一. 解釋名辭(32%; 請詳加解釋, 若僅翻譯則每題只給一分; 解釋正確, 但不夠詳盡, 給二分; 解釋正確, 且夠詳盡, 給三分; 解釋正確, 且夠詳盡, 並甚為精彩或有獨到見解者, 給四分.)
1. Maximum Aerobic Power
2. Toggle Switches
3. Mirror-image Arrangements
4. Convergence of two Eyes
5. Dark Adaptation
6. Dark Focus
7. Scale-side Principle (Rotary Controls and Rotary Displays in Same Plane)
8. Borg-RPE (rating of perceived exertion)

二. 假設您要為「慶祝成大工業設計系成立三十週年活動」設計標誌, 請問您將如何考慮 ? (5%) 您將如何運用符號設計(Symbolic Design)原則於您的設計?(5%) 請以 Sketch 畫出您的設計作品二件, 並說明其設計特點。(5%)

三. 試以實驗方式評估第二題(上一題)所設計之二件標誌作品,並回答以下問題 :
1. 請詳加說明本研究之自變項(Independent Variables)、應變項(Dependent Variables)和如何進行變項控制。(9%)
2. 請詳加說明實驗儀器之配置、計測過程及實驗注意事項。(6%)

四、假設您要為「慶祝成大工業設計系成立三十週年活動」標誌之徵選、諮詢及相關訊息公告成立一個網站,並進行分析及設計。
1. 試以工作分析法(Task Analysis)探討這個網站應涵蓋哪些功能及內容組件, 方為完整 ? (5%)
2. 試以連桿分析法(Link Analysis)探討這些內容組件應如何進行空間安排, 方為合適 ? (5%)
3. 請以 Sketch 畫出您的設計, 並說明設計特點。(5%)

五、假設某男校同學體重成常態分配(Normal Distribution),已知該校 10 %ile 體重為 50kg, 50th Percentile 之體重為 60kg,試求 (1)該校同學體重之標準偏差, (2)該校同學 95% tile 體重值。 (8%)

六、在搬舉物品時, 生物力學模型最重要之關鍵點有哪些 ? 應如何考慮搬舉物品時之生物力學 ? 請輔以圖示說明。(10%)

(背面仍有題目,請繼續作答)

七、以下兩則不同字母間距之文章,對擅長閱讀英文者,B 閱讀起來較快,為什麼?(5 %)

A: Regular spacing of text type (regular density)

> The readability of a passage of text depends on more than the physical characteristics of the letters or the particulars of how it is laid out. Readability is concerned with good writing style, sentence.......

B: Close-set text type (high density)

> The readability of a passage of text depends on more than the physical characteristics of the letters or the particulars of how it is laid out. Readability is concerned with good writing style, sentence construction, and ....

附表(第五題參考用)

標 準 常 態 分 配 機 率 表

$$P\ (-\infty < Z < Z_0)$$

Z_0	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
.0	.500	.504	.508	.512	.516	.520	.524	.528	.532	.536
.1	.540	.544	.548	.552	.556	.560	.564	.567	.571	.575
.2	.579	.583	.587	.591	.595	.599	.603	.606	.610	.614
.3	.618	.622	.626	.629	.633	.637	.641	.644	.648	.652
.4	.655	.659	.663	.666	.670	.674	.677	.681	.684	.688
.5	.691	.695	.698	.702	.705	.709	.712	.716	.719	.722
.6	.726	.729	.732	.736	.739	.742	.745	.749	.752	.755
.7	.758	.761	.754	.767	.770	.773	.776	.779	.782	.785
.8	.788	.791	.794	.797	.800	.802	.805	.808	.811	.813
.9	.816	.819	.821	.824	.826	.829	.831	.834	.836	.839
1.0	.841	.844	.846	.849	.851	.853	.855	.858	.860	.862
1.1	.864	.867	.869	.871	.873	.875	.877	.879	.881	.883
1.2	.885	.887	.889	.891	.893	.894	.896	.898	.900	.901
1.3	.903	.905	.907	.908	.910	.911	.913	.915	.916	.918
1.4	.919	.921	.922	.924	.925	.926	.928	.929	.931	.932
1.5	.933	.934	.936	.937	.938	.939	.941	.942	.943	.944
1.6	.945	.946	.947	.948	.950	.951	.952	.953	.954	.954
1.7	.955	.956	.957	.958	.959	.960	.961	.962	.962	.963
1.8	.964	.965	.966	.966	.967	.968	.969	.969	.970	.971
1.9	.971	.972	.973	.973	.974	.974	.975	.976	.976	.977
2.0	.977	.978	.978	.979	.979	.980	.980	.981	.981	.982
2.1	.982	.983	.983	.983	.984	.984	.985	.985	.985	.986
2.2	.986	.986	.987	.987	.987	.988	.988	.988	.989	.989
2.3	.989	.990	.990	.990	.990	.991	.991	.991	.991	.992
2.4	.992	.992	.992	.992	.993	.993	.993	.993	.993	.994