



**UNIVERSITI KUALA LUMPUR**  
Malaysia France Institute

---

**FINAL EXAMINATION**  
**JULY 2010 SEMESTER**

---

SUBJECT CODE : FWD 33502  
SUBJECT TITLE : WELDING MANAGEMENT  
LEVEL : DIPLOMA  
TIME / DURATION : 3.00pm – 5.00pm  
( 2 HOURS )  
DATE : 19 NOVEMBER 2010

---

**INSTRUCTIONS TO CANDIDATES**

---

1. Please read the instructions given in the question paper **CAREFULLY**.
2. This question paper is printed on both sides of the paper.
3. Please write your answers on the answer booklet provided.
4. Answer should be written in blue or black ink except for sketching, graphic and illustration.
5. This question paper consists of **TWO (2)** sections. Section A and B. Answer all questions in Section A and **TWO (2)** questions in section B.
6. Answer all questions in **English**.

---

THERE ARE 4 PAGES OF QUESTIONS AND 1 PAGE OF APPENDIX, EXCLUDING THIS PAGE.

---

**SECTION A (Total: 60 marks)**

**INSTRUCTION: Answer ALL questions.**  
**Please use the answer booklet provided.**

**Question 1**

- (a) Describe the purposes of **Inspection Test Planning (ITP)**. (5 marks)
- (b) Construct a simple **Inspection Test Plan (ITP)**? (5 marks)
- (c) What are the purposes of project meeting? (5 marks)
- (d) Who should be attending in project meeting? (5marks)

**Question 2**

CPM assumes we know a fixed time estimate for each activity and there is no variability in activity times. Answer the following questions:

- (a) Define what is **Slack Time** in **AON** networking? (5 marks)
- (b) Describe what is **Most-likely time (m)**? (5 marks)
- (c) Describe what is **Pessimistic time (b)**? (5 marks)
- (d) Describe what is **Optimistic time (t)**? (5 marks)

## Question 3

Given the following Time Chart and complete the table accordingly

Activity	Pre	a	m	b	t	Variance(v)
A	-	3	2	6		
B	A	2	3	4		
C	A	4	6	8		
D	B,C	2	4	5		
E	D	1	4	2		

Table 1

By referring to the Table.1 above, answer the following questions. For question 3 (e) please referring to Appendix 1.

- (a) Calculate the expected time (t) and variance (v) of activity E. (2 Marks)
- (b) Draw the AON networking according to time chart and identify the CPM. (5 Marks)
- (c) What is the completion time of the project? (3 Marks)
- (d) Calculate is the project variance of the project? (5 Marks)
- (e) What is the probability this project can be completed on or before the 15 week deadline? (5 Marks)

**SECTION B (Total: 40 marks)****INSTRUCTION: Answer TWO (2) questions only.****Please use the answer booklet provided.****Question 1**

- (a) Give two(2) types of management techniques and define each of them (5 marks)
- (b) What is procurement strategy? (5 marks)
- (c) Give two (2) steps to engaging the market (5 marks)
- (d) Define what is supply chain management (SCM)? (5 marks)

**Question 2**

Management of Projects involves **THREE (3)** phases, which are planning, scheduling and controlling, answer the following questions.

- (a) Why important to form project organization? (5 marks)
- (b) What are the activities of Project scheduling? (5 marks)
- (c) What are the activities of project controlling? (5 marks)
- (d) What are the activities of Project planning? (5 marks)

## Question 3

Activity	Description	Immediate Predecessors	Time (weeks)
A	Build internal components	—	2
B	Modify roof and floor	—	3
C	Construct collection stack	A	2
D	Pour concrete and install frame	A, B	4
E	Build high-temperature burner	C	4
F	Install pollution control system	C	3
G	Install air pollution device	D, E	5
H	Inspect and test	F, G	2

Table 2.

Base on table 2. answer the following question.

- Draw the appropriate AON PERT diagram of the project. (4 marks)
- Calculate the Forward -pass and Backward-pass processes. (4 marks)
- Calculate the activities slack time or free time. (4 marks)
- Identify the critical path activities. (4 marks)
- Calculate the project completion time of the project. (4 marks)

END OF QUESTIONS.



Appendix 1

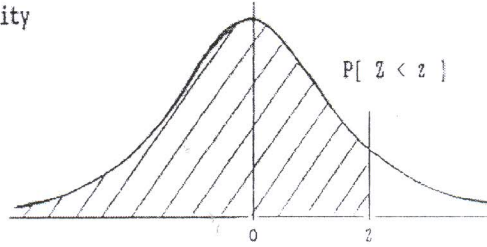
STANDARD STATISTICAL TABLES

1. Areas under the Normal Distribution

The table gives the cumulative probability up to the standardised normal value z

i.e.

$$P[ Z < z ] = \int_{-\infty}^z \frac{1}{\sqrt{2\pi}} \exp(-\frac{1}{2}z^2) dz$$



z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.5000	0.5040	0.5080	0.5120	0.5159	0.5199	0.5239	0.5279	0.5319	0.5359
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7854
0.8	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8804	0.8830
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767
2.0	0.9773	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857
2.2	0.9861	0.9865	0.9868	0.9871	0.9874	0.9878	0.9881	0.9884	0.9887	0.9890
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916
2.4	0.9918	0.9920	0.9922	0.9924	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9980	0.9980	0.9981
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986
z	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90
P	0.9986	0.9990	0.9993	0.9995	0.9997	0.9998	0.9998	0.9999	0.9999	1.0000