Paper: Principles of Management **Class: BSIT II** **Mid Term Exam May, 2018**

Govt. Ambala Muslim College Sargodha

Give the short answers of the following Questions:

» The "father" of Scientific Management?

» Fayol's Principles of Management?

» Bureaucracy?

» Omnipotent view of Management?

» Symbolic view of Management?

» Organizational Culture?

» Parochialism?

» Multinational Corporation?

» Organizational behavior?

» Draw Hierarchy of managerial levels?

Long Questions:

» Describe the functions, roles, and skills of managers?

» Explain the universality of management concept. Does it still hold true in today's world? Why or why not?

» Classrooms have cultures. Describe your classroom culture using the seven dimensions of organizational culture. Does the culture constrain your instructor? How? Does it constrain you as a student? How?

» Contrast ethnocentric, polycentric, and geocentric attitudes toward global business?

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BS 2nd Semester Examination 2018

Subject: I. T **Paper: Digital Logic & Design (CMP: 2210)**

Maximum Marks: 80

Time Allowed: 2:30 Hours

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

(2*16)

Q.1. Write short answers of the following in 2-3 lines each.

i. What is 4-bit binary parallel adder?
ii. Convert the decimal number 123 into octal?
iii. Obtain the 1's and 2's complement of the following binary function
1011101, 0111010, 0010001,010100
iv. If A=1, B=0 and C=1 and A,B,C represent the input of three input NAND gate, What will be the output?
v. Draw the implementation diagram using logic gates of the following Boolean function
F=AB+A(B'+C)
vi. What is Flipflop?
vii. Write the following function into minterms $F=\sum(0,1,3,6,7)$
viii. Draw the Truth table of half adder and write the Boolean function for its sum and carry?
ix. What is synchronous counter?
x. Why the NAND gate called as universal gate?
xi. What is Decoder?
xii. Draw the truth table and circuit diagram of T flipflop?
xiii. Simplify the following Boolean function using k-map
F(x,y)= x'y+xy'+xy
xiv. What is Multiplexer?
xv. What is up counter?
xvi. Prove that exclusive-OR is the compliment of exclusive-NOR?

Subjective Part (3*16)

Q.2. (a) Simplify to 3 number of literals [(CD') + A] ' + A +CD +AB
(b) Implement the Boolean function using NAND gates.
F= B'D'+ A'C'D + AB'C'D + A'BC'D'

Q.3. Simplify the following function with Karnaugh Map. Find both SOP and POS expression and implement them using NAND gate.
F(A,B,C,D) = (A'+B'+D')(A+B'+C')(A'+B+D')(B+C'+D')

Q.4. Draw the Truth table for 4-bit Asynchronous counter draw its circuit diagram also represent the values of Q_0, Q_1, Q_2, Q_3 using Clock Pulse?

Q.5. Draw the characteristic Table, implementation diagram and circuit diagram of JK Flipflop?

Q.6. (a) Implement a full adder circuit with a decoder and two OR gates
$S(w,x,y,z)=\sum(1,2,3,10,14,15)$ $C(w,x,y,z)=\sum(6,7,12,13)$
(b) Implement the following function using multiplexer
$F(A,B,C,D)=\sum(0,2,5,6,7,8,14,15)$

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BS 2nd Semester Examination 2018

Subject: I. T **Paper: Probability & Statistics (MATH: 2110)**

Time Allowed: 2:30 Hours **Maximum Marks: 80**

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

Q No. 1: Write short answers of the following in 2-3 lines each. (2*16)

i. Define statistics.
ii. Explain the difference between primary and secondary data.
iii. Differentiate between Discrete random variable and Continuous random variable.
iv. Compute range of the data -1,-3, 4 and -20.
v. Define the term mode and gives its two advantages.
vi. Define hypergeometric experiment and its two properties.
vii. Write down the properties of variance.
viii. What is probability density function?
ix. Explain the difference between permutation and combination.
x. Differentiate between Disjoint events and Overlapping events.
xi. Define negative binomial distribution .
xii. Define sampling distribution.
xiii. Differentiate between null and alternative hypothesis.
xiv. Define confidence interval for mean.
xv. Define linear regression.
xvi. Describe the properties of Arithmetic Mean.

Subjective Part (3*16)

Q No. 2: (a) The following data is the percentages of the families that are in the upper income level,

72.2	31.9	26.5	29.1	27.3	8.6	22.3	26.5
20.4	12.8	25.1	19.2	24.1	58.2	68.1	89.2
55.1	9.4	14.5	13.9	20.7	17.9	8.5	55.4
38.1	54.2	21.5	26.2	59.1	43.3		

i. Calculate the sample mean and sample median.
ii. Also compute the 10 % trimmed mean. Compare with the results (a) and (b) and comment.

(b) An electrical firm manufactures light bulbs that have a life, before burn-out, that is normally distributed with mean equal to 800 hours and a standard deviation of 40 hours. Find the probability that a bulb burns between 778 and 834 hours.

Q No. 3 (a) A tire manufacturer wants to determine the inner diameter of a certain grade of tire. Ideally, the diameter would be 570 mm. The data are as follows:

572, 572, 573, 568, 569, 575, 565, 570.

Find the sample variance, standard deviation, and coefficient of variation.

(b) A shipment of 20 similar laptop computers to retail outlet contains 3 that are defective. If a school makes a random purchase of 2 of these computers, find the probability distribution for the numbers of defective.

Q No. 4 A study was made on the amount of converted sugar in a certain process at various temperatures. The data were coded and recorded as follows: (16)

Temperature, x	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0
Converted sugar y	8.1	7.8	8.5	9.8	9.5	8.9	8.6	10.2	9.3	9.2	10.5

a) Estimates the linear regression line
b) Also compute the Residuals of Temperature and Sugar.

Q No. 5 (a) Suppose that the number of cars X that pass through a car wash between 4:00 P.M. and 5:00 P.M. on any sunny Friday has the following probability distribution: (16)

X	4	5	6	7	8	9
P(X = x)	1/12	1/12	1/4	1/4	1/6	1/6

Let g(x) = 2X−1 represent the amount of money, in dollars, paid to the attendant by the manager. Find the attendant's expected earnings for this particular time period.

(b) During a laboratory experiment, the average number of radioactive particles passing through a counter in 1 millisecond is 4. What is the probability that 6 particles enter the counter in a given millisecond?

Q No. 6 (a) The probability that a patient recovers from a rare blood decease is 0.4. If 15 people are known to have contracted this decease what is the probability that (i) at least 10 survive (ii) from 3 to 8 survive and (iii) exactly 5 survive? (16)

(b) In how many ways can 7 graduate students be assigned to triple and double hotel room during a conference?

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University of Sargodha

BS 2nd Semester Examination 2018

Subject: I. T **Paper: Communication Skills (ENG: 2412)**

Time Allowed: 2:30 Hours **Maximum Marks: 80**

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

(2*16)

Q.1. Write short answers of the following in 2-3 lines each.

i. Define communication?
ii. What is brain storming?
iii. What is encoding?
iv. Who is decoder?
v. What is language?
vi. What is paralanguage?
vii. What is audience analysis?
viii. What is pseudo listening?
ix. What is active listening?
x. What is prejudgment?
xi. Who is an interviewer?
xii. Who is interviewee?
xiii. What is stage fright?
xiv. What is internal communication?
xv. What is internal stimuli?
xvi. What is buffer statement?

Subjective Part (3*16)

Q.2. Elaborate the salient features involved in successful communication skills? Elaborate the process of communication in your own words?

Q.3. Define the skills and methods involved in the speaking process in our colleges? Explain the essential steps for preparing oral presentation?

Q.4. Write a comprehensive note on the following topics
a. Barriers in good listening?
b. Elements of communication styles?

Q.5. What is non-verbal communication? Describe its types and components in your own words?

Q.6. What type of factors can help a person to become active listener? Explain the need of listening skills in university students

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University of Sargodha

BS 2nd Semester Exam 2019

Subject: Information Technology **Paper: Communication Skills (ENG:2412)**

Maximum Marks: 80

Time Allowed: 2:30 Hours

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

(2*16)

Q.1. Write short answers of the following in 2-3 lines each.

i. Write at least two parts / elements of communication process?
ii. What is external communication?
iii. What is paralanguage?
iv. What is body language?
v. What is difference between listening and hearing?
vi. What are barrier factors in listening?
vii. What is decoding?
viii. What is passive listening?
ix. What is non verbal communication? Give examples
x. What is you attitude?
xi. What is denotation?
xii. What is connotation?
xiii. What is oral presentation?
xiv. What is role of eye contact in communication?
xv. What is stage fright?
xvi. What is feedback?

Subjective Part (3*16)

Q.2. Define communication? Elaborate the kinds of communication and its process in your own words?

Q.3. What is oral presentation? Elaborate its various stages and types in detail?

Q.4. Define listening and its purposes? Explain its stages and also suggest steps for effective listening in college students?

Q.5. Write a comprehensive note on non verbal communication and it role in making communication more effective?

Q.6. Elaborate the role of written communication in effective communication skills as compared to spoken and oral skills? Which skill is more important in success in real life situations?

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University of Sargodha

BS 2nd Semester Examination 2018

Subject: I. T **Paper: Digital Logic & Design (CMP: 2210)**

Time Allowed: 2:30 Hours **Maximum Marks: 80**

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

Q.1. Write short answers of the following in 2-3 lines each. (2*16)

i. What is 4-bit binary parallel adder?
ii. Convert the decimal number 123 into octal?
iii. Obtain the 1's and 2's complement of the following binary function
1011101, 0111010, 0010001,010100
iv. If A=1, B=0 and C=1 and A,B,C represent the input of three input NAND gate, What will be the output?
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xiv. What is Multiplexer?
xv. What is up counter?
xvi. Prove that exclusive-OR is the compliment of exclusive-NOR?

Subjective Part (3*16)

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Q.3. Simplify the following function with Karnaugh Map. Find both SOP and POS expression and implement them using NAND gate.
F(A,B,C,D) = (A'+B'+D')(A+B'+C')(A'+B+D')(B+C'+D')

Q.4. Draw the Truth table for 4-bit Asynchronous counter draw its circuit diagram also represent the values of Q_0, Q_1, Q_2, Q_3 using Clock Pulse?

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(b) Implement the following function using multiplexer
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BS 2nd Semester, Final Term Exam 2018

Subject: I. T Course: Object Oriented Programming (CMP: 2123)

Maximum Marks: 60

Time Allowed: 2:30 Hours

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

(2*12)

Q.1: Write short answers of the following in 2-3 lines each.

i. Define concrete class?
ii. What is ad-hoc polymorphism? give an example
iii. Early and late binding are used for which type of methods?
iv. What is difference b/w boxing and Unboxing?
v. Describe checked exceptions?
vi. Define default and No-Argument Constructor?
vii. Define JRE i.e. Java Runtime Environment?
viii. Why String class is considered immutable?
ix. Explain garbage collection in Java?
x. What is the difference between throw and throws?
xi. What is Encapsulation?
xii. Differentiate an Interface and abstract class?

Subjective Part (3*12)

Q.2: Create a class TelecomCompany with instance variable Comid, ComName, ComInterest with proper data types and access modifiers. Define overloaded constructors, getter/setter methods and also define a method to get the rate of interest according to Telecom Company. For example, "Mobilink", "Ufone", "Telenor" and "Zong" are providing 5.4%, 6.1%, 5.7% and 5.9% rate of interest. Demonstrate this class in your program.

Q.3: Create a class named **UniversityCourse** that includes data fields that hold the course name (for example OS), and the course number (for example 103) with proper data types and access modifiers. All of the fields need to initialized with parameterized constructors (may be multiple). The class includes a Display () method that displays all the fields of UniversityCourse class. Create a subclass named **LabCourse** that includes data field credit hours (CrHrs with type float) which is assign 4.0 if the user enters course name such as "ICT", "DBMS", "OS" or "OOP". Override the parent class Display () method to indicate that the course is lab course or otherwise. Write a main method that initiated an object of LabCourse and display its data.

Q.4: Create a class called **Person** that stores the id (perId type int) and name (PerName type String) of a person also has an abstract method ***"IsOutStanding ()"***. From this class derive two classes: **Student**, which adds a Student GPA (type float) and **Teacher**: which adds a publication (type int). Each of the three classes should have a ***GetData()*** method to get its data from the user and a ***ShowData ()*** method to display the data on screen. Override the ***"IsOutStanding ()"*** method to the Student and Teacher classes. Let's say that a Student with more than equal to 3.0 GPA, or a Teacher with more than equal to 10 publications, is considered outstanding. You can access this method from main () and display the string "outstanding" for outstanding Student and Teacher when you display their data. Demonstrate polymorphic behavior by using these classes.

Q.5: Explain **exception handling** in java and why we use nested try blocks. Write a program to demonstrate exception handling by nested try/catch blocks.

Q.6: Write a temperature-conversion application that converts from Fahrenheit to Celsius. The Fahrenheit temperature should be entered from the keyboard (via a JTextField). An un-editable Textfield should be used to display the converted temperature when user clicks on conversion button. Use the following formula for the conversion:

Hint: Celsius = 5/9× (Fahrenheit – 32)

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University of Sargodha

BS 2nd Semester Exam 2019

Subject: Information Technology **Paper: Object Oriented Programming (CMP:2123)**

Time Allowed: 2:30 Hours **Maximum Marks: 60**

Note: Objective part is compulsory. Attempt any three questions from subjective part.

Objective Part (Compulsory)

Q.1. Write short answers of the following in 2-3 lines each. (2*12)

i. Define Final method and Final class?
ii. What is wrapper class? Give an example.
iii. What is JVM?
iv. Define Interface.
v. How multilevel inheritance differ from multiple inheritance?
vi. What are inner classes?
vii. Why main () method is static?
viii. Differentiate b/w encapsulation and information hiding?
ix. What happens if no catch handler matches the type of a thrown object?
x. Why StringBuffer is called mutable?
xi. What is runtime polymorphism or dynamic method dispatch?
xii. Differences between this and super keywords?

Subjective Part (3*12)

Q.2. Explain the following.
i. Explain Interface with the help of Java Program
ii. Define inheritance? Explain its types with examples?

Q.3. Create a class **Bank** with instance variable Bankid, BankName, BankInterest with proper data types and access modifiers. Define overloaded constructors, getter/setter methods and also define a method to get the rate of interest according to banks. For example, "MCB", "UBL" and "HBL" banks are providing 6.5%, 7.1% and 8.9% rate of interest. Demonstrate this class in your program.

Q.4. Create an abstract class named **Book** that stores the book's title (*defined as String*) and book's price (*type double*). This class includes getdata() and showdata() methods for input and output book fields. This class also include an abstract method "bool *IsComputerBook ()*". From this class create two child classes: Electronic Book and paper Book. **Electronic Book** class contain additional data filed for Size in MB(type float) and **paper Book** class contain additional data field for weight (type float). All subclasses override the superclass method.
Let's say that an ebook with computer name and more than equal to 10 MB size, or paper book with computer name and more than equal to 1.5 kg weight, is considered as computer Science book. You can access the Methods from main () method and display the string "**This is computer Science book**" for ebooks and paper books when you display their data.

Q.5. What is exception handling in Java?. Write a java program to handle following multiple exceptions DividcByZeroException, NullReferenceException, RuntimeException, and Exception by using single try block and multiple catch blocks.

Q.6. Write an application that calculate Power of an integer number. The integer number should be entered from the keyboard (via a JTextField). One un-editable Textfield should be used to display the Power of entered number when user clicks on Power Result button.

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University of Sargodha

BS 2nd Semester, Final Term Exam 2018

Course: Principles of Management (MNG-221

Subject: I.T Maximum Mark

Time Allowed: 2:30Hours

Note: Objective part is compulsory. Attempt any four questions from subjective part.

Objective part (Compulsory)

Q.1. Write short answers of the following in 2-3 lines on your answer sheet.

i. What is Business?
ii. Define Conceptual skills.
iii. What is innovation?
iv. Define scientific management.
v. Define total quality management.
vi. Who is a manager?
vii. What is theory of X and Y?
viii. What is up ward communication?
ix. Define top management.
x. Define leadership.
xi. Write down the name of four management functions.
xii. Define job satisfaction.
xiii. What is specialization?
xiv. Who is innovation?
xv. Define Hallo Effect.
xvi. What is job description?

Subjective Part (4*12)

Q.2. Define Management? Discuss in detail the function of management.

Q.3. Explain the 14 principles of management by Foyal.

Q.4. Discuss in detail the external forces that are acting on Management performance.

Q.5. What is Organizational Culture? Discuss the seven dimensions of Organizational Culture.

Q.6. Discuss the process of Decision making.

Q.7. What is Work Place Diversity? Discuss in detail any three types of work place Diversity.

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