM 206 CIEG 208 BIOL 207 BIOL 206 BIOT 209 CHEG 211 ARCH 216 PHYS 212		

Controller of Examinations

Date	Day	I - II	II – II	III – II	IV – I
August 16	Friday	ENGG 112 ENVS 101 PHAR 111 BIOT 101 NEPT 101		~~EPEG 315~~ ~~ETEG 303~~ COMP 341 CIEG 312 CHEG 310 PHAR 313 BIOT 308 ENVS 303 ENVE 311	COMP 401
August 18	Sunday		EEEG 215 MEEG 206 COMP 231 CEEG 201 CIEG 206 CHEM 212 PHYS 211 CHEG 213 MATH 213 ARCH 217	MGTS 303 PHYS 313 GEOM 310	
August 19	Monday			ETEG 304 EPEG 318 ~~CHEG 305~~ COMP 304 COMP 409 ENVS 306	
August 20	Tuesday	MATH 104 MATH 102 MATH 103 MATH 106		CIEG 314 PHAR 315 BIOT 309	
August 21	Wednesday		PHYS 207	MEEG 302	COMP 472
August 22	Thursday		MCSC 202 CHEM 203 BIOT 207 ARCH 218	CHEG 313 PHYS 314 GEOM 306 ENVS 331	
August 23	Friday	ENGT 102		COEG 301 ETEG 305 MEEG 306 COMP 306 MATH 322 CIEG 313 CIEG 318 BIOT 305	
August 25	Sunday		CIEG 207 PHAR 214	GEOM 307 PHAR 316 ENVS 337	

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Date	Day	I - II	II – II	III – II	IV – I
August 26	Monday		COMP 201 MEEG 207 COMP 204 BIOT 206 STAT 221 CHEG 210 ENVS 204	INAN 301	COMP 484
August 27	Tuesday	COMP 116 COMP 102 STAT 101		COMP 342 COMP 323 CIEG 310	
August 28	Wednesday		INAN 211	~~GEOM 319~~ MEEG 318 ENVS 336	
August 29	Thursday		CIEG 209 ~~GEOM 204~~ ~~ENVE 205~~ CHEG 212	CHEG 315 CHEG 323	
August 30	Friday		MATH 207 BIOT 208 MATH 217	ENVE 399	COMP 478

Note: *Examinations will be conducted as per this schedule and under no circumstance the dates and times will be changed unless the University publishes prior notice.*

Holiday: August 15, 2019: Janai Purnima

Controller of Examinations

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August 11, 2019

NOTICE

As per the recommendation from the DEAN of School of Science and School of Engineering and HoDs of respective departments, the courses (EPEG 315, ETEG 303, GEOM 204, GEOM 206, GEOM 319, CHEG 305 and ENVE 205) have been re-scheduled as follows.

Date	Day	Courses
September 01, 2019	Sunday	EPEG 315, ETEG 303, GEOM 204, GEOM 319, CHEG 305, ENVE 205
September 05, 2019	Thursday	GEOM 206

Examination Time : 11.00 A.M. to 2.00 P.M.
Exam Centre : Kathmandu University, Dhulikhel.

Professor PANNA THAPA, PhD
Controller of Examinations