Time:	30 Minutes	**Artificial Intelligence**	Sohag University
Date:			Faculty of Computers and AI

Q: Choose the correct answer:

1	**The aims of AI is to make computers work with:**		
a	High speed	c	High accuracy
b	Efficiently in data management	d	Otherwise
2	**Which of the following of AI applications is true:**		
a	Database management system	c	Neural networks
b	System Analysis and design	d	Otherwise
3	**One of an attributes of AI systems uses of special structures to describe knowledge.**		
a	Knowledge representation	c	Dynamic knowledge
b	Meta knowledge	d	All the above
4	**It means providing the computer with optical sensors that can identify the persons and forms**		
a	Expert Systems	c	Neural Networks
b	Machine Learning	d	Image Processing
5	**It is a type of machine learning which models itself after the human brain**		
a	Expert Systems	c	Neural Networks
b	Machine Learning	d	Image Processing
6	**They are programs that contain a huge amount of information owned by a human in a specific field.**		
a	Expert Systems	c	Neural Networks
b	Machine Learning	d	Image Processing
7	**Which of the following FOLP is true for the sentence: All people that are not poor and smart are happy**		
a	$\exists X\ (\neg\,poor(X)\ \Lambda\ smart(X)) \rightarrow happy(X).$	c	$\forall X\ (poor(X)\ \Lambda\ smart(X)) \rightarrow happy(X).$
b	$\exists X\ (\neg\,poor(X) \vee smart(X)) \rightarrow happy(X).$	d	$\forall X\ (\neg\,poor(X)\ \Lambda\ smart(X)) \rightarrow happy(X).$
8	**To rewrite the following FOP by Rule, we use :** $\forall X$ {[friend(X, hany) $\rightarrow$ friend(X, saied)] $\wedge$ [friend(X, saied) $\rightarrow$ friend(X, ali)]}		
a	If X is friend hany, Then X is friend saied And X is friend ali	c	If X is friend hany, And X is friend saied Then X is friend ali

b	If X is friend hany, And hany is friend saied Then X is friend ali	d	Otherwise.
9	**By using Python Imaging Library (PIL), what is the correct code to read an image (D:\aaa.jpg)**		
a	Image.open ("D:\aaa.jpg")	**c**	Image.open ("D:\\aaa.jpg")
b	Image.read ("D:\aaa.jpg")	**d**	D = image.open ("D:\\aaa.jpg")
10	**If you consider the following code, what is the length of the line:** **draw.line((100, 200, 300, 400), fill=(0, 0, 0), width=10)**		
a	100	**c**	300
b	200	**d**	400

Q: Choose the correct answer:

1	AI aims is programming computers so that they can have the ability to:		
a	Think	c	Make decisions
b	Solve problems	d	All the above
2	Ii is a method to perform some operations on the form, in order to extract some useful information from it.		
a	Expert Systems	c	Neural Networks
b	Machine Learning	d	Image Processing
3	Which of the following of AI applications areas is true.		
a	Networks Field	c	Military Field
b	Medical Field	d	All the above
4	One of an attributes of AI systems is:		
a	Knowledge representation	c	Dynamic knowledge
b	Meta knowledge	d	All the above
5	It is considered one of the main components of expert systems		
a	Database Systems	c	Knowledge Base
b	Information Systems	d	Knowledge Based Systems
6	It is awareness gained by experiences of facts, data, and situations		
a	Fact	c	Knowledge
b	Rule	d	Information
7	Which of the following FOLP is true for the sentence: Every man respects his parent		
a	$\exists x$ man(x) ^ respects (x, parent).	c	$\forall x$ man(x) $\rightarrow$ respects (parent).
b	$\exists x$ man(x) ^ respects (parent).	d	$\forall x$ man(x) $\rightarrow$ respects (x, parent).
8	Consider the following rule and which of the following FOPL is true : If x is father of z, And z is father of y, Then x is grandfather of y.		

a	(∀x∀y∃z){father(x,z)∧father(y,z)→ grandfather(x,y)}.	c	(∀x∀y∃z){father(z,x)∧father(z,y) grandfather(x,y)}.
b	(∀x∀y∃z){father(z,x)∧father(y,z)→ grandfather(x,y)}.	d	(∀x∀y∃z){father(x,z)∧father(z,y)→ grandfather(x,y)}
9	**To change the size of an image using resize() method of pillow, you use:**		
a	im = image.open ("xxx.jpg") im.resize ((300, 300))	c	im = image.open ("xxx.jpg") im = resize ((300, 300))
b	im = image.open ("xxx.jpg") im = im.resize ((300, 300))	d	Oterwise
10	**Consider the following codes:** **from PIL import Image,ImageDraw** **img = Image.new('RGB', (500, 300), (12, 25, 15))** **draw = ImageDraw.Draw(img)** **draw.line((200, 100, 300, 200), fill=(0, 0, 0), width=10)** **img.show()** **and what do the parameters (500,300) represent:**		
a	The length and width of the line	c	The coordinates of the starting and end point of the line
b	The coordinates of the starting point of the line	d	Otherwise

Mid Exam For the Second Semester

Time: 30 Minutes

Date:

Artificial Intelligence

AI+BIO

Sohag University

Faculty of Computers and AI

Q: Choose the correct answer:

1	In expert systems, the computer is provided with optical sensors that can identify people and suspects		
a	True	**b**	False
2	The knowledge base is one of the main components of an expert systems.		
a	True	**b**	False
3	The knowledge is awareness gained by experiences of facts, data, and situations:		
a	True	b	False

4	Consider the following rule and which of the following FOPL is true : If x is father of z, And z is father of y, Then x is grandfather of y.
a	$(\forall x \forall y \exists z)\{father(x,z) \wedge father(y,z) \rightarrow grandfather(x,y)\}$.
b	$(\forall x \forall y \exists z)\{father(z,x) \wedge father(z,y)\ grandfather(x,y)\}$.
c	$(\forall x \forall y \exists z)\{father(z,x) \wedge father(y,z) \rightarrow grandfather(x,y)\}$.
d	$(\forall x \forall y \exists z)\{father(x,z) \wedge father(z,y) \rightarrow grandfather(x,y)\}$

5	To change the size of an image using resize() method of pillow, you use:		
a	im = image.open ("xxx.jpg") im.resize ((300, 300))	**c**	im = image.open ("xxx.jpg") im = resize ((300, 300))
b	im = image.open ("xxx.jpg") im = im.resize ((300, 300))	**d**	Oterwise

6	Consider the following codes, and what do the parameters (500,300) represent: **from PIL import Image,ImageDraw** **img = Image.new('RGB', (500, 300), (12, 25, 15))**		
a	The length and width of the line	**c**	The coordinates of the starting and end point of the line
b	The coordinates of the starting point of the line	**d**	Otherwise

7	If you consider the following code, what is the length of the line: draw.line((100, 100, 100, 400), fill=(0, 0, 0), width=10)		
a	100	**c**	300
b	200	**d**	400

8	**To write the following sentence by Prolog language, we use:** **jon likes everyone who plays a football.**		
a	likes (X,Y):- plays(X, football).	**c**	likes (jan,Y):- plays (jan, football).
b	likes (X,Y):- plays(Y, football).	**d**	likes (jan,Y):- plays (Y, football).
9	**To write the following sentence by Prolog language, we use:** **A man is happy if he is rich and famous**		
a	hapy (man): - rich(man),feamus(man).	**c**	hapy (X):- rich(man),feamus(man).
b	rich (man),feamus(man):- hapy(man),	**d**	hapy (X):-rich(X),feamus(X).
10	**What is the atomic sentence of the following sentence:** **Billy studies AI**		
a	study (Bily, AI)	**c**	study (bily, ai)
b	study (AI, Bily)	**d**	study (ai, bily)