INSTRUCTIONS:

1- Any kind of cheating will subject the student to the penalties specified by the University rules
2- Use of cell phone is strictly prohibited

<table>
<thead>
<tr>
<th>Question</th>
<th>Mark</th>
<th>Out of</th>
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</thead>
<tbody>
<tr>
<td>One</td>
<td></td>
<td>40</td>
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<tr>
<td>Two</td>
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<td>20</td>
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<td>Three</td>
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<td>Total</td>
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Total marks in letters

Page 1
QUESTION 1-A. GENERAL KNOWLEDGE

On the separate answer sheet, select the correct answer for each of the following questions.

1- Three of the following four are alike in a certain way and so form a group, which is the one that does not belong to the group?
   (a) Sand Stone       (b) Wood       (c) Granite       (d) Plastic

2- Identify the material illustrated in the given figure.
   (a) Cement
   (b) Marble
   (c) Concrete
   (d) Sandstone

3- Identify the type of Arch illustrated in the given figure.
   (a) Pointed Arch
   (b) Semi-circular Arch
   (c) Segmental Arch
   (d) Ogee Arch

4- How many times can glass be recycled?
   (a) It can’t be recycled       (b) Four Times
   (c) Twice
   (d) Forever

5- Under fire condition, which material melts first?
   (a) Steel
   (b) Timber
   (c) Concrete
   (d) Plastic

6- One of the best solutions to get rid of non-environmentally safe wastes is:
   (a) burning
   (b) dumping
   (c) burying
   (d) recycling

7- Which colour is known as achromatic colour?
   (a) green to blue
   (b) red to yellow
   (c) yellow to green
   (d) black to white

8- Which type of lighting IS NOT considered energy efficient?
   (a) Fluorescent
   (b) LED
   (c) halogen
   (d) Sunlight
9. The imagery in the work shown on the right is a typical decorative motif of Islamic architecture known as:
   (a) calligraphy
   (b) an arabesque
   (c) a mosaique
   (d) a paisley

10. Which is not a form?
    (a) circle          (b) sphere          (c) cylinder          (d) cone

11. This Art work “Guernica” is one of the greatest pieces of:
    (a) Piet Mondrian
    (b) Michael Angelo
    (c) Pablo Picasso
    (d) Rembrandt van Rijn

12. Face, butterfly, and the capital letter A are all examples of which kind of balance?
    (a) asymmetrical      (b) symmetrical     (c) radial            (d) balanced

13. Identify the building on your right
    (a) PETRONAS Towers
    (b) World Trade Centre
    (c) Millennium Tower
    (d) None of the above

14. I identify the given building
    (a) ABC Mall Ashrafieh
    (b) Beirut Souks
    (c) Byblos Souks
    (d) Le Mall Dbayyeh

15. Which of the following names is not a composer
    (a) Bach, Johann Sebastian
    (b) Chopin, Frédéric
    (c) Mozart, Wolfgang Amadeus Mozart
    (d) John, Elton
**QUESTION I-B. SPATIAL REASONING**

*On the separate answer sheet*, select the correct answer for each of the following questions.

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16- Count the number of surfaces in view given below.

(a) 10  
(b) 13  
(c) 12  
(d) 9

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17- What is the correct option for a Tetrahedron

(a) Face = 4  
Vertex = 6  
Edges = 4

(b) Face = 6  
Vertex = 6  
Edges = 6

(c) Face = 4  
Vertex = 4  
Edges = 6

(d) Face = 6  
Vertex = 8  
Edges = 12

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18- When the 2D shape is folded, which one of the following 3D forms could be obtained?

(a)  
(b)  
(c)  
(d)
19- Which of the following folded shapes CANNOT BE used to construct the shown hexagonal prism.

(a)  
(b)  
(c)  
(d)  

20- A volume that has 5 surfaces of which, 2 are parallel triangular faces, is a:

(a) triangular pyramid  
(b) triangular cone  
(c) Triangular prism  
(d) none of these

21- Identify the correct projection as indicated by the arrow.

(a)  
(b)  
(c)  
(d)  

22- Identify the bottom view of this object.

(a)  
(b)  
(c)  
(d)  

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23- Count the number of vertical surfaces

(a) 6  (b) 7  (c) 8  (d) 10

24- Identify the correct projection as indicated by the arrow.

(a)  (b)  (c)  (d)

25- Count the number of vertical vertices.

(a)  (b)  (c)  (d)
26- Which shape can be assembled using all of the individual shapes shown?

![Shapes for assembly](image)

(a) (b) (c) (d)

27- The drawings show a sheet of paper which has been folded. The dashed lines indicate the whole sheet; each drawing represents a single fold. The black square shows where a hole was punched. Where do the wholes appear where the sheet is unfolded?

![Folding drawings](image)

(a) 1B, 1C, 5B, 5C  (b) 2B, 2C, 5B, 5C  (c) 1B, 2C, 6B, 6C  (d) 1B, 1C, 6B, 6C

28- Count the Number of Vertical Vertices.

![3D shape](image)

(a) 10  (b) 11  (c) 12  (d) 9
29- Count the Number of triangles.

(a) 9  (b) 10  (c) 12  (d) 13

30 - How many cubes are there?

(a) 19  (b) 20  (c) 22  (d) 24

**QUESTION I-C, INDUCTIVE REASONING**

*On the separate answer sheet*, select the correct answer for each of the following questions.

31-

(a)  (b)  (c)  (d)
32- Three views of the same cube are shown above. Which symbol is opposite the X?

(a)  (b)  (c)  (d)

33- What is the next logical step in the sequence?

(a)  (b)  (c)  (d)

34- Which of the cubes shown could be made from the pattern?

(a)  (b)  (c)  (d)
35- What is the next logical step in the sequence?

(a)  (b)  (c)  (d)  

36- Which of the patterns when folded will make the cube shown?

(a)  (b)  (c)  (d)  

37- What is the next logical step in the sequence?

(a)  (b)  (c)  (d)  

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38- What is the next logical step in the sequence?

(a)     (b)     (c)     (d)

39- What is the next logical step in the sequence?

(a)     (b)     (c)     (d)

40-

IS ROTATED TO

AS

IS ROTATED TO

(a)     (b)     (c)     (d)
QUESTION II. FREE HAND DRAWING AND IMAGINATION SKILLS (45 MINUTES, 20 MARKS)

Imagine you are 6 cm in size and you are standing on the table which has a world map, 2 books, 2 pencils, compass, notepad; and this table is near a window having partial curtains on it. Now sketch what you see.

Sketch this scene on the attached A3 Canson within a rectangle 40 cm x 28 cm.

QUESTION III. CREATIVITY SKILLS (45 MINUTES, 20 MARKS)

Create a sculpture from 20 cubes (3 cm x 3 cm) taking into consideration that some of the cubes are opaque and some are transparent.

So give the light and shadow accordingly & sketch it On the attached A3 Canson,