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**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF ENGINEERING

TEST 1

Winter Semester: 2021- 22

Course Code: PET 2030

Course Name: Health, Safety and Environment

Program & Sem: B. Tech (PET) & IV Sem

Date: 28th April 2022

Time: 11:30 AM to 12:30 PM

Max Marks: 30

Weightage: 15%

Instructions:

- (i) Read the all questions carefully and answer accordingly.
- (ii) Question paper consist of three parts, PART A, B & C
- (iii) All questions are mandatory

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries TWO marks.

(4Qx 2M= 8M)

1. Illustrate what do you understand by term hazard? (C.O.No.1) [Knowledge]
2. Describe what do you mean by the incident? (C.O.No.1) [Knowledge]
3. What do you understand by “close call”? Give any example. (C.O.No.1) [Knowledge]
4. Explain what do you understand by chemical hazard. (C.O.No.2)[Comprehension]

Part B [Thought Provoking Questions]

Answer both the Questions. Each question carries SIX marks.

(2Qx6M=12M)

5. There are many theories that attempt to explain the occurrence of accident. Consider the Swiss cheese Model and explain it in detail with the help of an exam (C.O.No.1) [Knowledge]
6. Identify the following hazard Symbol and explain the meaning. State an industry, workplace or condition where you may find the following hazard symbol. Also write down the precautionary measures for the following hazards. (C.O.No.2) [Comprehension]

a)



b)



c)



Part C [Problem Solving Questions]

Answer the Question. Question carries TEN marks.

(1Qx10M=10M)

7 Consider yourself as a HSE officer at a drill site. Fire hazard is one of the nightmare of any Health and safety concern. The sources and preventive measures to be taken for a Fire outbreak will be dependent on the type of Tree analysis you make. As an HSE officers prepare any one of the Hazard Tree Analysis for the particular scenario. (C.O.No.2) [Comprehension]



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**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF ENGINEERING

TEST 2

Winter Semester: 2021- 22

Course Code: PET 2030

Course Name: Occupational Health safety

Program & Sem: B. Tech (PET) & IV Sem

Date: 03-06-2022

Time: 11:30 AM – 12:30 PM

Max Marks: 30

Weightage: 15%

Instructions:

- (i) *Read the all questions carefully and answer accordingly.*
- (ii) *Question paper consist of three parts, PART A, B & C*
- (iii) *All questions are mandatory*

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries TWO marks.

(4Qx 2M= 8M)

1. Which Act/Standard states the air Pollution levels for different types of area, eg hospital, industrial area? (C.O.No.2) [Knowledge]
2. List out the different health hazard associated with drilling operation. (C.O.No.3) [Knowledge]
3. What do you understand by Minimal National Standards? (C.O.No.2) [Knowledge]
4. As a worker at the drill site, list out some general equipment safety guideline for tools that you would follow. (C.O.No.3) Knowledge]

Part B [Thought Provoking Questions]

Answer both the Questions. Each Question carries six marks.

(2Qx6M=12M)

5. A pesticide industry is setup in Bangalore. It was found that the industry dumps the hazardous waste in the lakes nearby. Also the data was received that the NO₂, SO₂ gas levels near the industry area was far more than the limit decided. What are the different Rules/Acts/Standards will be applicable for this particular scenario, explain it in detail.

(C.O.No.3) [Comprehension]

6. Imagine you as an HSE Officer. A drill site has been located for the drilling operation to take place. The drill site was located far off from Bangalore city near a village. The site was near the forest on a hill top. And it was used as the dumping ground many years ago. You as an HSE Officer how will you prepare the drill site and also what safety guideline will you give once the drilling starts.

(C.O.No.3) [Comprehension]

Part C [Problem Solving Questions]

Answer the Question. Question carries ten marks.

(1Qx10M=10M)

7. Compute the risk ranking for the following department of a particular company. If the annual budget of the company is 600,000 how will you split the amount to various department and state your reason for it?

Dept	Hazard Score	Control Score	Control Credit	Property value (\$)	Business Profit (\$)	Business interruption (\$)	Personnel exposure (\$)
A	214	263	124	397	1345	1255	778
B	258	278	367	537	1276	1587	776
C	231	321	288	778	1487	1123	663
D	284	254	169	498	1654	1234	443
E	372	277	210	689	1597	1498	623
F	130	243	184	489	1276	1698	754

(C.O.No.2) [Comprehension]



**PRESIDENCY UNIVERSITY
BENGALURU**

SCHOOL OF COMMERCE

END TERM EXAMINATION

Winter Semester: 2021 - 22

Course Code: SOC2003

Course Name: Business Statistics

Program & Sem: B.COM (Prof. & Hons.) & II SEM

Date: 1st July 2022

Time: 9:30 AM to 12:30 PM

Max Marks: 100

Weightage: 50%

Instructions:

(iv) Read the all questions carefully and answer accordingly.

Part A [Memory Recall Questions]

Answer all the Questions. Each question carries THREE marks.

(10Qx 3M= 30M)

- _____ data, also referred to as time-stamped data, is a sequence of data points indexed in time order. (CO1)[Knowledge]
A. Nominal B. Continuous C. Time-Series D. Cross-Sectional
- Which is a secondary source for data collection. (CO1)[Knowledge]
A. Observation Method B. In-depth Interview C. Statistical Database D. Consumer Panel
- From the following data, calculate range for the class (CO3)[Application]

Class Interval	20-30	30-40	40-50	50-60	60-70
Frequency	18	14	18	10	5

- A. 10 B. 50 C. 20 D. 70
- Consider the linear equation $y = a + bx$, what is a ? (CO4)[Application]
A. Intercept B. Slope C. Dependent Variable D. Independent Variable
- From the following Data of a cricket player, calculate the value of Mode (CO3)[Application]

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
No. of Hundred	4	2	2	3	2	4	4	3	1	0

- A. 4 B. 2 C. Both A & B D. 3
- From the following data, calculate the median (CO3)[Application]

X	6	7	7	8	9	10	10	10	11
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- A. 6 B. 7 C. 8 D. 9
- Choose the *incorrect* statement (CO3)[Application]
A. Variance is the square of standard deviation
B. Standard Deviation is the square of variance
C. Both A & B
D. None of the above
- What is Correlation? Explain the different types of correlation. (CO4)[Application]
- Define the term regression. (CO4)[Application]

10. Choose the *incorrect* formula of coefficient of variation (CO3)[Application]
 A. $\frac{\text{Standard Deviation}}{\text{Mean}}$ B. $\frac{\text{Mean Deviation}}{\text{Mean}} \times 100$ C. $\frac{\text{Mean}}{\text{Standard Deviation}} \times 100$ D. All of the above

Part B [Thought Provoking Questions]

Answer all the Questions. Each question carries FIVE marks. (8Qx5M=40M)

11. The mean marks in statistics of 100 students of a class was 72. The mean of marks of boys was 75, while their number was 70. Find the mean marks of girls in the class. (CO3)[Comprehension]

12. Different salaries are offered to students in the last year of campus recruiting based on their achievement in the recruitment drive and past academic performance. The information is presented in the table below. (CO2)[Comprehension]

Salary Classes (000 Rs)	Number of students
40-50	8
50-60	19
60-70	32
70-80	25
80-90	18
90-100	14
100-110	10

Based on the above information find Relative Less than cumulative frequency and Relative More than cumulative frequency.

13. (a) Calculate the mode for the following data attaining to the marks in English out of 140 marks for 80 students in a class. (CO3)[Application]

Marks	0-20	20-40	40-60	60-80	80-100	100-120	120-140
No. of Students (f)	4	26	22	10	9	6	3

(b) For a layperson, classification and tabulation are same, but the fact is they are different, as the former is a means to sort data, for further analysis while the latter is used to present data. For explaining to a layperson in detail, differentiate between Tabulation and Classification with the help of suitable examples. (CO2)[Comprehension]

14. The following table summarises the times, t minutes to the nearest minute, for a group of a students to complete an exam. (CO3)[Application]

Time (minutes) t	10-20	20-30	30-40	40-50	50-60	60-70
No. of students (f)	62	88	16	13	11	10

Estimate the mean, standard deviation, variance and coefficient of variation of these data.

15. Data Sure Company gathered information on how many interviews each of its 40 salespeople needed to close their most recent transaction. The following are the figures: 102, 95, 90, 101, 60, 80, 113, 102, 110, 126, 66, 121, 116, 139, 72, 101, 93, 114, 99, 112, 105, 97, 100, 99, 115, 129, 111, 119, 81, 91, 93, 119, 113, 128, 110, 75, 87, 107, 108.

Question: (CO2)[Comprehension]

Construct a frequency distribution and ogive with six class intervals.

Part C [Problem Solving Questions]

Answer all the Questions. Each question carries FIFTEEN marks.

(2Qx15M=30M)

16. Regression is a statistical method used in finance, investing, and other disciplines that attempts to determine the strength and character of the relationship between one dependent variable (usually denoted by Y) and a series of other variables (known as independent variables)

In the above context you have to calculate the regression coefficient and interpret the results for the following data (CO4)[Application]

X	1	2	3	4	5	6	7
Y	9	8	10	12	11	13	14

17. Mr. Sabarbal is importing Mushrooms from Ghana. Next he processes the same in his Okha's factory. The processed mushroom is sent to UAE, where it is having high demand. However, he wants to find a relation between the quality of the mushroom imported and the demand of it in UAE. For that he found a correlation between the data. Interpret the output and find the degree of relation between them. What is your opinion. (CO4)[Application]

18.

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Imports (in Rs. Crores)	18	19	20	21	22	23	24	25	26	27
Exports (in Rs. Crores)	14	16	16	18	18	19	20	20	21	21