বাংলাদেশ ইউনিভার্সিটি অব প্রফেশনালস্

সেকশন/গ্রুপ: *Section-A*

ইনভিজিলেটরের স্বাক্ষর

মোট পৃষ্ঠা সংখ্যা: *11* টি

BSc. in CSE-17 Spring Final Feb-21 পরীক্ষা(Examination), 20 *21*

বিষয় (Subj): *System Analysis, Design and Development* পত্র/কোর্স নং (Paper/Course No): *CSE-401*

পত্র/কোর্সের নাম (Paper/Course Name): *CSE-17* কেন্দ্র (Center): *MIST*

রেজিঃ নম্বর (Regn No): *13140117 0018* শিক্ষাবর্ষ (Session): *2019-2020*

রোল নম্বর (Roll No): *201714018* তারিখ (Date): *10-02-2021*

INSTRUCTIONS FOR EXAMINEE

1. Examinees are forbidden to write their names either on outer cover page or anywhere of the answer scripts. In case of violation, the answer script will not be evaluated.

2. Examinees must mention their roll and registration number along with session on the outer cover page of the answer scripts clearly. Otherwise, answer scripts may not be evaluated.

3. Students will write his examination roll number on the top left corner and section-A/B on the top right corner of each page. All pages must be numbered chronologically at the bottom center in x of y format. (for example: 1 of 21)

4. In no case, an examinee will be allowed to start the examination half an hour after the commencement of examination.

5. The Camera of the examinee MUST always be ON during the examination and answer script submission. If Camera is OFF then that online examination will be treated as CANCELLED.

6. The focus of the camera should be such that the invigilator(s) can see the script and examinee with his/her surroundings.

7. Students are to share their entire screen of desktop/laptop to the invigilator throughout the online examination. .

8. Browsing any files other than the given question paper (PDF) and/or online sites other than the respective allowed examination platform (e,g Zoom, Google classroom etc.) is strictly prohibited.

9. Online invigilators reserve the right to take remote access of the examinee's desktop/laptop and investigate as needed at any point during the examination or even after the examination

10. Students without laptop/desktop cannot appear exam online by using mobile phone. Students not possessing laptop/desktop, will have to appear examination Physically at MIST.

পরীক্ষক কর্তৃক পূরণীয়

প্রশ্ন নম্বর	প্রদত্ত নম্বর
১	
২	
৩	
৪	
৫	
৬	
৭	
৮	
৯	
১০	
১১	
১২	
১৩	
১৪	
মোট	

পরীক্ষকের স্বাক্ষর

নিরীক্ষকের স্বাক্ষর

INSTRUCTIONS FOR EXAMINEE

11. Examinees must abide by the instructions of chief invigilator if there are no definite instructions on any subject/matter.

12. No examinee will be allowed to leave the examination session until an hour has elapsed from the commencement of examination.

13. Legal action will be taken against the examinees those are trying to adopt/adopting unfaimeans/exibiting unbecoming conduct in the examination hall and found guilty for any breach of discipline as per rule.

14. Invigilators will have complete authority of deducting marks from any student attempting unfair means.

15. All rough works should be done in the same paper used as answer scripts. Answer scripts should be submitted intact. Papers used for rough work should be pen through by the examinees and submitted along with the answer script.

16. The answer scripts submitted beyond specified time will be treated as CANCELLED.

17. The examinee will send his/her scanned examination script in PDF format to the following e-mail addresses:

     (a)   e-mail address of subject invigilator/examiner.

     (b)   Central Database Scheme (coursecode@mist.ac.bd)

           Example: EECE433@mist.ac.bd

18. The examinee has to preserve the original answer script of every examination and be ready to submit whenever asked for.

19. Answer script should be the A4 size papers with a cover page provided by Department. Examinee has to fill up his/her necessary details on the cover page. Section A and section B must be clearly marked on the cover page like. | **Section A** | or | **Section B** |

20. Examination duration for each subject will be two hours (section-A for one hour + section B for One hour). In between students will get 15 minutes time to submit the answer script of section A and 5 minutes time to issue the question for section B . After completion of 01 hour examination time for section B, students will get 15 minutes to submit the answer script of section B.

21. After completion of written examination (online/physical), viva will be conducted by the respective faculty of that subject.

<u>Section-A</u>

<u>Ans. to the ques. no.-01(a)</u>

The key issues of making IT projects different from other types of projects are listed and discussed below:

① Lack of clear goals and success criteria.

most IT projects are software based or system application based, they often lack the clear goal of the software apant from the output required. Where other projects (besides IT) have a clear goal and success criteria.

② Inadequate skills an of team member:
IT projects needs to have the team to be ~~knowledag~~ knowledgeable with the technology latest and updated. The lack of skills of team member in an IT project is common. That is why IT project is different than other project. types.

<div align="right">P.T.O.</div>

<div align="center">01 of 11</div>

③ Inadequate risk management. IT project are often data driven projects and data reside on computers. So, lost of data or damage to infrastructure is a risk to an IT project. An IT project often lacks the adequate risk management and disaster controls. That is why inadequate risk management is a key issue that makes IT projects different than other types of projects.

④ Lack of communication. IT projects needs the communication with an non-technical users with the technical terms. This issue is often lacks in a IT project management due to impatience of both or either the analyst on the user. That is why IT projects are different from other types of projects.

Ans. to the ques. no. - 01(b)

Success factors for the given online ~~Home~~ ^{Hous} Rental management System for minpun-DOHS are listed below:

Scope goal:

The project needs to cover all the scopes mentioned in the description. the possible scopes that ensures the success are!

- search using keywords like property type, location etc.

- landlords should have provision to post/update their property details.

- post/update property re should need admin approval.

- ~~tent~~ tenants should be able to view the comple. details of property.

- tenants should be able to shortlist their preferences and register to book for a site visit.

- Member registration.

P. T. O.

Time goal:

The IT project must be completed by the time mentioned or agreed upon before the project initiation by project managers and project sponsor.

Cost goal:

The project rental management system should be completed within the budget agreed beforehand.

And the project needs to have the following additional factors,

- the project needs to be secure.
- the project should have nice and aesthetic users interface so that more and more tenants use the system.
- the project should have users verification and validation features.
- the project should have proper disaster/recovery plan.

- the project has to be satisfied by the projects sponser and all the requerds of the projects organization should be met and implemented properly.

These are the all possible success factors for the IT project; Online House Rental management System for MIRPUR-DOHS.

<u>Ans. to the ques. no. - 01 (c)</u>

Major security threats to system are
listed below:

   ① Errors and omissions,

   ② Disgruntle and dishonest employees.

   ③ Fire,

   ④ Natural disasters,

   ⑤ External attacks. etc.

Of all the threats to system security
most of the time internal errors or
accidents and dishonest employees
revenge on the system is ~~very~~ most
serious. Because the disgruntle and
dishonest employee's have the complete
knowledge of the system and have
authorization and access to systems
sensitive parts which can lead to
potential system disaster and often
can cause the organization to litigation

P.T.O.

06 of 11

Also intere errror or ~~mistep~~ mistakes can also cause serious damage to the system as they have the access to complete control of the system.

That is why these threats are the most serious and needs careful inspection and proper disaster recovery plan.

Ans. to the ques. no. -03(a)

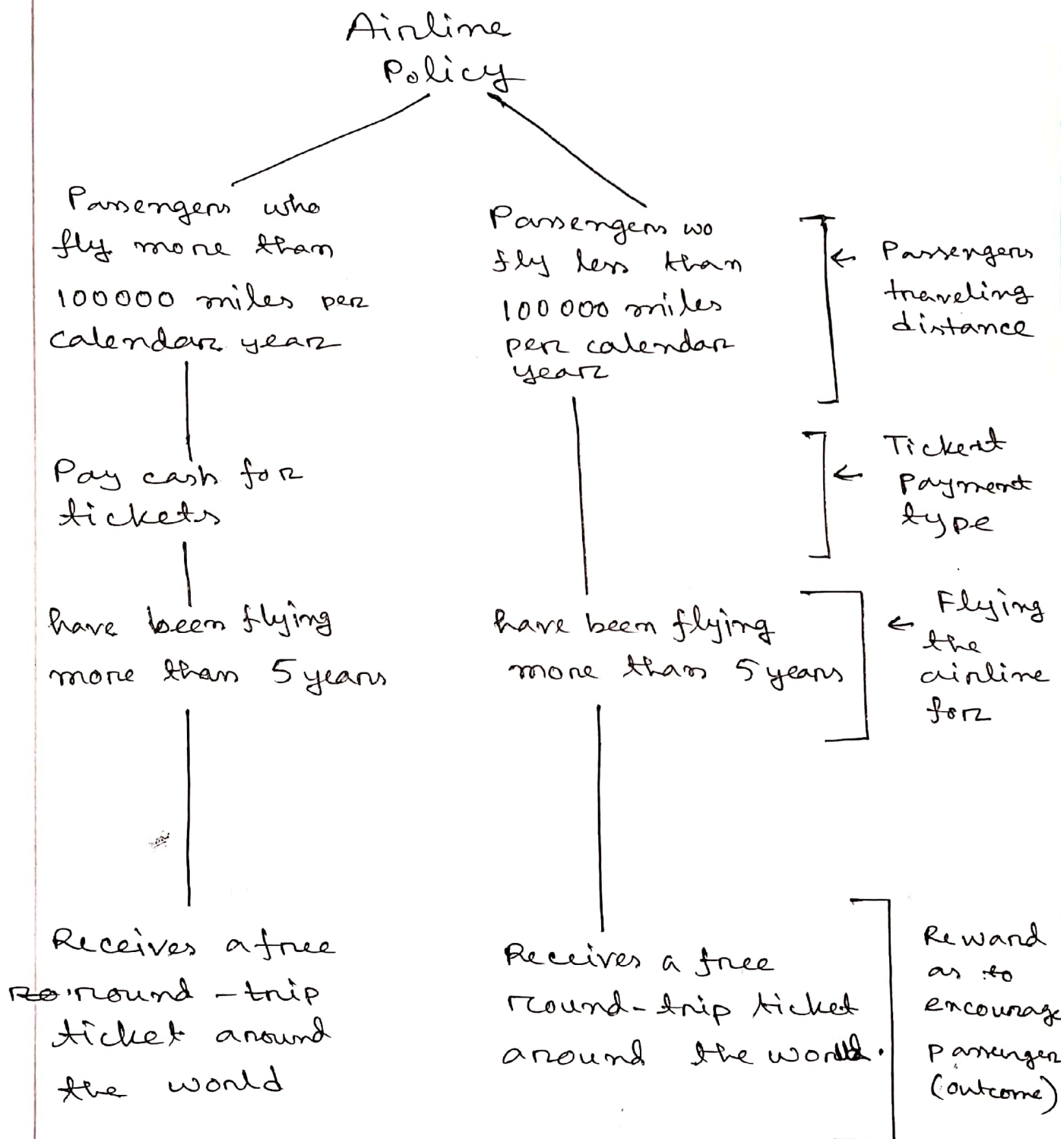(i) Ans: Decision tree based on the statement as drawn below:

Airline
Policy

Passengers who fly more than 100000 miles per calendar year

Passengers wo fly less than 100000 miles per calendar year   ← Passengers traveling distance

Pay cash for tickets   ← Ticket Payment type

have been flying more than 5 years

have been flying more than 5 years   ← Flying the airline for

Receives a free Ro·round-trip ticket around the world

Receives a free round-trip ticket around the world.   Reward as to encourage Passenger (outcome)

Fig: Decision tree for the airline policy statement.

08 of 11

P.T.O.

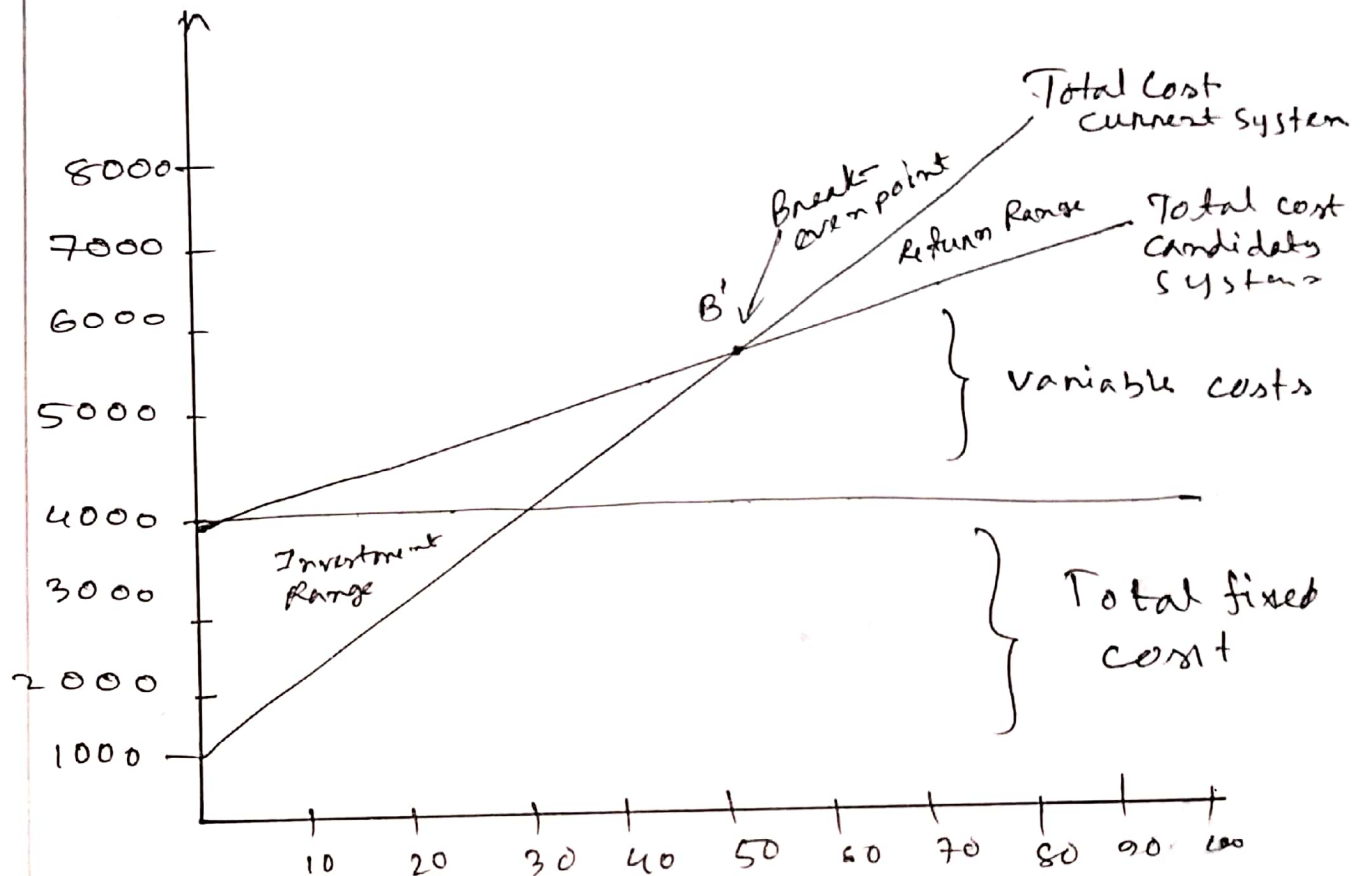(ii)Ans: A Decision table for passenger free ticket is developed below:

	Condition Stub	1	2	Condition entry
IF	① Passengers fly more than 100000 miles per calendar year	Y	N	
	② Pay cash for ticket	Y	N	
	③ Flying for more than 5 years.	Y	Y	
	④ Passengers fly less than 100000 miles per calendar year		Y	
THEN	① Receive a free round-trip ticket around the world.	X	X	

Action Stub   Action entry

Here,
Y → Yes
N → No
X → Action taken

Fig: Decision table for the passenger free ticket.

09 of 11

Ans. to the ques. no.-03(b)

Free-hand break-even chart and pointing
the break-event point is given below:

Fig: Break-event chart and Break
even point.

Ans. to the ques. no.-03(c)

Present value analysis:

Present value analysis is a long-term project's present costs with future benefits. In this method cost and benefit are calculated in term of today's value of investment.

we know,

$$P = \frac{F}{(1+i)^n}$$

$$= \frac{2500}{(1+0.12)^9}$$

$$= 901.52 \quad Tk.$$

So, preset value is 901.52 Tk.

Ans