

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- MAY- 2018

M.Tech II Semester

COURSE CODE: 10M11CE212

MAX. MARKS: 35

COURSE NAME: Heavy/ Civil Construction Equipment, Methods and Management

COURSE CREDITS: 3

MAX. TIME: 2Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. What are different types of control charts? What are advantages of Shwart's control charts and explain two types of errors. [CO3] (5)

Q2. The following data relate to the life of 15 samples of 6electric bulbs each drawn at intervals of 1hrs from a production process. Draw the \bar{X} and R charts and comments. [CO3] (5)

Sample No.	Life time (in hrs.)					
1	620	687	666	769	839	686
2	501	585	524	585	655	668
3	673	701	636	567	622	660
4	646	626	572	628	632	743
5	494	984	659	643	660	640
6	634	755	625	582	685	555
7	619	710	664	693	773	534
8	631	723	614	535	551	570
9	482	791	533	612	497	499
10	706	524	626	503	662	754
11	530	432	379	690	724	536
12	485	497	608	393	648	729
13	585	535	762	588	624	737
14	462	490	635	587	554	673
15	722	608	665	587	531	705

Q3. Using a flow chart discuss the causes of accidents in construction industries. Enumerate ten basis principles of safety. [CO4] (5)

Q4. Explain the different legislation for environmental protection in India. Explain the process of environmental clearance for the construction projects. [CO4] (5)

Q5. Write short notes on dewatering and pumping equipments. Briefly discuss different methods of dewatering. [CO2] (5)

Q6. Write short notes on **any four** [CO2-CO4] (10)

- i) Equipment suitability
- ii) Proactive maintenance
- iii) Classification of rock crushers
- iv) Safety inspection and safety audit
- iv) Depreciation